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Abstract

It is argued in literature that the competitiveness of higher education institutions (HEIs) will increasingly depend on their ability to operate internationally in the near future (Delgado-Márquez et al., 2013; De Haan, 2014; De Wit, 2010; Graf, 2009). The emergence of entrepreneurial university phenomena as well as a shift in movement from students to the movement of programmes and universities lead to the emergence of one of the riskiest and unexplored entry modes to international markets in higher education – international branch campus (IBC). Risk reduction strategies of IBC establishment are analysed and suggested in this thesis.

The object of present study is international development of HEIs using a branch campus, thus addressing the problem of the lack of comprehensive theoretical and practical frameworks of transnational education activities. The aim of the thesis is to develop a decision support model for international branch campus establishment enhancing the university competitiveness in the foreign market.

The dissertation consists of the introduction, three chapters, general conclusions and 8 annexes. Chapter 1 reviews literature on the contemporary issues of internationalisation of higher education focusing on IBC management. Internationalisation theories and foreign market entry modes are analysed in business and higher education. The chapter is finalised with the formulation of the scientific problem of the dissertation.

Chapter 2 starts of by reviewing the research methodology for the development of the decision support model for IBC establishment enhancing the university competitiveness. Further, the empirical research for the development of the decision support model is presented. The following research methods have been used: analysis of statistical data, 4 expert surveys (3 on IBC development, 1 on networking), Delphi method, multicriteria decision support method (FARE), semi structured interviews, and computer assisted qualitative data analysis (CAQDAS) using Nvivo software.

Chapter 3 suggests and explains in detail the decision support model for the establishment of IBC. The model is based on the synergy of theoretical and empirical research results. During the theoretical analysis of the thesis, the theoretical basis of the model was formed, which was reasoned, elaborated and validated by the empirical research with the participation of four international expert groups. The model itself is presented in the third chapter, describing its empirical validation, as well as revealing the perspectives and limitations of its application. Also the model approbation is presented.

9 scientific articles focusing on the subject discussed in the dissertation have been issued (3 in international journals, 6 in international conference proceedings) and 1 chapter in a book published abroad.

Reziumė

Mokslinėje literatūroje plačiai diskutuojama, kad ateityje aukštojo mokslo institucijų konkurencingumas vis stipriau priklausys nuo sugebėjimo veikti tarptautinėse rinkose (Delgado-Márquez et al., 2013; De Haan, 2014; De Wit, 2010; Graf, 2009). Versliojo universiteto kaip fenomeno atsiradimas bei perėjimas nuo studentų tarptautinio mobilumo prie studijų programų bei pačių aukštojo mokslo institucijų mobilumo susijęs su vienu rizikingiausių ir mažiausiai ištirtų įėjimo į užsienio rinkas būdų aukštajame moksle – filialų užsienyje steigimo. Todėl šioje disertacijoje siūlomos filialo užsienyje įsteigimo rizikos mažinimo strategijos.

Tyrimo objektas yra tarptautinė universitetų plėtra, panaudojant filialus užsienyje kaip įėjimo į užsienio rinką būdą, sprendžiant išsamių teorinių ir praktinių tarptautinio švietimo modelių trūkumo problemą. Tyrimo tikslas – sukurti tarptautinių filialų užsienyje steigimui skirtą sprendimų paramos modelį, didinant universiteto konkurencingumą užsienio rinkoje.

Disertaciją sudaro įvadas, trys skyriai, bendrosios išvados ir 8 priedai.

Pirmajame skyriuje pateikta aukštojo mokslo tarptautiškumo didinimo teorinė studija, sutelkiant dėmesį į universitetų filialus užsienyje. Analizuojamos internacionalizavimo teorijos bei įėjimo į užsienio rinkas būdai versle ir aukštajame moksle. Skyrius užbaigiamas disertacijos mokslinės problemos formulavimu.

Antrajame skyriuje pristatoma disertacijos tyrimų metodologija, skirta sprendimų paramos modelio kūrimui. Pristatomi empiriniai tyrimai: statistinių duomenų analizė, 4 ekspertų apklausos (trys apie tarptautinius filialus, viena tinklaveikos tema), Delphi metodas, multikriterinio vertinimo metodas (FARE), pusiau struktūriniai interviu ir kokybinės medžiagos kodavimo metodas su Nvivo programine įranga.

Trečiame skyriuje pateikiamas sprendimų paramos modelis skirtas universiteto filialų užsienyje steigimui, didinant universiteto konkurencingumą. Kuriant šį modelį remtasi teorinių ir empirinių tyrimų sinergija. Atliekant teorijų analizę, suformuotas modelio teorinis pagrindas, kuris buvo pagrįstas, detalizuotas ir patvirtintas atliekant empirinius tyrimus, dalyvaujant keturioms tarptautinėms ekspertų grupėms. Trečiajame skyriuje pateikiamas pats modelis, aprašomas jo empirinis pagrindimas, atskleidžiamos jo taikymo perspektyvos bei ribotumai ir atliekamas modelio aprobavimas.

Disertacijos tema paskelbti 9 moksliniai straipsniai recenzuojamuose mokslo leidiniuose (iš jų 3 užsienio mokslo leidiniuose, 6 tarptautinių konferencijų medžiagoje) ir 1 dalis knygoje, išleistoje užsienyje.

