Role of Restructuring in Crisis Development

František Freiberg – Pavel Scholz***

ABSTRACT

A business with low adaptability to its relevant environment usually gets into difficulties and undergoes a crisis development that might result into insolvency. The article deals with the process of business restructuring as a way of crisis solution. Business restructuring is characterized as a large and comprehensive decision-making process of business recovery with the aim to strengthen the performance, effectiveness, competitiveness and financial stability of the business. The authors focus on the course of a crisis, symptoms of a crisis in individual stages of crisis development and relevant causes of crisis development. Moreover, the article covers the explanation of the restructuring conception, the description of possible crisis solutions, the content of restructuring feasibility and value aspects of restructuring.

Key words: Bankruptcy; Solutions of bankruptcy; Course of crisis; Symptoms of crisis; Causes of crisis; Risk management; Business restructuring; Value assessment; Recovery.

JEL classification: G30

Legislative Framework of Restructuring Process

The applicable Czech legislation provides for four possibilities how to handle a bankruptcy: bankruptcy, reorganization (restructuring), debt forgiveness and a special solution. Restructuring means that a company may continue its business while respecting a restructuring plan. Restructuring assumes meeting of several conditions (minimum turnover and minimum number of employees) or consent of one half of creditors at least [16, 17].

Both debtor and creditor may come up with restructuring proposal. Restructuring plan must contain strictly defined parts, like splitting of creditors into groups, manners of reorganization, terms and conditions of debtor´s business operation, manners of financing of the plan, measures addressing dealing with assets, to name just a few. The law does not stipulate binding ways of restructuring, however it assumes solutions like forgiving a part of debts, merger of debtor, issue of shares, transfer of parts of assets to a company possessed by creditors, transferring a part of debtor´s assets to creditors. Restructuring ends with delivery of restructuring plan as adopted or parts thereof [16, 17].

Course of Crisis

Existence of a business and its development is to a large extent dependent on its capability to identify relevant risks that endanger its performance and on its capability to respond to the risks in a relevant manner. The room for appropriate response is adversely impacted by growing intensity and complexity of change in business environment, reduced pace of economic growth, growing competition and limited financial resources.

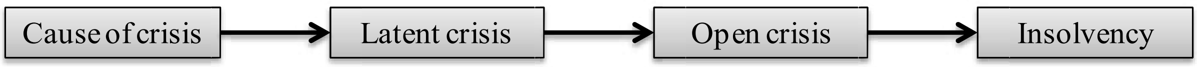
---

* Prof., František Freiberg, head of department, Czech Technical University in Prague, Faculty of Engineering.

** Ing., Pavel Scholz, Ph.D. student, Czech Technical University in Prague, Faculty of Engineering.

A business with a low capacity to adapt to its relevant environment and to get harmonized with it usually gets into difficulties and undergoes a crisis development that might result into insolvency endangering the existence of such business. A business does not run into crisis suddenly but usually as a consequence of problems not attended for some time. Figure 1 shows a scheme of a typical course of a crisis from latent stage to open crisis and to insolvency. [6, 7, 10]

Figure No. 1: Typical course of crisis



Source: [6]

