

Factors Generating Financial Crises

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Abstract

The paper refers to aspects related to the company's functioning inside the country, which determines the company's principles and external environment. The same enterprise, operating in a globalized environment, greatly changes its behaviour, operating rules, principles, and the business environment. The estimation of the company's potential of development implies its successful functioning, that is, the imaginative existence of this company with other possibilities of producing, selling, with another structure of the final product, with another efficiency. It is natural to admit that the firm's manager will position the company's increasing potential. However, depending on the impact of the technical and scientific progress, of the exogenous factors, the enterprise could reduce its productive potential. In this context, the firm's financial level must be taken into account in order to ensure the company's development.

Key words: company (enterprise), modernization, economic potential, firm of the future.

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1. Introduction

The success, failure of an enterprise depends on a number of factors. These may be established in scientific laboratories. IBM, for example, is successfully trying to identify factors with impact on the Firm of the Future, based on the results of the practitioners' laboratories (Corniliev, 2009).

Practitioners, senior managers are representatives of the most prestigious companies in 40 countries, including 80% of developed countries, 20% of emerging countries; 530 firms from 32 branches. According to the managers opinions, endowed with experiences, methods and situations of all kinds, the firm of the future will be affected by the following factors: market factors (demand, supply, prices); professionalism of the employees (the profession does not remain the same for a long period of time, the studies are done continuously, the employees become graduates of new and new professions requested by the company); macroeconomic factors (tax policies can change, the firm has to split to maximize profit, according to other policies - companies have to merge, etc.); globalization (can contribute both to emigration and labor immigration, to growth, reduction of domestic demand, etc.); regulatory restrictions (the final products being put to the consumer's use may be partially subject to certain requirements, qualitative or dimensional standards, etc.); technologies (technology change generates changes in the costs of raw material, labor, some machines can become extra, others in on the minus side etc); socio-economic factors (depending on the country's economic, social policies, the company may be subject to additional costs related to sickness, pension, etc.); environmental factors (the use of natural resources can become payable, the cost of using, for example, water, air, etc. can increase considerably or the company's final products may become environmentally unacceptable); geopolitical factors (some political relations between countries turn into economic wars, for example, wine from country X can only paint the fences in country Y etc.). (<https://vdocuments.site/ileana-anastase-thesis.html>)

In the successful managers' opinion, each of the factors listed above corresponds to a certain rank. Over time, under the impact of the 9 factors, it evolves. In 2014, according to IBM Global CEO Study data, market factors were ranked first (rank1), followed by the employees' professionalism, macroeconomic factors, etc. and ending with geopolitical factors (Table 1). <https://vdocuments.site/ileana-anastase-thesis.html>

Table 1. Factors with impact on the company

No.	Factors with impact on the company	The factor's rank in the year				The average	The desired rank
		basic	2014	2016	2018		
1	Market factors	I	I	I	I	1,0	I
2	The employees' professionalism	II	II	II	II	2,0	II
3	Macroeconomic factors	III	III	III	III	5,0	III
4	Globalization	IV	IV	IV	IV	4,3	IV
5	Normative Restrictions	V	V	V	V	4,6	V
6	Technologies	VI	VI	VI	VI	4,0	VI
7	Socio-economic factors	VII	VII	VII	VII	7,3	VII
8	Ecological factors	VIII	VIII	VIII	VIII	7,6	VIII
9	Geopolitical factors	IX	IX	IX	IX	9,0	IX

Source: elaborated by the author in on the basis of "IBM Global CEO Study", [\(www.ibm.com/ibm/ideasfromibm/us/ceo/20080505/\)](http://www.ibm.com/ibm/ideasfromibm/us/ceo/20080505/)

In two years, in 2016, the first two factors maintained their first and second ranks; Technological factors have risen on the third place; more important have become the normative restrictions, etc. Based on the average of the ranks achieved by the factors, the expected rank is calculated. The researches of the Global CEO Study demonstrates that The Company of the future will constantly be subject to all kinds of changes the manager has to deal with. Will managers be able to react appropriately to all endogenous, exogenous changes? A particularly complex and important problem at the same time is that of innovation. Innovations can make some people richer, others poorer. Under the impact of technical-scientific progress, intellectual products, the level of high engineering culture, the number of innovations (N) increases over time, the function $N(t)$ - is increasing. From the available number of innovations determined by the function $N(t)$ in the Firm of the Future only $n(t)$ $N(t)$ will be implemented. The indicator $\left(1 - \frac{n(t)}{N(t)}\right)$, called Change Gap is

a decreasing function. In other words, there are more innovations in the world than practitioners would be able to implement. In this case, some may blame the successes of science, intellectuals, innovators as moving too fast; others could say the opposite - business managers move too slowly. According to IBM Global CEO Study, in 2016 the Change Gap indicator was 0.08 and in 2018 0.22. Here we have to say that this gap is great despite the great need for innovation. The innovations generating effects, at the same time can create problems that the manager cannot always handle. The Employees' professionalism, which is constantly growing and changing, market parameters, technologies generated by innovators, positive, negative, ecological effects as a whole, create an environment generating instability for the enterprise's manager. <https://vdocuments.site/ileana-anastase-thesis.html>

