

Cernostana, Zanna

Working Paper

Financial sustainability for private higher education institutions

Institute of Economic Research Working Papers, No. 17/2017

Provided in Cooperation with:

Institute of Economic Research (IER), Toruń (Poland)

Suggested Citation: Cernostana, Zanna (2017) : Financial sustainability for private higher education institutions, Institute of Economic Research Working Papers, No. 17/2017, Institute of Economic Research (IER), Toruń

This Version is available at:

<https://hdl.handle.net/10419/219840>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/3.0/>



Institute of Economic Research Working Papers

No. 17/2017

Financial sustainability for private higher education institutions

Zanna Cernostana

Article prepared and submitted for:

9th International Conference on Applied Economics Contemporary Issues in Economy, Institute of Economic Research, Polish Economic Society Branch in Toruń, Faculty of Economic Sciences and Management, Nicolaus Copernicus University, Toruń, Poland, 22-23 June 2017

Toruń, Poland 2017

© Copyright: Creative Commons Attribution 3.0 License

Zanna Cernostana

zanna.bki@inbox.lv

Baltic International Academy 4 Lomonosova str., Riga, Latvia

Financial sustainability for private higher education institutions

JEL CODES: I22; M21

Keywords: *private higher education; financial sustainability; financial ratio system*

Abstract

Research background: The development of higher education (HE) is amongst topical issues. The modern society recognises that the most valuable capital is a human being with his/her intellectual potential and this has become the main resource for social and economic development. The important component of the HE systems of many countries is formed by Private Higher Education Institutions (PHEIs), although in each case they have national peculiarities. Today PHEIs undergo difficulties inherent to the entire system of education. The problem of financial sustainability and efficiency of HEIs is becoming urgent. In this context, the most important issue is to deal with developing approaches for quantifying financial sustainability and identifying the indicators of its evaluation.

Purpose of the article: To analyse the financial sustainability of the private sector of HE in Latvia and justify the necessity of an integrated indicator system for financial sustainability evaluation.

Methodology/methods: Include methods of economic and statistic analyses, methods of the analysis and synthesis of economic information, methods of grouping, comparisons, classification, summarising, description and prediction.

Findings & Value added: one of the major issues is the existing gap between the assessment of financial activities of a higher education institution (HEI) and its education activities, which is asserted by accreditation standards; according to these standards, financial and education activities are autonomous entities, hardly interconnected.

Introduction

Higher education institutions at all levels are facing extraordinary challenges at present time: demographic shifts, rising costs of providing HE, limited sources of funding (Lapovsky L., 2014). Effectiveness, efficiency and

financial sustainability become central concerns for the HE sector. Only those institutions that have sound financial structures and stable income flows will be able to fulfil their multiple missions (Sazonov S., 2015). What is the overall measurement of financial health? A variety of academic and financial performance metrics are used to assess HEI performance. However, there is no consensus on the best performance measures.

There are many methods of analysis for the evaluation of the business, including the use of various financial ratios. But before we begin, we must decide on the viewpoint and purpose of our analysis (Helfert E., 1996, p. 111). Modern approaches to financial analysis offer assessment from the party in interest's point of view, i.e. stakeholders. There are several groups of stakeholders which have interest in the financial well-being of HEIs, whether public or private, profit or non-profit, such as: regulatory agencies, licensing officials, accreditation agencies and equity owners, whether present or potential, and in the case of profit institutions – funding and other financial resource providers (e.g. donors), recipients of institutions' services (students and their parents), faculty members and administrators, as well as the public at large. (Montanaro M., 2013, p. 3). In these days, the important stakeholders are Education Quality Assessment Agencies and the universities' administrators responsible for the quality of learning.