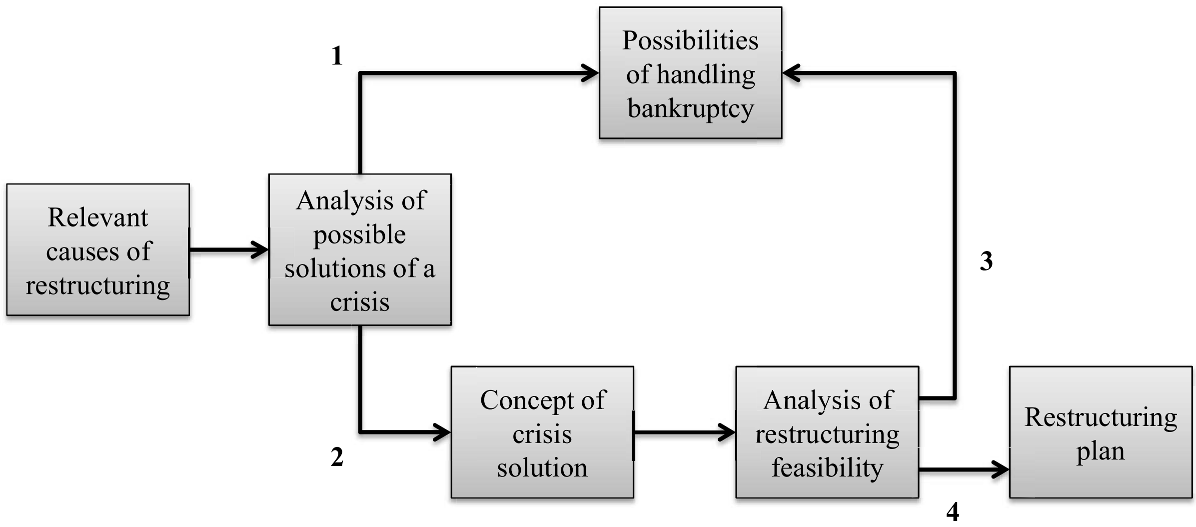
Every crisis has its own specific causes, consequences and a specific course. A crisis may be latent at the beginning, it may be under way without any attention of the outside world and often without attention and intervention of company management. In the open crisis stage the business´s problems are obvious not only to the company management but also to its external partners (stakeholders), who may respond to it in a negative way and thus intensify the crisis and accelerate the business´s transition into insolvency.

Numerous authors address the course of crisis or, to be precise, symptoms of crisis in individual stages of a crisis development. For example in [8] are symptoms specific for individual stages of a crisis development described in the following sequence, decrease of performance, decrease of viability, increased demand for working capital and deterioration of capital structure that ends up by permanent insolvency. In [13] is the way to insolvency described by means of a sequence of changes in parameters of a business efficiency performance. Primary stimulus to insolvency is reduction of production and revenue and the process continues by fall of the inventory and receivables turnover, problems to cover fixed costs by contribution margin, worse terms and conditions of payments to suppliers, difficulties with credit refinancing, increasing interest and requirements for guaranties, reduced investment efficiency, growing indebtedness, problems with repayment of liabilities and deceleration in cash cycle up to insolvency.

Restructuring as a Decision Making Problem

Specific solution of a crisis development shall always depend on magnitude of crisis and particular position of a business. Restructuring represents a large and comprehensive decision making process of business recovery implemented with the aim to strengthen performance, effectiveness, competitiveness and financial stability of a business. Decision making on restructuring of a business starts from an analysis of relevant causes of the crisis development. Factors that cause the critical condition of a business are identified at this stage. Identification of these factors is necessary indeed for the following stage, which is an analysis of possibilities how to arrange long term financial and economic stability of a business. If the analysis concludes that the possibilities are feasible, the following stage verifies own feasibility of the proposed solution regarding available sources and readiness of entities involved to make sacrifice, if it is required. Only then a final concept of restructuring may be set up and implementation can be launched. If there is no stabilization possible of the crisis or if the solutions are unfeasible, then there is no other way then to resort to insolvency. Figure 2 shows schematic picture of stages of restructuring decision making process.

Figure No. 2: Schematic picture of stages of restructuring decision making process



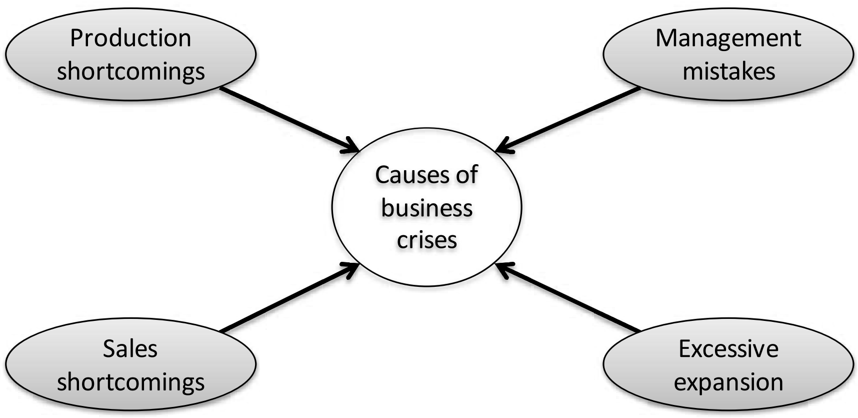
1. Solution of a crisis by other manners
2. Solution of a crisis by restructuring
3. Restructuring is unfeasible
4. Restructuring is feasible

Source: [7]

