

# **THE CONCEPT OF ECONOMIC SECURITY OF THE HOSPITAL: A NEW LOOK AT THE LEVERS OF CONTROL<sup>1</sup>**

**Yuliya Shutyak, PhD**

yuliya.shutyak@ulg.ac.be

**Didier Van Caillie, Prof.**

D.VanCaillie@ulg.ac.be

University of Liege, HEC Management School, Belgium

## **Abstract**

Despite a significant progress achieved in the healthcare sector during last decades, we need to admit the fact that many urgent problems remain unsolved even in well developed countries. Along with other major factors, economic causes of these problems hold a prominent position. It is then necessary to think about a need of shifting from a view of hospitals as ever being institutions existing by default in any society to a view of hospitals as organisations with an incorporated economic mechanism, adapted to social changes and relevant economic risks. With this regard, this paper seeks to incorporate the concept of economic security of the hospital into Simons' LOC model used in hospital management. We provide a brief overview of the concept of economic security of the organization. We adjust this concept for hospital management considering the healthcare system as an economic system and taking main problems of the hospital and interests of stakeholders in the core of strategy development. Further, we accommodate the concept with the levers of control. The result of the paper is a revised Simons' LOC model which provides a theoretical framework for further research on hospital management and serves a modified management instrument.

**Key words:** HCO strategy, risk, economic security, health care management, HCO management control.

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## Introduction

In 1957, the World Health Organisation (WHO) defined a hospital as an “integral part of a social and medical organisation, the function of which is to provide for the population complete health care, both curative and preventive, and whose out-patient services reach out to the family in its home environment; the hospital is also a centre for the trainings of health workers and for bio-social research” (WHO, 1963: 9). This definition still remains relevant. Hospitals are among the most important elements of health systems all around the world. The list of functions executed by hospitals is very long; first of all, they are a meeting point for patients and doctors.

At the same time, as with any other organisation, the hospital is an element in a network of stakeholders. The government, political parties and NGOs, patients, employees, investors, and sponsors surround and interact with the hospital. These stakeholders provide various resources: financial, material, organisational, human resources, science-based support, etc. Simultaneously, they have their expectations regarding the performance of the hospital. Some of these expectations are similar for all interested groups, while others are specific for a certain group of stakeholders. Consequently, it is erroneous to reduce hospital tasks to the provision of medical services.

Fulfilment of obligations to main stakeholders is an important prerequisite for a hospital’s survival and its stable functioning in the future. However, this side of the hospital life is overlooked. Moreover, hospitals operate in an environment that is characterised by risks and uncertainty that make it difficult to achieve all desired goals. Increase in resource demand for hospitals is provoked by several causes, among which are a swell in world population and ageing of population in developed countries; the emergence of new diseases; an increase in the number of persons with chronic and incurable diseases; climate changes; and economic and financial crises. These, and other problems, are challenging for hospitals in both developing and developed countries. Inability to solve them effectively creates the need for a new approach to hospital performance management that will allow finding the optimal integration of the medical, economic, and social goals that the hospital must achieve.

For this reason, this paper opens a discussion on the utility of the concept of economic security of the hospital (ESH), which may serve as a modern approach in hospital management. By integrating the economic and management vision of the hospital and focussing on the protection and realisation of stakeholders’ interests, ESH supplements other approaches to strategic management, such as Simons’ levers of control.

## 1. Economic problems of the hospital

Nowadays, it is usual to speak about hospital problems through the prism of budget constraints. According to the World Health Organisation, more than a billion of the world's population do not have access to medical services because of poverty (WHO, 2013a). 11.9% of all expenses on healthcare systems of the world are "out-of-pocket expenditures" (WHO, 2010; WHO, 2013b). In some of the most impoverished countries, this indicator exceeds 70%. More than 57 countries in the world suffer from a critical shortage of healthcare workers, and insufficient financing plays a vital role in this case. All these problems specifically concern hospitals taking into account that they absorb the largest part of financial resources (McKee, Healy, 2002).