Notations

Symbols

α – confidence level

a_{1i} – the impact of *i*-th criterion on the main criterion

$\widetilde{a_{1i}}$ – the part of *i*-th criterion's potential impact transferred to the main criterion

ε – margin of error

m – the number of the system's criteria

n – sample size

N – population size

p – the predicted probability of the event occurring in the chosen population

P – the potential of the system's criterion impact

P_i^f – the actual total impact of the *i*-th criterion of the system on the research object

P_i – the total impact produced by the i-th criterion of the system or its total dependence on other criteria

P_S – total potential of the effect of a set of criteria

q – the predicted probability of the event not appearing in the population

S – the maximum value of the scale of evaluation used

w_i – the values of the potential of the total impact of the criteria on the research object

Abbreviations

BA – Bachelor's study programme
CAQDAS – Computer assisted qualitative data analysis
C-BERT – Official branch campus listing by Cross-Border Education Research Team
DDP – Double degree programme
HE – Higher education
HEI – Higher education institution
FDI – Foreign direct investment
IaH – Internationalisation at home
IBC – International branch campus
JDP – Joint degree programme
KPI – Key performance indicators
LLL – Linkage, leverage and learning model
OLI – Eclectic paradigm (Ownership-Location-Internalization)
MA – Master's study programme
MCDM – Multi-criteria decision making method
MEM – Market entry mode
MNU – Multinational university
NPM – New public management
RBV – Resource based view
TCA – Transaction cost analysis
TNC – Transnational corporation
TNE – Transnational education
UAE – United Arab Emirates
VGTU – Vilnius Gediminas Technical University
WTO – World Trade Organisation

Contents

[1] The annexes are supplied in the attached compact disc.

Introduction

Formulation of the Problem

The changing relationship between universities, government and business, as well as growing market of the transnational education leads to the new roles and functions of higher education institutions, the models of higher education cooperation and internationalisation are changing. In the context of rising competition in international higher education, there is a pressing need for new instruments and knowledge for using the business principles and business internationalisation theories in foreign market entry in higher education. There is a lack of knowledge, necessary for the strategic and systematic approach to international branch campus (IBC) as the most radical form of foreign market entry. There is a deficiency of systematized knowledge on the micro and macro environment of education export conditioning the successful international branch campus development. There is a need for theoretical tools which would allow using the macro environment indicators with the strategic parameters for the decision making in IBC development. There is a lack of knowledge, necessary for the evaluation of the relationship and effect of the international branch campus on the competitiveness of a university.

Relevance of the Thesis

The competition in higher education area is growing and universities are becoming more and more entrepreneurial. It is argued in literature that universities will be run like multinational corporations (Etzkowitz, 2017; Rhoades, Stensaker, 2017). It is also argued that entering international markets is a source of competitiveness (Delgado-Márquez, Escudero-Torres, Hurtado-Torres, 2013; De Haan, 2014; De Wit, 2020). The most radical foreign market mode in higher education is an international branch campus (IBC). However, there is still a lack of theoretical knowledge because it is still a relatively new phenomenon. There is a lack of knowledge of business principles application in foreign market entry in HE, the strategic and systematic approach to IBC as the most radical form of foreign market entry and knowledge, necessary for the evaluation of the relationship and effect of the IBC on the competitiveness of a university. There are relatively few IBCs (only 1% of all HEIs has one), they are all evolving in unique internal and external conditions and therefore are very different. Due to this, it is challenging to find adaptable good practice examples to learn from. In order to be able to use IBC as a tool to enhance university competitiveness, a comprehensive decision support model for the establishment of international branch campuses focusing on university competitiveness must be developed.

Object of Research

The object of present study is international development of HEIs using an international branch campus as a market entry mode.

Aim of the Thesis

The aim of the thesis is to develop a decision support model for international branch campus establishment in the development of university internationalisation.

Objectives of the Thesis

To achieve the aim of the thesis the following objectives were formulated:

1. Evaluate the trends of higher education management and internationalisation, focusing on the transnational activities and IBCs.

2. Summarise the main business internationalisation theories in order to identify their applicability in higher education management and define the theoretical basis of the dissertation.
3. Summarise the foreign market entry modes in business and higher education, identifying their applicability in higher education internationalisation, focusing on the international branch campus.
4. Evaluate the factors of micro and macro environment of education export conditioning successful development of IBCs and evaluate the cases of international branch campuses.
5. Determine the relationship and effect of IBC performance indicators on the competitiveness of a university.
6. Develop and approve by empirical study the decision support model for international branch campus establishment, incorporating the business theories and principles in the context of higher education.

Research Methodology

A critical review of literature along with the methods of interpretation and conceptualization has been used to defining the problem of the thesis and analysing the context of the problem. Statistical data analysis has been executed in order to identify the similar patterns between the export of business and education services. The expert survey executed with the heads of IBCs internationally and the analysis of international branch campuses worldwide (USA, Australia, Malaysia, UK, Sweden, and Estonia) helped to recognise the good practices of IBC establishment. Semi structured interviews with leading experts of IBCs have been executed and framework analysis has been executed with Computer Assisted Qualitative Data Analysis (CAQDAS) to determine the main key performance indicators of IBCs. In order to identify the impact of IBCs on the university competitiveness and recognize the relationships between the KPIs of IBCs and university competitiveness, two methods have been used: expert survey using the Delphi method and one of the multicriteria decision support methods – FARE. Delphi method was used in order to gather the expert evaluations and to ensure the credibility of the results from the expert survey. FARE method was used for the relationship recognition between the KPIs of IBCs and university competitiveness. In order to analyse the peculiarities of using the networking as a risk reduction tool in the international branch campus establishment process, the international expert survey was executed with the professionals in HE internationalisation. It is noted, that in total 4 different international expert groups participated in the research. Two of the groups had partially the same members.