Relevant causes of Restructuring

Identification of real causes of a business crisis is a precondition of effective restructuring. Inability to identify causes and symptoms of failure leads to absence of corrective measures and further deepening of crisis. Identification of causes gives us the idea of a nature and magnitude of business disorder and allows us to come up with a solution with the aim to establish desired effectiveness. In every business in crisis we can see a set of specific causes that reflect conditions, in which a business operates. Common feature of a business crisis is, in the environment of global economic downturn, particularly a decrease of demand and following loss of orders. Usually these are more simultaneous and mutually influenced external and internal causes. Main causes of business crises are usually the following [6, 9, 15]:

Image No. 3: Main causes of business crises



Source: own proposal

- Management mistakes: centralistic management style, insufficient delegation of competences, insufficient coordination, management fluctuation, unrealistic expectation, failure to understand the level of underdevelopment, ignorance of causal relations, underestimated strategic management and similar

- Excessive expansion (overtrading): reasonless strive to achieve maximum growth, turnover and market share, unutilized capacities, premature introduction of products that need further development and similar
- Sales shortcomings: inadequate attributes of products, too high quality or too low quality, too broad or too narrow production program, wrong pricing policy, loss of markets and similar
- Production shortcomings: obsolete technologies, introduction of new not tested technologies, high defects rate, insufficient production control and similar

Further causes might concern shortcomings, irrationalities and failures in the areas of inventory management, logistics, research and development, financing, investment policy, failure of HR management. In [9, 15] it is recognize that underdeveloped risk management is the main cause of business crises – to be more precise, underestimated monitoring and assessment of risk factors, too strong focus on financial risks, neglected opportunities, reduction of market share, departure of quality managers, decrease of self-confidence of the business, reduced quality standards, reduction of research expenditure, worsening competitiveness of products. Similarly in [3] are mentioned the following examples of causes crisis or lower performance of a business, insufficient managerial competence, inability to tailor a business to internal and external requirements, obsolete strategic management, weak competence of marketing and operations management, insufficient cost control, insufficient motivation of employees and their insufficient identification with the business, lack of flexibility in dealings with suppliers and customers.

Analysis of Possible Solutions of Crises

At the stage of analysis of possible solutions a capability of a business to solve crisis must be analyzed and verified. All relevant factors determining the performance and financial state of a business should be subject to an analysis. It is necessary to look for possibilities to remove the defects and to restore profitability of business and its financial balance.

It requires understanding of internal state of the business and its environment - existing and potential market, customers, business partners and competitors. It is necessary to understand the functioning of the external influences to be able to use many of them to benefit of the company and to understand where the company has advantage over its competitors.

The primarily subject of an analysis used to be [2, 7, 11]:

- Competitiveness including, among others, analysis of amount and structure of costs, attractiveness, quality and competitiveness of products, productivity of manufacturing equipment, sales and supply channels, etc.
- Market attractiveness including, among others, analysis of price level, input barriers, market shares, scope a growth of the market, reliability and number of customers, behavior and intensity of competition, etc.
- Financial performance including, among others, analysis of profitability, profit rate, use of capacities, cash flow, sale, potential for cost reduction, etc.

- Company management, with a focus on management capability to communicate correctly, make right decisions, enforce the decisions, motivate adequately and also on analysis of staff competence, organizational structure, management style, etc. [4]
- Assets and capital structures, research capacity and potential, innovation capabilities, performance and quality of production, productivity of labor, loyalty and competence of workers, reputation and image perceived by the customers

Concept of crisis solution

If the analysis of internal potential and external development conditions concludes that restructuring is legitimate, proposed set of measures for reorganization of business activities and corresponding financial provisions should follow. The resulting concept should specify the aims of restructuring, deadlines and material parameters of individual measures, effects of such measures, capital requirements and ways of there coverage.

There are some possible conceptions usable for a business, e.g. the business cost-reduction, integration, market intensive, diversification and defensive conceptions [12]. The selection of every conception reflects the specific conditions in which the given business operates. For example defensive strategy based on the selling a business unit is considered in the conditions, when demands on resources exceeds their availability, the unit does not fit into required portfolio of a company, the competitors are too strong, the unit has constantly low efficiency, low profitability, bad employee morale, etc.