At the same time, we cannot solve the problem of financing only by increasing the budget. Previous research demonstrates that the countries with highest expenses not necessarily have the most efficient healthcare systems (WHO 2010; Stasse, 2012). It calls for a search of different approaches to decrease expenses and simultaneously maintain the volume and quality of medical services on the necessary level. Firstly, healthcare is not only an individual problem; it has a social nature (Stasse, 2012). Many diseases appear because of risky behaviour. Malnutrition provokes obesity, diabetes, and cardiovascular disease; smoking provokes cancer, specifically, lung cancer; alcohol and drug abuse; violation of rules of personal hygiene; and practice of a disordered sexual life that provokes a decrease in the number of sexually transmitted diseases, which include incurable diseases like AIDS and hepatitis C. The fight against this type of behaviour becomes one of the main objectives of hospitals. In this case, the economic goal is linked with the medical and social goals, because a decrease in number of patients with such diseases allows hospitals to solve some urgent social problems and economise their limited resources.

Secondly, many hospitals continue using outdated methods, technologies, and medications because of limited access to new technologies and new, more efficient medications. Moreover, absence of qualified personnel decreases the effectiveness of medical treatment, increases secondary undesirable effects, and increases the number of days in hospital. As a result, the costs of treatment rise considerably. Therefore, it becomes inevitable and necessary to involve medical workers in the struggle against hospitals' economic problems.

Finally, organisation of work at hospitals can be inefficient and counterproductive. For instance, the use of manual procedures for the reception and maintenance of documents may require more time and costs than an electronic system. In turn, inefficiency of reception or poor organisation of

medication delivery may negatively influence subsequent performance of medical services. We can provide a number of similar examples that constitute operational problems in hospital management.

## **2. Presentation of the concept of the economic security of a hospital**

The idea of economic security came from the research fields of politics and macroeconomics (Baldwin, 1997; Collins, 2013), which consider the state, region, family, or individual an object of security. Initially, economic security was associated with the idea of protection of economic interests of an object of security. This approach became one of the most discussed in research papers on economic security of the organisation in Russia, Ukraine and other post-Soviet countries (Ivanova, 2011; Kozachenko et al. 2003; Shemaeva, 2010).

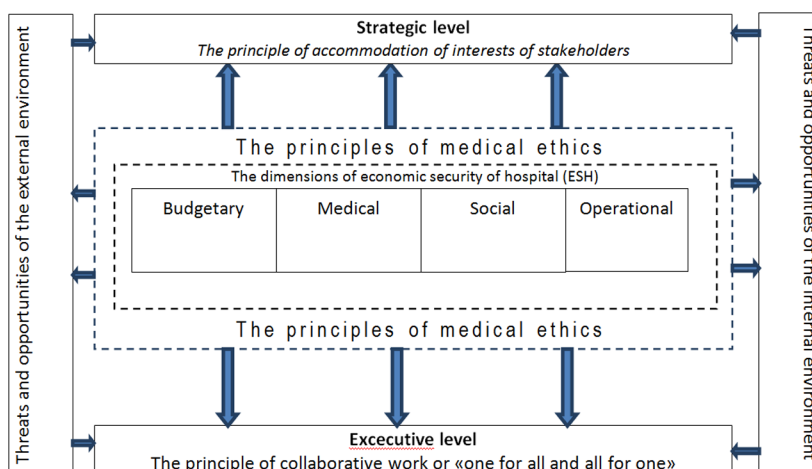
Further studies on the economic security of the organisation link economic security to other concepts and notions (Shutyak et al. 2014). Among these concepts on the first place are risks, threats and opportunities of the external and internal environment of the organization. Simultaneously, some researchers propose to study the economic security of the organisation as a combination of several components that represent different dimensions of organisational activity. Similarly, we propose to represent the economic security of the hospital by taking into account the specifics of hospitals' functioning.

With regard to this study, the interests of the hospital must be formulated by taking into account the interests of its stakeholders. Therefore, we propose a simplified definition of hospitals' economic security as a state of organisation that assures the accommodation and realisation of its stakeholders' interests from a short- and long-term perspective through the elimination of threats and use of opportunities that are limited by principles of medical ethics. Based on this definition, we present ESH diagrammatically (see Figure 1).

In this context, a hospital's strategy must be developed with due consideration of interests and expectations of its stakeholders. Further, we must take into account the fact that it is difficult to speak about an individual's security without assuring a certain level of collective security. At the same time, to achieve this goal, all interested groups must be involved in the process of maintenance of ESH. The principle of collaborative work, or the implication of all parties, becomes obligatory on the executive/operational level.

Further, the four main interrelated dimensions of ESH include the budgetary, medical, social, and operational dimensions. The budgetary dimension seems to be the most important because many hospitals' problems are considered from the point of view of deficient finance resources. However, a focus on the economy of hospitals does not give lower priority to medical aspects. As mentioned above, there are reciprocal links. The quantity and quality of limited resources determines, in large part, the quality of services provided by the hospital. Simultaneously, medical activity influences the utilisation of hospitals' resources.