Today, quality assurance is one of the central issues in HE debates. The serious problems include assuring the quality of diverse academic institutions and ensuring that they maintain standards of teaching, admission, and infrastructure. Quality assurance in the private sector is especially important given that a few other methods of control exist other than market forces. (Altbach, Ph.G., 2005, p. 8). "Standards and Guidelines for Quality Assurance in the European Higher Education Area", developed by the European Association for Quality Assurance in Higher Education (ENQA), specify that educational institutions should ensure the availability of adequate and affordable learning resources and student support services relevant to educational goals. This question focuses attention on two levels of financial health: first, the institution's financial capacity to successfully carry out its current programmes, and second, the institution's continuing financial capacity to carry out its intended programmes for the expected lifespan of the institution.

At present, there is no single methodology for assessing the financial provision of educational services supplied by commercial companies in Latvia. The objective of this article is to identify the set of financial sustainability's ratios, which are more appropriate for higher education institutions and to evaluate the private sector of HE in Latvia on their basis.

Literature review

Broadly, sustainability refers to the ability of managers to maintain an organisation over the long term. According to the manual “Fundamentals of NGO Financial Sustainability” (Slabyj *et al.*, 2000), sustainability is a measure of the organisation’s ability to fulfil its mission and serve its stakeholders over time. Sustainability is a process, not an end. The organisation does not “become” sustainable and rest on its success afterwards. Sustainability involves all the elements and functions of the organisation, and every major decision made within the organisation — from human resources to finances to service delivery — must be considered through the filter of sustainability. Financial sustainability can be gauged by the organisation’s net income (the surplus of revenues over expenses); liquidity (the cash available to pay bills); and solvency (the relationship of assets and debt or liabilities). Financial sustainability refers to the ability to maintain financial capacity over time.

The financial theory considers the concept of financial sustainability as the provision of financial independence. For example, Savitskaya G. gives the same definition of financial sustainability: “It is the subject’s ability to function and develop and maintain the balance of its assets and liabilities in the changing internal and external environment ensuring its solvency and long-term investment attractiveness within the boundaries of the acceptable level of risk. The sustainable financial state is reached provided the capital adequacy, good quality of assets, sufficient level of profitability considering the operational and financial risk, sufficient liquidity, stable income and wide range of borrowing opportunities” (Savitskaya G., 2004, p. 536). The efficiency of a company can be defined as the relationship between the output of products or services and the input of resources necessary for their delivery. (Rees B., 1995, p. 157)

Financial ratio analysis for HEIs

One of the classic options for assessing the financial condition of the enterprise is the analysis using financial ratios. There are five categories of ratios used in financial statement analysis. These are: (1) liquidity ratios, which measure a firm’s ability to meet cash needs as they arise; (2) activity ratios, which measure the liquidity of specific assets and the efficiency of managing assets; (3) financial sustainability ratios, which measure the extent of a firm’s financing with debt relative to equity and its ability to cover interest and other fixed charges; (4) profitability ratios, which measure the overall performance of a firm and its efficiency in managing assets, liabilities, and equity and (5) market value ratios, which bring in the stock price and give an idea of what investors think about the firm and its future prospects. (Brigham E., Houston J., 2016, p. 129). The advantage of the analysis using

financial ratios is that it not only allows to assess the institution's current financial health, but also compare it to the averages for the industry and leading competitors (benchmarking) and identify development trends. Financial performance may be used to signal academic performance and vice versa.

For the last decades, the economic literature is having debates about the financial position of HEIs, and which indicators are most effective and reflect the specifics of their activities. In October 2014, Hanover Research presented the overview “Financial Reporting in Higher Education”. Besides considerations for financial reporting, the report describes financial key performance indicators, which can be used by HEIs to create comparable charts for benchmarking with peer institutions. These ratios can help an institution answer questions like:

- ☐ Are financial resources sufficient to support the institution`s mission?
- ☐ Is the institution clearly financially healthy or not as of the balance sheet date?
- ☐ Is the institution financially better off or not at the end of the year than it was at the beginning?
- ☐ Did the institution live within its means or not during the year?

According to Hanover Research, there are three main ratios for private institutions: primary reserve ratio, equity ratio, and net income ratio. The primary reserve ratio addresses how long an institution could potentially operate with its expendable reserves. The equity ratio assesses the proportion of assets that the institution owns. Finally, the net income ratio assesses whether unrestricted activities resulted in a surplus or a deficit.