The suggested conception must be consistent with available resources regarding investment, working capital, management, and operating and support personnel, premises, plant, machinery, equipment, raw materials, components, finished goods, professional services

Justification of the restructuring conception takes place through the assessment using appropriate criteria, e.g. return on investment, risk of losing investment, potential growth, ownership and control, stability of employment and earnings [12].

The restructuring conception should include identification of its risks and strategy of their elimination or reduction. Various strategies of risk management covering individual causes and factors of crises shall be prepared according to their magnitude and probability of their occurrence [15]. The strategies may include measures focusing on risk elimination, for inst. elimination of problem products or processes from the business activities. Risk reducing measures might be focused on reduction of negative impact of risks on a business for example by means of product, supplier, customer and territorial diversification, transfer of risk on other entities, increased capacity to respond fast and cost efficiently on risk occurrence [5, 10, 15].

Check of Restructuring Feasibility

Concept of restructuring shows possible solutions of crisis and finding economic and financial consolidation of a business. Adoption of a concept and its subsequent elaboration into a restructuring plan depends on credibility of the concept, availability of a quality crisis management, flexibility of organizational structure of a business, time horizon of renewal of profitability and financial balance and obviously on availability of financial resources including readiness of the participants to accept financial sacrifice [2, 7, 11].

Success of restructuring depends to a large extent on quality and credibility of company management, quality of contracts, symbiosis and consistence of interests and positions of engaged parties, on capability to minimize loss in the case of negative development or failure of restructuring [1]. Company management [4] plays the key role in the overall process of restructuring. Company management prepares a restructuring concept and manages its implementation. Implementation of restructuring concept might be problematic if carried out by external crisis managers or creditors proxy. Company management, who is not competent enough to conceive a quality restructuring concept, usually is not able to implement a concept conceived by external entities in a timely, consistent and efficient manner. Thus the best concepts might wreck due to poor preparedness of company management.

Value Aspect of Restructuring

Manner of solution of a business crisis immediately concerns owners and creditors who have provided and invested capital to the business. Both owners and creditors assess alternative solutions of a crisis from the point of view of expected revenue in particular. Owners might wish to achieve non-monetary targets as well, for inst. to retain independence of assets of a business.

Capital providers who assess alternative solutions ask about revenues and losses related to particular solutions of a crisis. If they are to decide between restructuring and liquidation, they will query the value of assets of a restructured business continuing its economic activity under the same or altered ownership, structural and organizational conditions as opposed to values they would obtain in the case that the assets would be sold in liquidation.

In the case of restructuring, the value of property is based on the current value of expected future financial flows created by current activities of a business. Financial flows may be calculated on the basis of a free cash flow that is available for claims of owners and creditors (entity method). The following formula is used for the calculation:

$$\text{Value of company} = \sum_{t=1}^{n} \frac{(CF_{FCt})}{(1+d_s)^t}$$

where: d_s .... discount rate (interest rate used for discounting)

n .... number of periods

CF_{FCt} .... free cash-flow of a company in period t

The procedure of free cash-flow calculation is described the table 1:

Table No. 1: Calculation of free cash-flow of a company (CF_{FC})

+	Sales
-	Costs
=	EBIT (Earnings before taxes and interests)
-	Tax
=	EBT (Earnings before taxes)
+	Depreciation
=	CF_O (operational cash-flow)
-	Change of working capital)
-	Investment
=	CF_{FC} (free cash-flow of a company)

In the case of liquidation, the value of property is based on income from sale of a business, its part or individual sale of its assets items. The most advantageous alternative is the one, that represents the highest value of net revenue. The decision making problem might then be put the following way [7]:

$$V = \max(V_R, V_L)$$

where: V_R ...... value of property at restructuring

V_L ...... value of property at liquidation

According to the above, the restructuring alternative will be preferred if $V_R > V_L$. It is however a more complex problem, as we have to include a possible asymmetry of satisfaction of creditors and an owner, who is in the position of a debtor vis á vis the creditors. The value of receivables (R) may be higher at liquidation then at restructuring: $R_L > R_R$ and the value of equity (ownership share) (E) is on the contrary higher at restructuring then at liquidation: $E_R > E_L$. This asymmetry is usually caused by different level of owner´s and creditor´s participation on profit and loss. Both creditors and owners bear the loss but creditors only receive profit up to the amount of their interest as opposed to the owners. Creditors might be more engaged if they receive a higher share of profit. Creditors might prefer liquidity (fast cash inflow), and thus decide not to pursue restructuring even in case $R_L < R_R$ and higher participation on profit. Various combinations of V_R, V_L, R_L, R_R, E_R, a E_L are possible. Their detailed analysis is not a subject matter of this contribution. Let´s add that decision making according to monetary criteria is problematic in practice as it is difficult to forecast revenue from liquidation and restructuring, it is also difficult to anticipate risks of such forecasts and also due to important non-monetary aspects of decision-making [7, 14].