Scientific Novelty of the Thesis

In the course of developing the thesis, the following significant results for the management science (innovation management and higher education management) has been achieved:

1. The regularity between the international development of HEIs and the historical context between the home and host countries has been discovered. The identified pattern indicates that majority of universities are following the classic Uppsala approach and establishing IBCs in the markets with small psychic distance (i.e. previous colonies of the source country or sharing the same language).
2. Similar patterns between the business export flows and the university service export between the countries has been discovered. The identified pattern indicates that universities are expanding to the markets where there are large previous flows of business exports.
3. A system of indicators has been developed to assess the impact of HEI international development on the university's competitiveness and a relationship between the key performance indicators of the IBCs and the university's competitiveness has been revealed. The following indicators have been identified and listed according to the strength of a positive impact they have on the university competitiveness: number of study programmes taught at IBC, student number in IBC, number of social partners in a host country of IBC, number of international staff (not local) in IBC, yearly income of IBC, having partners in IBC establishment in a form of joint venture (number of partners). These indicators have been recognised as important for decision making in IBC establishment and have been added to the third stage of the decision support model.
4. After systematizing all the discovered regularities and patterns, the decision support model was proposed that allows universities to adopt international development solutions using an IBC as a tool for foreign market entry. The suggested model combines various indicators of transnational higher education activities (historical, geopolitical, economic, political), important in the decision making in the context of IBC development. The proposed model is a unique set of theoretical tools, which were developed incorporating the new knowledge summarised in the literature review on the internationalisation of HEIs and business principles application in HE, as well as the empirical research by the author of the dissertation and research executed by other scholars. Unique set of criteria and steps makes for a unique model for the decision making for a foreign market entry in higher education in a form of IBC.
5. Contribution to the theoretical knowledge in HEIs internationalization has

been made filling the discovered gaps (business principles and business internationalisation theories application in foreign market entry in HE; the strategic and systematic approach to IBC as the most radical form of foreign market entry; knowledge, necessary for the evaluation of the relationship and effect of the IBC on the competitiveness of a university). The applicability of the main business internationalisation theories and principles in higher education has been identified. This knowledge has enabled developing the decision support model which allows the systematic and strategic planning of the establishment of an IBC.

Practical Value of Research Findings

The comprehensive decision support model for international branch campus establishment enhancing the university competitiveness is significant for the HEIs due to the following reasons:

1. The obtained results and the decision support model will contribute to the existing internationalisation practices of HEIs considering entering new foreign markets in a form of international branch campus.
2. The model is universal and could be used for internationalisation management purposes in all higher education institutions from advanced large universities to small colleges and schools. It is especially helpful for the latecomer HEIs that consider IBCs as too risky and radical. The decision support model is a set of theoretical tools for the top management in HEIs, contributing to the strategic and systematic approach to the international branch campus establishment.
3. The research findings and proposed model might also be used by the governments (i.e. ministries of education) as a practical scientific instrument for the modelling of international development processes and developing national education export strategies.

Defended Statements

The following statements based on the results of present investigation defended in this thesis:

1. There are regularities between the international development of a higher education institution and historical context of the countries (previous colonies, psychological distance, shared language) and geopolitical circumstances (proactiveness of the host countries, development of national education valleys). International development of HEIs is often

targeted at countries that have a mutual historical context and favorable geopolitical circumstances for the IBC establishment.
2. There is a trend between business export flows and export of education services. The established pattern indicates that universities are expanding to those markets where there are large flows of business exports.
3. Profit generation is not the main goal when establishing an international branch campus. The process of image formation of the institution in local and foreign markets has a great influence in this process.
4. IBC establishment can be used as a tool for increasing the competitiveness of a higher education institution.
5. The proposed decision support model serves the systematic planning of the establishment of an international branch campus enhancing the competitiveness of a higher education institution.

Approval of Research Findings

9 scientific articles focusing on the subject of the dissertation have been issued in total: 3 in foreign scientific journals (1 of them in the Clarivate Analytics Web of Science database) (Girdzijauskaitė et al., 2018b, 2019b, 2019c), 2 in the Clarivate Analytics Web of Science Conference Proceedings databases (Girdzijauskaitė et al., 2016; Girdzijauskaitė & Radzevičienė, 2014), 4 in other international peer-reviewed publications (Girdzijauskaitė et al. 2018a, 2019a; Girdzijauskaitė & Radzevičienė, 2013; Radzevičienė & Girdzijauskaitė, 2012).

Also, the results of the thesis have been published as a chapter in a book "Aspects of internationalisation of higher education at NHL Stenden University of Applied Sciences" edited by R. J. Coelen (2018).