Figure 1. The revised concept of economic security adopted for hospitals



Social and operational components also play important roles. Social dimension is connected to diseases caused by risky behaviours, such as malnutrition, smoking, abuse of alcohol and drugs, etc. (Stasse, 2012). The fight against such behaviour becomes one of the highest-priority tasks for hospitals. And, in this case, it involves prevention of both economic and medical negative consequences. In turn, the operational component is linked to the organisation of work within a hospital and determines the efficiency of programmes within the three previous dimensions of ESH.

Finally, it is necessary to take into account the specificities of the hospital environment, which is characterised by changes that are provoked by the general economic, social, and political situation in a country. Uncertainty of the external environment creates conditions for threats and opportunities for the hospital. Simultaneously, opportunities are always limited by the principles of medical ethics (Lartigau, Nobre 2011; WMA, 1994), which serve as a filter for managerial decisions.

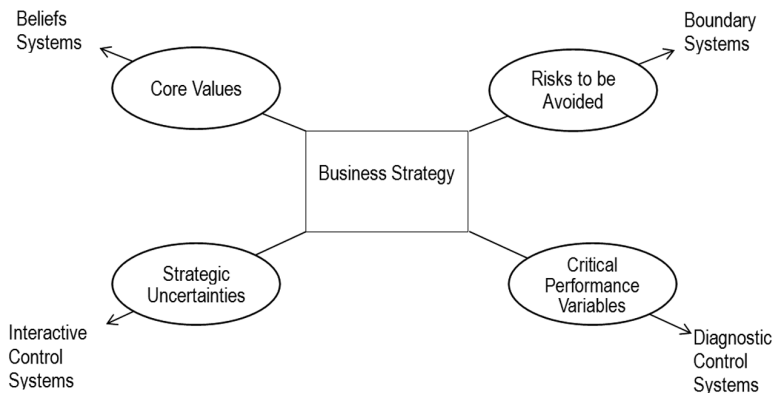
### 3. Simons' levers of control

Despite certain critics, Simons' levers of control have been used frequently for both private and public organisations, including hospitals (Alcouffe et al. 2013; Lartigau, Nobre, 2011; Tessier, Otley, 2012; Widener, 2007). Simons built his theory as a system of opposing positive and negative forces (see Figure 2).

According to Simons, an organisation may implement its strategy successfully if it balances these forces. In his model, two levers of control – belief systems and interactive control systems – represent positive inspiring forces when two others – boundary systems and diagnostic control systems – are negative constraining forces (Simons, 1995).

Belief systems concern core values communicated within an organisation to “inspire and guide organizational search and discovery” (Simons 1995: 36). It helps tackle problems and motivates employees to be creative. In turn, boundary systems serve to limit employees' behaviour based on risks to be avoided. Simons underlines that managers cannot dictate to individuals which opportunities to use. Instead, they may communicate some basic rules defining what employees should not do. With this logic, boundary systems become “a prerequisite for organizational freedom and entrepreneurial behaviour” (Simons, 1995: 41) and, along with belief systems, create a focussed space within which employees exploit organisational opportunities.

Figure 2. Simons's levers of control



Source: Simons, 1995.

The other positive forces, interactive control systems, focus on strategic uncertainties and represent “formal information systems that managers use to involve themselves regularly and personally in the decision activities of subordinates” (Simons, 1995: 95). Simultaneously, diagnostic control sys-

tems are used by managers to monitor organisational performance and intervene in cases of deviation from established standards.

#### **4. Integration of ESH with Simons' levers of control**

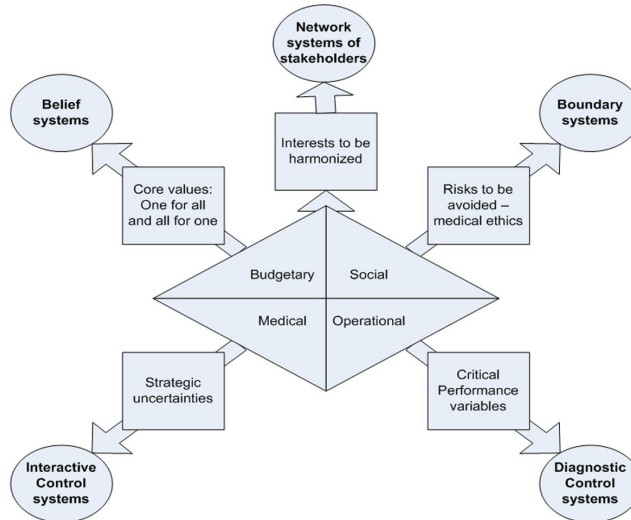
The concept of ESH is especially interesting for strategic management since it determines a horizon of action and objectives and specifies priorities. Strategic values of the concept of ESH make it worth operationalising for further utilisation in practice.