Prager, Sealy&Co, LLC, KPMG LLP and BearingPoint offer the use of strategic financial analysis tools. The strategic financial analysis is a combination of approaches, methods and tools to analyse, evaluate and communicate financial information on whether an institution is achieving its mission from a financial perspective. The basis for effective management is a clear institutional mission. Every institution should have a clearly articulated mission and there must be measurement, both financial and non-financial.

Financial analysis of Private HEIs in Latvia

The system of HE in Latvia consists of two subsystems: public and private education. In the academic year 2015/2016, 17 public and 14 private HEIs functioned in Latvia, where they enrolled 57,027 and 16,477 students respectively (private HEIs enrolled 22.42% of all students). Among the 14 private HEIs in Latvia, 11 HEIs are commercial companies with the right to earn and distribute profit, 10 HEIs have the status of limited liability

companies and 1 is a joint-stock company. 3 HEIs are registered as non-profit institutions without the right to earn a profit (Cernostana Z., 2016).

To assess the overall financial state and sustainability of the private sector of HE in Latvia, the above-mentioned methodology of analysis utilizing financial ratios was used. The set of indicators was selected from the ones used by statistical (Latvian Statistical Bureau, Lursoft database) and state bodies (Ministry of Education). For the calculations, the public financial statement data of 14 HEIs for 2015/2016 academic year were used. The results of the study are presented in Table 1.

Table 1. Analysis of the financial Ratios of Private HEIs in Latvia[illegible]

Net profit margin	Net income Net sales	2 232 786 27 213 197	8.20	-0.503	15.04	> 1 Higher is better
Return on equity (ROE)	Net income Total equity	2 232 786 31 012 269	7.20	-0.81	9.9	> 0.2
Return on assets (ROA)	Net income Total assets	2 232 786 48 170 351	4.64	-0.81	5.78	> 0.15

Source: own calculations based on www.lursoft.lv

Liquidity ratio analysis: This ratio shows the current assets available to cover current liabilities at the balance sheet date and help answer the question: whether the HEI be able to settle its liabilities when the time comes while remaining a viable organisation. In general, the current ratio analysis revealed that the PHEIs are in the zone of stability and do not have difficulties with the repayment of payables. But two PHEIs have the indicator below the norm. This is related to the acquisition of long-term loans. The relatively high level of current ratio is explained by the fact that HE services are traditionally rendered on the principle of advance payment, i.e. students pay their fees at the beginning of the semester and the services are rendered at a later date. Therefore, monetary assets (average 57.43%) usually comprise a significant part of the PHEIs' current assets. This is confirmed by the quick ratio value, which differs slightly from the current ratio.

Activity ratio analysis: The coefficients of this group show how well the company manages its assets. These rates answer the following question: how rational is the amount of each type of liquid assets in terms of current and predicted sales. The analysis showed that the assets mostly consist of the Non-current assets (an average of 51.29%), Accounts receivables (an average of 9.63%) and Cash (an average of 15.91%). The rates of Total assets turnover and Fixed assets turnover are slightly understated and do not correspond to the size of the gained profits. Days payable outstanding corresponds to the receivable repayment norms.

Financial sustainability ratio analysis: shows the ratio of the company's borrowed capital to its own; it characterises the degree of risk and the stability of the company. The financial stability of the most HEIs is within the normal range, although 6 of them are below the norm and are at risk. The analysis of the borrowed funds' structure shows that only 14.35% of them are loans to banks and other organisations, 43.71% are deferred incomes (usually unrealised funds of Grants), and 25.72% are students' advance payments for studying. The remainder is the current payables on wages, taxes and current expenditures.

Profitability ratio analysis: a relative indicator of economic efficiency. The enterprise's profitability comprehensively reflects the degree of efficiency in the use of material, labour, monetary, etc. resources. Profit margins reflect the results of management effectiveness and all operating decisions of the company. The analysis of the studied universities showed that on average the profit margin values are high, with the exception of 3 institutions that finished the fiscal year with a loss.