Four presentations on the topic of the thesis were given in the following international conferences:

- Girdzijauskaitė, E., Radzevičienė A., Jakubavičius A., "International branch campus: strategic mapping", "Contemporary Issues in Business, Management and Education, 2019", Vilnius, May 9–10, 2019.
- Girdzijauskaitė, E., Radzevičienė A., Jakubavičius A., "Transition of Entrepreneurial University: from Local to International", "Business and Management, 2016", Vilnius, May 12–13, 2016.
- Girdzijauskaitė, E., Radzevičienė A., "International branch campus: framework and strategy", "Contemporary Issues in Business, Management and Education, 2015", Vilnius, November 13, 2015.
- Girdzijauskaitė, E. "Internationalisation processes in the development of universities activities", "Science – Future of Lithuania, 2016", February 9, 2016", Vilnius, February 11, 2016.

Also, four presentations on the topic of the thesis were delivered in doctoral seminars at VGTU and three presentations were given in the following international PhD seminars abroad:

- International PhD seminar on the transnational higher education export (Groningen University, Netherlands, 2016);
- International PhD seminar on qualitative research methods in internationalisation of higher education (Catholic University of the Sacred Heart, Italy, 2015);
- International PhD seminar on qualitative research methods in internationalisation of higher education (Catholic University of the Sacred Heart, Italy, 2014).

Structure of the Dissertation

The dissertation consists of the introduction, 3 chapters, general conclusions, references, the list of author's publications, summary in Lithuanian and 8 annexes. The total scope of the dissertation is 150 pages, excluding annexes. 35 figures, 25 tables, 6 numbered formulas and 203 references have been included in the dissertation.

1

Theoretical Framework for Higher Education Internationalisation

This chapter reviews literature on the contemporary issues of internationalisation of higher education and transnational education priority given to the international branch campus management. Foreign market entry theories and modes are analysed in business and higher education.

The findings of this chapter have been published in 9 scientific papers (Girdzijauskaitė et al., 2016, 2018a, 2018b, 2019a, 2019c; Girdzijauskaitė & Radzevičienė, 2013, 2014; Radzevičienė & Girdzijauskaitė, 2012).

1.1. Contemporary Issues of University Management in the Context of Internationalisation

Since the establishment of the first universities in 11th century in Europe until the 20th century, the mission of educating the society and developing fundamental knowledge were praised (often stressing the principles of Humboldtian university); the state assumed the function of financing higher education. However, since the eighties of 20th century universities found themselves to be expected the coherence of their activities with the practical needs of society

development, ability to provide services in the market conditions, basically, be able to compete for the customer and generate revenue for their services (through tuition fees, contracted work, etc.) (De Wit, 2019). This illustrates very apparent shift of higher education from public good to private good, or tradable service during the last two decades.

The concept of public goods is central to economic analysis of government role in the resource allocation. Public goods are defined by two characteristics (Varian & Varian, 1992):

1. Non-excludability: it is impossible to exclude non-payers from consuming the good.
2. Non-rivalry in consumption: additional people consuming the good do not diminish the benefit to others.

However, considering the above mentioned definition it is evident that in most countries higher education is not entirely a public good anymore. People who are not paying for educational services may be excluded: there are many countries were not state but individuals are covering the study costs and there are more and more of paid educational services. Nevertheless, the shift from public good to private good might raise conditions of the public interest violation, but little is known in practice of such occurrences.

This shift is proceeding in the context of decreasing state allocations for higher education. Governments are increasing the funding for tendering activities. The new funding models are based on objective measurable indicators of university performance results – this way the state retains the influence on universities. Universities are forced increasingly to compete under the market conditions; difference between private and public HEIs is diminishing. Organisational behaviour similar to that of business companies is becoming increasingly natural for all kinds of educational institutions (Kirby, 2005; Mohrman et al., 2008). The decreasing state funding for universities is offset by private-organized sources and university generated income.

The transfer from centralised regulations of university activities to corporate self-government has been a trend in European Area of Higher Education since early 90-ties. The new model of governance evolving during last decade shrinks the traditional self-government of academic community and strengthens the role of new generation of leaders that are accountable for the society rather than academia. The influence of social stakeholders HEIs management is growing significantly. New university management system strengthens the university orientation to the practical needs of society, commercialisation of study and research, social responsibility and competitiveness. Such trend in governance policy is summarised as the “third mission” (Sutrisno, 2019). This is an integral part of the EU competitiveness and development policies and the global development trends of world's leading HE countries.

The main changes that universities are facing nowadays (Etzkowitz, 2016, 2017; Guerrero et al., 2018; Klofsten et al., 2019; Girdzijauskaitė et al., 2018a):

1. A change in the role of universities as originators and keepers of knowledge lead by increased access to university education and availability of knowledge online.
2. Increased university competition for students and government funds.
3. Digital technologies changing the way education is delivered and assessed and the way value is created by higher education providers.
4. Increased competition and opportunities for global partnerships by global mobility of students, academics, and university brands.
5. The need to increase integration with industry in the decade ahead in order to differentiate teaching and learning programmes, support the funding and application of research, reinforce the role of universities as drivers of innovation and growth through startup development, makerspaces and other measures.

The above mentioned changes, especially increased competition for students and government funds have led to the emergence of entrepreneurial university phenomena. Etzkowitz (2004) raises the idea, that the advancement and capitalisation of knowledge are inextricably intertwined. The entrepreneurial university phenomenon is widely discussed in literature (Clark, 1998; Gibb & Hannon, 2006; Wasser, 1990; Wong et al., 2007).