Simons' model proved its usefulness in hospital management (Lartigau, Nobre, 2011). Moreover, the levers of this model can be easily superimposed with the elements of the concept of ESH. Therefore, we propose to integrate the concept of ESH with the Simon's model of levers of control (Lartigau, Nobre, 2011; Simons, 1995; Tessier, Otley, 2012) as demonstrated in Figure 3.

Firstly, we propose to place in the core of the model four dimensions of ESH and thus four dimensions of hospital strategy: budgetary, social, medical and operational. These dimensions are connected to one or another way to all levers of control.

*Belief systems.* This is a very important lever of control with regard to the economic security of an organisation because its purpose is to "secure the commitment of employees towards common goals while inspiring them to search for organizational opportunities" (Arjaličs, Mundy, 2013). Belief systems aim at cultivating among employees an understanding that their individual economic security interrelates closely with organisational security. It is important for an organisation to assure that an individual will not practice opportunist behaviour in search of personal economic security to the disadvantage of the organisation. For security reasons, the goals of employees should not be in conflict with organisational goals. Therefore, we incorporate in the Core Values the principle of collaboration or the principle "one for all and all for one" as a value that managers should communicate to other employees and implement into practice at all organisational levels.

Figure 3. Revised Simons's levers of control



*Boundary systems.* The boundary systems in hospital management control are based on relevant risks and threats to hospitals. Among them, special attention is on threats to realisation of principles of medical ethics (Lartigau, Nobre, 2011). This lever allows managers to assure the secure behaviour of employees and simultaneously give them a certain level of freedom. It enables the exploitation of opportunities in a conscious, responsible way.

*Interactive control systems.* Interactive control systems allow managers to search for new positions and best strategies in changing environments that are characterised by risks and uncertainty. It allows assuring economic security of an organisation in a dynamic way rather than maintaining a fixed state of organisation during a long period of time. As positive forces, interactive control systems allow an organisation to assure its security through dynamic, flexible, and well-timed decision making.

*Diagnostic control systems.* Critical performance variables must correspond to the four dimensions of a hospital's economic security – budgetary, medical, social, and operational. Diagnostic control systems, similar to boundary systems, set limits on employees' behaviour, on the one hand, and direct employees' efforts towards clear goals on the other. Unlike interactive systems, diagnostic systems tend to orient an organisation towards a certain state that is characterised by clear performance indicators. Simultaneously, it does not mean freezing the organisation at a certain level of development. It is, rather, a road map where indicators as road signs not only forbid but also prevent and orient a driver.

*Network system of stakeholders.* The key change in Simons' model is the introduction of the fifth lever, which is responsible for the harmonisation of a hospital's interests with the interests of its various stakeholders. We introduce this lever of control as a separate dimension of managers' attention, which is one of the core elements of the concept of ESH. What is important with this lever is that it presents a trade-off or contradiction between positive and negative forces. On the one hand, the organisation needs to protect its own interests and struggle for its full realisation, which can be interpreted as the necessary and inevitable infringement of the rights of other stakeholders. On the other hand, no organisation can survive in isolation and is dependent, to one or another extent, on its stakeholders and needs to take their interests into account. Although the "win-lose" strategy has been proven effective in certain situations for the long-lasting prosperity of organisations, including hospitals, the "win-win" strategy is the only key to success.

## Conclusions

The aim of this paper was to adopt the concept of economic security to managerial practice in hospitals. Based on the literature on the economic security of the organisation and hospital management, we revised the theoretical foundation of this concept of economic security by highlighting distinctive features that are relevant to hospitals as specific organisations. First of all, we took into account the main problems that hospitals in all countries face. We focussed on the four main dimensions of economic security of the hospital – budgetary, social, medical, and operational – in their strong interrelation with the interests of the various stakeholders of a hospital. In addition, we took into account a vital need to assure compliance with the rules of medical ethics.