Conclusions

Financial sustainability is of paramount importance for universities, because this figure characterises the stability of the institution in the long term. The specificity of HE lies precisely in the duration of the provision of services. It is recommended to implement an assessment of financial stability as a criterion for evaluating the financial condition of the institution when conducting accreditation procedures and quality assessments. The analysis showed that a number of universities are in a precarious financial position, and therefore cannot guarantee students a high-quality education for the future periods.

The next problem is the existing gap between the assessment of financial activities of a HEIs and its education activities, which is asserted by accreditation standards; according to these standards, financial and education activities are autonomous entities, hardly interconnected. Financial performance may be used to signal academic performance and vice versa. The institution should not be regarded as a private, but as a socially significant economic entity developing the education's quality system. Such definition of the problem requires finding new integral indicators uniting the results of financial and educational activities.

References

- Brigham, E., Houston, J. (2016) *Fundamentals of financial management concise* South-Western, Cengage Learning
- Helfert, E. A. (1996). *Techniques of financial analysis*. Richard D.IRWIN, INC.
- Rees, B. (1995). *Financial analysis*. Prentice Hall Europe
- Savitskaya, G. (2004). *Economic analysis*. Moscow: Novoje znanije
- Altbach, Ph. G. (2005). *The private higher education revolution: an introduction*. In Ph.G. Altbach (Ed.) *Global perspectives on higher education*. Rotterdam/TAIPEI: Sense Publishers.

- Cernostana, Z., Verovska, V. (2016). Private higher education in Latvia: funding and quality assurance” *European Scientific Journal*, July / Special Edition/
- Hanover Research. (2014). Financial reporting in higher education. Retrieved from <http://www.hanoverresearch.com/media/Financial-Reporting-in-Higher-Education.pdf>
- Lapovsky, L. (2014). The higher education business model: innovation and financial sustainability. Retrieved from <http://www.tiaa.crefinstitute.org>
- Leon, P. (2001) *Four pillars of financial sustainability*. Arlington, VA: The Nature Conservancy. Retrieved from http://pdf.usaid.gov/pdf_docs/Pnadf342.pdf
- Montanaro, M.K., (2013). The influence of financial performance on higher education academic quality. *Education Doctoral Paper*, 117. Retrieved from http://fisherpub.sjfc.edu/education_etd/117
- OECD (2007), “Higher education: quality, equity and efficiency”, in *Education policy analyses: focus on higher education*. OECD publishing DOI: <http://dx.doi.org/10.1787/epa-2006-2-en>
- Rajnoha R., Lesníková P., Korauš A. (2016). From financial measures to strategic performance measurement system and corporate sustainability: empirical evidence from Slovakia, *Economics and Sociology*, 9(4), pp. 134-152. DOI: <http://dx.doi.org/10.14254/2071-789X.2016/9-4/8>
- Sazonov, S.P., Kharlamova, E.E, Chekhovskaya, I.A., & Polyanskaya E.A. (2015). Evaluating financial sustainability of higher education institutions. *Asian Social Science*; 11(20); DOI: <http://dx.doi.org/10.5539/ass.v11n20p34>
- Slabyj, S., Terrell N., Musau S., McGunnigle M., Stillman K., & Ryan T.J. (2000). Fundamentals of NGO financial sustainability. Retrieved from http://www2.pathfinder.org/site/DocServer/Fundamentals_of_NGO_Financial_Sustainability.pdf
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Brussels, Belgium: EURASHE. Retrieved from http://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf
- Strategic Financial Analysis in Higher Education: Identifying, Measuring & Reporting Financial Risks (Seventh Edition) – KPMG LLP; Prager, Seally&Co., LLC; Attain LLC
- Lursoft - Data bases of Latvian enterprises: www.lursoft.lv
- Latvian Statistical Bureau: <http://www.csb.gov.lv/>