2. The manager is permanently

The manager is permanently attacked: by the buyers' preferences; by the demand, supply and the prices on the market; by the competitors' actions; by the growing number of innovations (if company A does not implement them, there is another company B that implements them and company A creates itself unfavourable conditions); socio-economic factors; of geopolitics; environmental issues; new standards, etc. Under these circumstances, could the manager find any

strategic theory of the firm to serve as counselor, scientific support, guide for solving the listed problems? And yet the problem has a solution. The manager, the company's employees must accept all the changes caused by the listed factors as a natural situation in which the enterprise is located, changes occur and will occur continuously. The mastery, skill, engineering culture systematically helps the employees feel comfortable in the changing environment. In the environment where systemically, the structure of the final products changes, the parameters of the sales markets, the company revises its goals and means of realization. An issue of primary importance for the manager is the issue of hiring, promoting employees in the job hierarchies, stimulating the innovators, and changing the leaders of the enterprise. The enterprise needs to be transformed by the manager in the place, field, and domain of implementation of intellectual products in the company's problem solving processes.

The manager, trying to apply the most radical innovations, technologies, is likely to personally become the initiator of change. In order to motivate, mobilize performance innovators, the manager has attractive incentives. For example, innovators may have a share of the results created after the implementation of their intellectual products. In the firm of the future the manager has to transform the art of the innovator into a discipline of study for the employees.

The production of ideas (innovations) must be as natural as the production of other final products. The firm of the future must always be ready: to aim for change; to cultivate talented leaders; to have programs for making changes in the company's business processes; to constantly be looking for products, new services, unprecedented; to become monopolist in certain activities, offers, services. The success of the firm can also be assured by the application of information theory methods.

The manager of the enterprise has 5 variants of production expansion. Each of the possible variants may be optimal, under certain conditions, in the use of material, financial, energy, labor resources. Due to the lack of additional information, first of all with the projects of the five variants, for the manager, all variants can be accepted with the same probability, ie they are equiprobable.

The data, knowledge, information on the technical parameters of each variation after each study is evaluated. The analysis of the variants is done in stages (table 2).(<https://vdocuments.site/ileana-anastase-thesis.html>)

Table 2. The stages of studying modern variants

The stages of studying, analysing the variants of modernisation for the functioning of the company	The Probability of accepting the variant				
	I	II	III	IV	V
Stage 1 The first knowledge of the 5 projects	0,2	0,2	0,2	0,2	0,2
Stage 2 Analysing variants I,II,III	0	0,3	0,3	0,2	0,2
Stage 3 3. The complex analysis of all the projects	0	0	0,4	0,3	0,3
Stage 4. The complex analysis correlated with the available resources of the company	0	0	0	0,7	0,3
Stage 5. The complex analysis correlated with the request on the market	0	0	0	0,8	0,2

Source: elaborated by the author in on the basis of "IBM Global CEO Study", (www.ibm.com/ibm/ideasfromibm/us/ceo/20080505/)

At Stage 1: The probability of accepting each variation is $P = 0.2$; $i = 1, 2, \dots, 5$; the uncertainty is $H = -0.2 \log 0.2 - 0.2 \log 0.2 - 0.2 \log 0.2 - 0.2 \log 0.2 - 0.2 \log 0.2 = -5 * 0.2 \log 0.2 = - = \log 5 = 2,322$ (bit).

In stage 2: Following the analysis of variants I, II, III these variants can be accepted by the manager with the probability $P_1 = 0$; $P_2 = P_3 = 0.3$; $P_4 = P_5 = 0.2$. The uncertainty after step 2 is $H_2 = -0.3 \log 0.3 - 0.3 \log 0.3 - 0.2 \log 0.2 - 0.2 \log 0.2 = - 0.6 \log 0.3 - 0.4 \log 0.2 = - 0.6 - 0.4 =$

- $0.6 + 0.4 * 2.322 = 1.974$. After Stage 2 of the possible options for reprofiling the enterprise, the manager's uncertainty was reduced from 2,322 to 1,974 bits, that is, with $\frac{2,322 - 1,974}{2,322} * 100\% = 15\%$

In step 3: After complex analysis of all variants, the probabilities of their acceptance are $H3 = -0.4 \log 0.4 - 0.3 \log 0.3 - 0.3 \log 0.3 = -0.4 - 0.6 = 0.4 * 2,322 - 0.6 = 0,9288 + 1,0452 = 1,974$.

Stage 3 - complex analysis - excluded the third option of expanding production, but did not reduce the level of uncertainty. The manager continues to study variants III, IV, V. In Stage 4, the complex analysis correlated with the available resources contributed to the increase of the probability of acceptance of Variant IV, leaving the probability of variant V without modification. The uncertainty is: $H4 = -0.7 \log 0.7 - 0.3 \log 0.3 = -0.7 - 0.3 = -0.7 - 0.3 = 0.3584 + 0.5226 = 0.881$. Studies after Stage 4 have helped reduce uncertainty. In Stage 5, the complex analysis, also correlated with the market demand for the final products of the enterprise, the uncertainty will be: $H5 = -0.8 \log 0.8 - 0.2 \log 0.2 = -0.8 - 0.2 = -0.8 + 0,2 * 2,322 = 0,2576$. After the complex analysis correlated with the demand, the uncertainty diminished with $\frac{0,881 - 0,2576}{0,881} * 100\% = 71\%$.