When integrated into Simons' LOC model, the concept of ESH can be useful for managers of hospitals as well as for representatives of international organisations who are responsible for the development and implementation of universal politics in the healthcare sector. Thus, the article contributes in several ways to managerial application of the concept of ESH. First, we argued in favour of practical implementation of the concept through the use of the levers of control model, which has already proved its utility in the hospital environment. Second, the fifth lever of control that we added to Simons' model focuses managers' attention on an important component of a hospital's economic security: the network of stakeholders. This lever contributes to the goal setting and choice of decisions at an organisation's strategic level. It requires managers to build their decisions in a way to

protect the organisation's interests simultaneously with their accommodation of the interests of groups of stakeholders. Third, we proposed to build belief systems around the core security principle of collaboration.

Finally, the paper provided a conceptual framework for future research. Thus, there is a need to develop instruments to measure economic security of the hospital, perception of this security by hospitals' employees, implementation of the principle of collaboration, and compliance with the requirement of interest harmonisation.

## References

1. Alcouffe, S., Boitier, M., Rivičre, A., Villesèque-Dubus, F. (2013), *Contrôle de gestion sur mesure: Industrie, grande distribution, banque, secteur public, culture*. Dunod, Paris.
2. Arjaličs, D.-L., Mundy, J. (2012), The use of management control systems to manage CSR strategy: A levers of control perspective, *Management Accounting Research*, Vol. 24, pp. 284-300.
3. Baldwin, D. (1997), The concept of security, *Review of International Studies*, Vol. 23, pp. 5-26.
4. Collins, A. (2013), *Contemporary security studies*. 3rd ed. Oxford University Press, Hampshire.
5. Ivanova, N. (2011), *Otsinka efektyvnosti systemy ekonomichnoi bezpeky ahropromyslovykh pidpriemstv*. Dnipropetrovs'k State Agrarian University, Dnipropetrovsk.
6. Kozachenko, G., Ponomarev, V., Lyashenko, A. (2003), *Ekonomicheskaya bezopasnost predpriyatiya: sushchnost i mekhanizm obespecheniya*. Libra, Kyiv.
7. Lartigau, J., Nobre, T. (2011), *Une nouvelle grille d'analyse pour le contrôle de gestion hospitalier: Le contrôle intégré de Simons*. Comptabilités, Economie et Société. Montpellier, France.
8. McKee, M., Healy, J. (Eds.) (2002), *Hospitals in a changing Europe*. Open University Press, Buckingham, Philadelphia.
9. Shemayeva, L. (2010), *Ekonomichna bezpeka pidpriemstv u stratehichnii vzaiemodii z subiektamy zovnishnoho seredovishcha*. University of Economics and Law «KROK», Kyiv.
10. Shutyak, Y., Danylenko, O., Van Caillie, D. (2014), The Concept of economic security of the enterprise: Why do we need it? Paper presented at the REDETE 2014 Conference proceedings, 10-12 April, Banja Luka.
11. Simons, R. (1995), *Levers of control: how managers use innovative control systems to drive strategic renewal*. Harvard Business School Press, Boston.
12. Stasse, F. (2012), *Le système de santé idéal*, *Les Tribunes de la santé*, Vol. 4 (37), pp. 35-42.

13. Tessier, S., Otley, D. (2012), A conceptual development of Simons' levers of control framework, *Management Accounting Research*, Vol. 23 No. 3, pp. 171-185.
14. Widener, S. (2007), An empirical analysis of the levers of control framework, *Accounting, Organizations and Society*, Vol. 32, pp. 757-788.
15. WMA The world medical association (1994), WMA international code of medical ethics (adopted 1945, amended 1994), available at: <http://www.wma.net/fr/30publications/10policies/c8/index.html> (accessed 13 October 2013).
16. WHO World Health Organization (1963), Expert committee on health statistics. Eight report. Technical Report Series №261. Geneva.
17. WHO World Health Organization (2010). World health report 2010: Health systems financing, the path to universal coverage, available at: [http://www.who.int/gho/health\\_financing/en/#](http://www.who.int/gho/health_financing/en/#) (accessed 13 October 2013).
18. WHO World Health Organization (2013a). Research for Universal Health Coverage, available at: [http://apps.who.int/iris/bitstream/10665/85761/2/9789240690837\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/85761/2/9789240690837_eng.pdf) (accessed 13 October 2013).
19. WHO World Health Organization (2013b), World Health Statistics, available at: [http://www.who.int/gho/publications/world\\_health\\_statistics/2013/en/](http://www.who.int/gho/publications/world_health_statistics/2013/en/) (accessed 13 October 2013).

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