Considerably more often it is argued in the literature that in order to succeed, HEIs shall need to develop perspective business models (Guerrero-Cano, 2008; Jacob et al., 2003; Kirby, 2005; Mohrman et al., 2008) and have increased collaboration with industry (Etzkowitz, 2017; Lazzeroni & Piccaluga, 2003). Those new models are about to require significant change. And having in mind that universities have traditionally been resistant to change, university managers will be challenged to find ways to maintain unaltered mission and stay true to the academic values, and at the same time develop (change) their operating models (Barsony, 2003; Gallagher, Garrett, 2012).

The above mentioned issues have met considerable criticism, claiming that universities are loosing their academic values and being too much market driven. Therefore, this issue is addressed bellow.

Traditionally, the mission of a university used to be two-fold: 1) executing research and studies; 2) producing and disseminating the knowledge. In modern times "the third mission" has been increasingly recognized in the agendas of universities (Etzkowitz, 2006; Fayolle & Redford, 2014; Gulbrandsen & Slipersaeter, 2007).

Approximately 15–20 years ago when the emergence of an "entrepreneurial university" was elaborated in the works of Etzkowitz (2004) and Clark (1998), a "third mission" of contributing to economic development had emerged alongside

the "first mission" of teaching and the "second mission" of conducting basic research (Trencher et al., 2014). The third mission has been defined in literature as identifying, creating and commercialising intellectual property (Etzkowitz et al., 2000) and contributing to regional or national economic performance as well as the university's financial vantage and that of its faculty (Etzkowitz et al., 2000; Trencher et al., 2014).

The above mentioned epitomisation of the third mission of the universities concerns the collaboration between university and external stakeholders (Sam, van der Sijde, 2014) and a so called Triple Helix of University-Industry-Government relations (Etzkowitz, Zhou, 2017; Etzkowitz, 2006), followed by the Quadruple and Quintuple Helix models (Leydesdorff, 2012). Higher education institutions are increasingly demanded for social responsibility, for wider involvement and contribution to the different stakeholders of the society. It is expected of universities to increasingly engage in various forms of cooperation with local, regional, national and international business and social partners (Culum et al., 2013; Girdzijauskaitė et al., 2018a).

The traditional missions of university are undergoing turbulent times. Governments demand for an increasing number of students, the curricula must reflect the employment market needs, the excellence of teaching and research must be achieved in a way that is measurable, efficient, and relevant for the contemporary knowledge economy and society at large (Culum et al., 2013; Göransson et al., 2009). Contrary to the above mentioned challenges, universities have been criticized for the loss of academic identity and being too much market driven. This raises the main challenge: seek entrepreneurial model, preserve academic values, and do not lose the balance in between.

In order to meet the needs of all stakeholders and develop an entrepreneurial culture in an institution, it is important to have a strong leadership and governance.

One of the main elements of entrepreneurial management model is overcoming the traditional bureaucratic barriers: universities with fewer hierarchies undertake entrepreneurial activities faster (spin-offs, branch campuses, makerspaces) (Girdzijauskaitė et al., 2018a). It is widely recommended that universities promote the autonomy of units and individual ownership of initiatives, very often leading to full cost model and strict R&D management at academic unit level. (Girdzijauskaitė et al., 2016) This way the creation and development of ideas or new organizational structures is enhanced. The mechanisms for breaking down traditional boundaries and fostering new relationships – bringing internal stakeholders together (staff and students) and building synergies between them must be developed. Internal stakeholders of the university should create synergies and linkages across faculties, departments and other structures, breaking down tradi-

tional boundaries, contributing to entrepreneurial agenda. An entrepreneurial university should have instruments to exploit the existing internal knowledge and resources.

Another important element of entrepreneurial university management model is an advanced human resource strategy (Ketikidis, Ververidis, Kefalas, 2012; Middlehurst 2004, 267). Entrepreneurial university invests in staff development as human resource is its most valuable resource and the one that considerably drives the entrepreneurial agenda of the university. Entrepreneurial agenda is associated withconstant upskilling, therefore, the adaptive policy of professional training and staff career development is a very important element of entrepreneurial university human resource management strategy (Etzkowitz, 2017; Girdzijauskaitė et al., 2016).

The entrepreneurial university is self-steering, self-reliant university. It is stressed in the literature that the entrepreneurial university is looking forward and pursuing the opportunities beyond available means (Clark, 1998). An entrepreneurial university could be defined as a survivor of competitive environments with a common strategy oriented to being the best in all its activities and tries to be more productive and creative in establishing links between education and research (Guerrero, Urbano, 2012; Kirby 2005). The entrepreneurial university seeks regional, national, and international distinctiveness where a unified identity and a unified public reputation are a priceless asset (Clark, 1998). In line with diminishing external regulation of university activities, the financial, legal and academic autonomy is increasing, as well as the responsibility and accountability to society is being increased through business and research partnerships, public funding schemes, etc. (Etzkowitz, 2017; Inzelt, 2004).

It is suggested in the literature that, one important feature of an entrepreneurial universities is that they are capable of responding flexibly, strategically and yet coherently to opportunities in the environment (Etzkowitz, 2017). According to Clark (2001) this is ‘strong steering core with acceptance of a model of self-made autonomy’ across the academic departments. It is clear that the more autonomous university the more flexible and responsive it is able to be (Middlehurst (2004, 272–273). The so called “entrepreneurial response” has become a necessity for all the universities that want to be a viable player in the competitive and dynamic HE environment.