Conclusion

The article presents the process of business restructuring as a way of crisis solution. Business restructuring is characterized as a large and comprehensive decision-making process of business recovery boosting performance, effectiveness, competitiveness and financial stability of a business. The most frequent causes of a business crisis are presented as a necessary precondition of effective restructuring. Extra attention is focused on the crisis solution options and on the concept of restructuring boosting economic and financial consolidation of a business. It is shown that the adoption of the concept depends on the credibility of the concept and the availability of crisis management, the flexibility of the business organizational structure, and obviously on the availability of financial resources. The final part of the article deals with the value aspects of restructuring.

References

[1] Bivainis, J. – Tamošiųnas, A. (2003): *Enterprise Restructuring Programmes: EVALUATION AND IMPLEMENTATION.* Management of Organizations: Systematic Research, 2003, annual volume 27, p. 17-34.

[2] Boeckenfoerde, B. (1991): *Unternehmenssanierung.* SchaefferVerlag, 1991.

[3] Burksaitiene, D. – Mazintiene, A. (2011): *THE ROLE OF BANKRUPTCY FORECASTING IN THE COMPANY MANAGEMENT.* Economics & Management, 2011, annual volume 16, p. 137-143.

[4] Cascio, W. F. (2002) *Strategies for responsible restructuring.* Academy of Management Executive, 2002, year class 16, annual volume 3, p. 80-91.

[5] Dooley, D.F. – Fox, B.J. (2013): *The Chief Restructuring Officer's Guide to Bankruptcy: Views from Leading Insolvency Professionals.* Washington, D.C., American Bankruptcy Institute, 2013.

[6] Hauschildt, J. (1988): *Krisendiagnose durch Bilanzanalyse.* Koeln, Verlag Dr. Otto Schmidt KG, 1988.

[7] Jozefowsky, H.A. (1985): *Sanierungsfinanzierung.* Wien, Fachverlag an der Wirtschaftsuniversitaet Wien, 1985.

[8] Kislingerová, E. (2010): *Podnik v časech krize.* Praha, Grada Publishing, a.s., 2010.

[9] Platt, H. D. (1999): *Why Companies Fail: Strategies for Detecting, Avoiding, and Profiting from Bankruptcy.* Washington, D.C., Beard Books, 1999.

[10] Ratner, I. – Stein,G.T. – Weitnauer, J.C. (2009): *Business Valuation and Bankruptcy.* New Jersey, Wiley, 2009.

[11] Ruetschi, A. (1989): *Sanierungs-management bei unternehmenskrisen.* IO Management Zeitschrift, 1989, year class 58, annual volume 2.

[12] Stutely, R. (2002): *The definitive Business Plan.* Great Britain, Prentice Hall, Pearson Professional Education, 2002.

[13] Vránová, D. (2004): *Rating a jeho vliv na posuzování podniku.* MM Průmyslové spektrum, 2004, annual volume 11, p. 84-85.

[14] Wilson, S.C – Altman, E.I. (2010): *Creating Value Through Corporate Restructuring: Case Studies in Bankruptcies, Buyouts, and Breakups.* New Jersey, Wiley, 2010.

[15] Winterling, K. (1989): *Risiken in Unternehmen erkennen, verhindern, bewaeltigen.* IO Management Zeitschrift, 1989, year class 58, annual volume 11.

[16] Zákon č. 182/2006 Sb., o úpadku a způsobech jeho řešení.

[17] Zákon č. 294/2013 Sb., kterým se mění zákon č. 182/2006 Sb. o úpadku a způsobech jeho řešení (insolvenční zákon).

Contacts:

František Freiberg, Prof.
Czech Technical University in Prague
Faculty of Engineering
Department of Management and Economics
Karlovo náměstí 13
Praha 2, 121 35
Frantisek.freiberg@fs.cvut.cz