After such analysis, the manager of the enterprise can certainly accept variant IV or not.

3. Determining the economic potential of the enterprise

Determining the economic potential of the enterprise cannot be done without taking into account the factors generating financial crises. Unjustified price increases can only lead to a financial crisis only if the goods in question have an infinitely long existence. The factors, generators of the crisis: the herd principle; innovations, the emergence of some technologies, services. The globalization contributes not only to economic growth, but it can multiply local crises and increase them globally. At the initiation, development of the economic crises can also contribute the economic policies of each state. The economic crises are the result of the imperfection of the market economy system. Economic and financial crises cannot be excluded from the world economy; they are specific to the market economy. In order to overcome the crises, each state has to set its own program of overcoming the inevitable financial crises. The success, the failure of the economy as a whole, of the enterprise in particular, is largely determined by the structure of the final product. Goods that serve to assemble a final product, others - which are intended for investment; non - productive consumptions have different indices that characterize their evolution in time. (<https://vdocuments.site/ileana-anastase-thesis.html>)

4. Financial instability

Financial instability is an immanent property of the financial system. The situations of financial equilibrium are rather exceptions, sporadic deviations from the rule. The specificity of the market does not allow the involvement of an arbitrage in the financial affairs. Financial professionals, called rational investors and seemingly irrational investors, act on the financial markets. The first estimate the price level at the right value (with a certain approximation); the irrational ones in its estimates contribute to increasing price dispersion in relation to their mathematical expectation. The undue (unjustified) increase of the prices contributes to the imbalance between the supply of goods, services and the money supply, to creating the premises for reducing them, with all the negative consequences for the development of the economy. The prices rise considerably in the economic upturn. Price rises are determined by the relationship between supply and demand; which for different goods are different. (<https://vdocuments.site/ileana-anastase-thesis.html>)

5. Conclusion

In conclusion, the enterprise can be economically successful in a medium-term period, if it can accommodate to the changes generated by exogenous factors, if it can initiate and successfully implement changes generated inside the firm. The enterprise must not wait for structural changes and technology to comply with them; the firm must become the author of the changes, harvest the effects, become a leader in the activities it performs; the firm must overcome its competitors. Consequently, it will focus on increasing the number of innovations, will create attractive incentives for the authors of innovations. The work of the innovators turns into an object of study and not the art of talent. The company, systemically, is initiated in the success of that science at the fundamental, applicative, design, testing of products, new services, of possibilities for serial production of these. One of the ways of solving this problem is provided by the information theory, which can be successfully used by business managers in Romania. At the rising of the prices of corporate shares, a significant contribution is made by managers. These, being motivated to ensure the success of their own institution, strive to increase the company's image, the prices of the company's shares. The slight financial-theoretical balance can be achieved; in practice- cannot, because in parallel with purely economic enterprises there are paraeconomic activities (eg stock market speculation) that distract considerable amounts of finance from the economic circuit. Economic crises are caused by the unjustified increase in prices. But not any increase in prices will necessarily lead to financial crises. Rising prices is a way of destroying finances. But if it's about seasonal products, no matter how big the speculation is, the rise in these prices will not trigger financial crises. Financial crises can be initiated by an unjustified increase in prices when the goods in question have a period of infinite use. A major generator of financial crises is the herd principle. With the majority of the population turning into sellers, and the buyers missing, the moderate financial crisis is turning into a financial storm. (<https://vdocuments.site/ileana-anastase-thesis.html>)

6. References

- Abreu, D. and Brunnermeier, M., 2003., "Bubbles and Crashes", *Econometrica*, 71 (1).
- Baruch, B., 1993. *My own story*. Buccaneer Books; Cutchogue N.Y.
- Bates, D., 1991. "The Crash of '87: Was it expected? The Evidence from Options Markets", *Journal of Finance*, 46 (3).
- D'Avolio, G., 2002. "The Market for Borrowing Stock", *Journal of Financial Economics*, 66 (2-3).
- Hong, H., Kubik, J. and Solomon, A., 2000. "Security Analysts' Career Concerns and Herding of Earnings Forecasts", *RANG Journal of Economics*, 31 (1).
- Mahar, M., 2004. *Bull! A History of the Boom and Bust*. Harper Collins Publishers; N.Y.
- Tirole, J., 1982. "On the Possibility of Speculation under Rational Expectations", *Econometrica*, 50 (5).
- Чиркова, Е.В. Анатомия финансового пузыря. М.: Кейс, пр.3, 2010, р. 63-72. <https://vdocuments.site/ileana-anastase-thesis.html>
- <http://www.abb.com/cawp/seitp202/402891ecc6a8cdcc12573e20038dd15.aspx>, press release from 14.02.2008.