Another important feature of the entrepreneurial university is the diversified funding base. A high degree of financial dependence on a single funding source delays the process of creating a self-reliant university. (Clark, 2015) Diversified funding enables to decide independently and therefore not only provides more freedom but also fastens the processes.

The streams of income can be classified in numerous ways. Clark (2001) categorizes it as follows: mainline institutional support from a governmental

ministry; funds from governmental research councils; and all other sources lumped together as "third-stream income." According to Clark, such diversification of income is essential for entrepreneurial university. (Clark, 2015)

The third-stream funds category by Clark (2001) includes several types of income sources, such as:

1. Other governmental sources. These include other departments at the same level of government, such as departments of technology, economic development; departments of regional and city governments.
2. Private organized sources. This category includes three sub-categories. Firstly, industrial firms; secondly, professional and civic associations promoting continuing education for their members; thirdly, philanthropic foundations offering specific funds and unearmarked funds.
3. University-generated income. Sources lying under this category include: income from endowment and investments; income from campus services, ranging from the hospital to the bookstore; student tuition fees; alumni fundraising; royalty income from patented intellectual property in which the university and specific faculty members share as co-holders.

Certain pros and cons lie behind the above mentioned funding sources diversification. The main pros are greater independence from government funding and flexibility managing risks and downturns in the local market (Etzkowitz, 2017). However, expenditure discretion is limited to some extent. University-industry collaborations involve bargaining and compromises over whose interest has priority, government departments may offer generous, relatively unearmarked grants, or they may insist on tight accounting. But "university-generated income" is the one with least limited expenditure discretion. Activities defined under the university-generated income, as well as private organized funds category, require certain organizational behaviour typical of business companies seeking profit.

In case of success, this income category can bring significant benefits. For instance, professionally managed income from endowment or alumni contributions offer university the funding that could be directed to certain additional non-core operations and projects. However, the funding generated for education and research services provided on competitive basis has the most impact as a stream of income (typically, the part generated by European HEIs makes about 25–35 percent of the total budget), requiring more and more proactive business-like approach (Etzkowitz, 2003).

The economic impact of higher education institutions has been analysed and evaluated by Vaiciukeviciute (2019). It is claimed that HEIs should be considered as a significant element of economic development and that maintaining HE's impact on the economy should be managed through effective usage of financial resources and intellectual capital in HEIs.

Having current numbers of international students at universities it becomes evident that international education is foremost a business and financial interests are at stake. In some countries (e.g. the Netherlands, Sweden, Denmark) substantial tuition fees have been introduced for non-EU students, which institutions use to increase and diversify income. The above mentioned insights enhances the notion that a university can be international without being entrepreneurial, but there is no way to be entrepreneurial without being international (Girdzijauskaitė et al., 2016).

Entrepreneurship can be defined as the process of discovering, exploring and creating opportunities through implementing change and launching innovative ideas in an uncertain/risky and lately, international environment (Ketikidis, Ververidis, Kefalas, 2012; McDougall and Oviatt, 2000). The same notion can be applied in the context of higher education institution management.

The entrepreneurial university explores regional, national, and international markets. The means of international expansion are growing in diversity and scope. Since nowadays international activities are integral and unavoidable part of all universities, entrepreneurial universities find themselves being engaged in the most risky and advanced modes of internationalization (Girdzijauskaitė et al., 2016).

The rationales for international expansion are various. Four categories are emphasized in this thesis: enhancement of knowledge, physical and financial resources, and positioning in foreign markets. Knowledge resources group is the most important one in any knowledge-intensive organization, especially university. Engagement into internationalisation acitivities is raising the qualification capacities of students and staff (outgoing and incoming mobility, international research and knowledge exchange). All this eventually creates a more rich service portfolio for internal and external stakeholders.

The second rationale – physical capital is about the infrastructure development of universities through various forms of cooperation (joint ventures, joint projects) or transfer of good practices and bringing ideas for new establishments or improvement of the old ones (Radzevičienė & Girdzijauskaitė, 2012).

The financial resources rationale emphasizes the income diversification through income from international activities, increase of revenue. Trade in HE is recognized as "business" already for a few decades (Burnett, 2008; Knight, 2002b, 2003). And together with the growing need for local higher education, the demand has been growing for transborder education such as inte national branch campuses, twinning arrangements with other universities, corporate universities, virtual universities, open universities and e-universities (Burnett, 2008; Knight, 2002a, 2002b; Wilkins & Huisman, 2013). Together with the recent technological revolution and the massive growth in online learning, this "business" is facing perfectly fertile market conditions (Burnett, 2008).

The fourth rationale for the international expansion is positioning in foreign markets and image building (Marginson, 2006; van Vught, 2008). It is claimed, that international expansion in general and international branch campuses especially helps to gain a strong positioning in certain markets and has an overall positive effect on the university's image (Delgado-Márquez et al., 2013; De Haan, 2014; De Wit, 2010, 2020; Graf, 2009). It is also discussed in literature, that due to the fact that a brand or a reputation is built over a long period of time it is a source of sustainable competitive advantage (Srivastava et al. 2001).

Further in this thesis (subchapter 1.2.) internationalisation approaches in higher education shall be discussed. Talking about the internationalisation of higher education, study services are being accentuated in this thesis rather then research services. Internationalisation of research has been analysed in the thesis by Eigirdas Žemaitis „Innovations and internationality developing high technology sector" (2019).

It is important to note, that university profile and level of maturity has impact on the internationalisation practices. For the purpose of this particular research there was done an attempt to classify HEIs according to the criteria describing the maturity of HEI as international market player (Table 1.1). The classification has been developed according to the following factors: long standing reputation, scope of international activities (internationaly active, renown educational country brand, stable reputation over the time, no language barriers, local orientation, principals of multinational companies (new managerialism).

According to the historical, political and other factors, higher education institutions in the market can be described as mature HEIs and latecomer HEIs. Higher education institutions that have entered international education market within the last 50 years because of historical or political reasons are defined as latecomer universities in this thesis. Similar to business firms latecomer universities have to position themselves in already settled higher education scene and compete against the players with long standing international reputation. An example could be the so called "red-brick" universities in UK, Humboldt type research universities in Germany, universities founded before 1900[2] in Italy, France, Austria, Belgium, the Netherlands, Sweden; the US universities who were founded in 18th century[3] as Harvard, Princeton, University of Cambridge.

The universities established in the end of 19th and the first half of 20th century as engineering schools (later transformed into universities and institutes of technology) have entered the education arena later than the previous group but with clear institutional profile and therefore relatively soon gained an international reputation.

[2] Universities founded before 1900. See: http://www.infoplease.com/ipa/A0193904. html
[3] http://www.infoplease.com/askeds/oldest-us-universities-colleges.html

The third group is majority of higher education institutions established mainly after second World War in former EU transition and NIS countries (Eastern and Central Europe, Central Asia), emerging economies and expanding education markets in Latin American countries, China, Southeast Asia) (Girdzijauskaitė & Radzevičienė, 2013). In this context we are focusing on the majority of the institutions established in the country, despite the fact that in every country of this group there is at least one national comprehensive university established before 1900 (e.g. BME in Hungary, VU in Lithuania, University Sao Paulo in Brazil etc.). Some of them even in Medieval times, but the major distinction between the mature institutions is not established/unclear international reputation both of these institutions and the country.

Table 1.1. Classification of higher education market players in Europe (compiled by the author)

Classification criteria	Mature HEIs		Latecomer HEIs		
	Golden Triangle	Reborn	Local traditionnalists	Latecomers	Absolute latecomers
Long standing reputation	+	–	+	–	–
Internationally active	+	+	–	–	–
Renown educational country brand	+	+	+	–	–
Stable reputation over the time	+	–	–	–	–
No language barriers	+	+	–	–	–
Local orientation	–	–	+	+	+
Principals of multinational companies	+	+	–	–	–

Higher education institutions that have a long-standing international reputation, and usually are based in a country with a strong educational brand falls under the mature HEIs category in this thesis (e.g. USA, Australia, UK, Western Europe, Scandinavia). The above mentioned HEIs are usually pioneering with international activities and are sought out as partners by latecomer institutions. See Table 1.1 for the classification of HE market players in Europe.

Besides higher education institutions, new kind of players is emerging in the global education market: business corporations providing educational services. These players are seen as potential partners as well as competitors.

European commission encourages this shift and says that both HEIs and businesses benefit from working together; cooperation encourages the transfer and sharing of knowledge, helps to create long-term partnerships and opportunities whilst boosting students' future employment prospects.

International strategic partnerships of HEIs and business are essential for cross-border innovation. Partnerships that aim to foster entrepreneurship and innovation have great potential to bringing benefits both to HEIs and partnering businesses (Etzkowitz, Zhou, 2017). Promotion of affordable and inclusive innovation, helping the emerging countries to tackle their challenges and promote market access, trade and investment for European companies holds great potential for HEI-business cooperation.

Having current numbers of international students at universities it becomes evident that international education is foremost a business and financial interests are at stake. In some countries (e.g. the Netherlands, Sweden, Denmark) substantial tuition fees have been introduced for non-EU students, which institutions use to increase and diversify income, allowing them, for instance to offer scholarships to students from developing countries. However, this is equally true for countries where students do not pay fees, like Germany. Graduates are attracted to stay and contribute to economy after their studies.

The economic importance of international higher education is growing. It has been stressed in HE research since the eighties that HE sector is becoming a service market. A recent UK Department for Education report estimated that revenue from cross-border educational activity – is worth almost £20 billion (US$26 billion) to the United Kingdom economy (February 2019). Cross-border education is the movement of people, knowledge programs providers and curriculum across national or regional jurisdictional borders. It also refers to dual and joint degree programs, branch campuses, and virtual, online education. (Knight, 2003a)

It is stated that the amount earned rose by 3.1% from 2015 to 2016 and by 26% from 2010 to 2016, to an estimated nearly £19.9 billion in current prices. In Australia, for example, the economic impact of international education reached AUS$32.4 billion in 2019 (February, 2019), again around two thirds of this is contributed by the universities alone, being the third top export material after iron ore and coal. In USA, the education export generated $42.4 billion in revenue, more than double the amount eight years ago, according to the Bureau of Economic Analysis. When other student spending is factored in – food, cars, clothes – education's total export value rivals that of pharmaceuticals ($51 billion) and automobiles ($53 billion) (January, 2019) (Knight, 2003b).

Despite the changing society structure and diversified customer segment, the main providers of international education remain unchanged: the UK, USA, Australia. Universities in these countries generate around 60 per cent of total income from international student fees. In total English-speaking countries own a global market share of over 65% and talk about the 'industry' that generates a significant source of income when referring to the internationalisation of higher education. However, opportunities emerge for HEIs from the Netherlands, Malaysia, Singapore, and Canada which are active providers of TNE.

Internationalisation of higher education has changed over the past four decades. In the seventies and early eighties of the past century development cooperation and aid was primary focus of HE internationalisation: support to universities in developing countries by providing scholarships, equipment, training professionals. In the second half of the eighties internationalisation took a shift from aid to trade.

The rise of transnational education, cross-border delivery of education or offshore education took place in the nineties. Such shift was leaded by Australia and United Kingdom, which were affected from Asian economic crisis as having Asian countries as main providers of international students. The assumption was: if the customer does not come, the provider reaches out to a customer. More than 400,000 students were enrolled in the UK institutions through different transnational education arrangements (joint degree programmes, branch campuses, distance learning programmes, etc.), and more than 100,000 international students are enrolled by Australian providing educational services abroad.

Growing consumer class in Asia will expand a new segment of students who are willing to pay for a global educational experience while staying in their home country or region. This segment is referred to as glocals – global aspirations with local experiences. Glocals differ from the traditional segment of international students, who go abroad for education and living experience abroad as they look for career advancement and quality of education, without having to go very far from home, mainly because of financial limitations and lower academic merit ambitions. Glocals represent the segment of students who typically seek transnational education (TNE) including international branch campuses, twinning arrangements and online education.

Australian and United Kingdom universities started to develop branch campuses in Singapore (6), Malaysia (6), Vietnam (2), South Africa (3), and so on (C-BERT, 2019). The traditional boundary between North and South and East and West became blurry. The increasing importance of Asia, the developing Middle East, Latin America and Africa have been also changing HE landscape: United Arab Emirates alone have been hosting 40 branch campuses, which makes up for 17 per cent of all BCs globally or approx. one in five branch campuses in the

world is hosted by the UAE according to the Observatory of HE. Dubai is a study destination for many South Asian students through international branch campuses.

The rapidly advancing means of transportation and information technology infrastructure has opened up many new opportunities for higher education: new virtual learning models make education easily accessible to individuals who reside far from the university. Europe has some of the best-established HEIs providing non-traditional educational services such as distance learning. The supply of Open Educational Resources (OER) and, in particular Open Courseware (OCW) and Massive Open Online Courses (MOOCs) has been rapidly evolving in recent years.

The use of ICT enabling digital learning has a vast effect on HE internationalisation: the access to European higher education is being widened to new audiences (e.g. off-campus international learners; students following single courses instead of a complete programme; various age ranges), the curricula, teaching materials and methods are open to the exchange of global knowledge and adjustment to the demands of global market, new forms of partnerships are emerging, synergies of disciplines takes place. Both competition and transparency are being improved.

The hyper competition is evident globally as well as regionally. This is especially relevant for the latecomer HEIs of emerging economies, including Lithuanian and other Eastern Europe universities. Such changes not only rise challenges but also bring HEIs closer to becoming a multinational and entrepreneurial university: in order to fully exploit their potential not only should universities adapt and cope with changes, but also be part of it and take proactive approach – seek self-reliance and income diversification, seek for ways to enhance their international activities and make their educational services attractive in the foreign markets. Finally, just as in business world, a lot depends on internationalisation success. Internationalisation approaches and their application in higher education are further discussed in subchapter 1.2.

1.2. Internationalisation Approaches in Higher Education Research

J. Knight and J. G. Altbach (2007) suggest that internationalisation and globalisation are connected yet different concepts. Globalisation is the context of economic and academic trends of XXI century. Internationalisation is a set of strategies and practices undertaken by systems and individual institutions in order to cope with globalisation.

E. Beerkens (2004) suggests the following aspects when considering the influence of globalisation on internationalisation:

- Increased intensity of interaction between HEIs and increased flows of mutual resource exchange. Progress in technology caused easier establishment and maintenance of contacts with interested parties. Higher volume of connections and cooperation lead to the development of project activities and networking between HEIs.
- Changed relationship between universities and government. Increased autonomy lead by globalisation encourages searching for new sources of funding and decreasing the dependence on government funding. Such situation illustrates the rise of an Entrepreneurial University – the concept of university applying business models into its activities (Clark, 1998; De Wit, 2009; Santiago et al., 2008).
- Identity of university in a global world. HEIs become less dependent on their institutional context. Not only a university as an organisation, but also the content of study programmes and methodology are under of the influence of this. According to Smith (1990), it is "contextless whole of components that are consistent everywhere and nowhere".

Higher education is in transition lead by the emerging mass access to information channels around the world, changing relations between government and HEIs, emergence of new technologies and globalisation (Knight, 2008; Maasen, 2003; Santiago et al., 2008). Internationalisation in HE can work two directions: inward and outward internationalisation (Radzeviciene, 2005, 2008). These two trends are embodied in J. Knight's theory of three generations of cross-border education that illustrates the development of HE internationalisation over time.

"Cross-border education takes place in situations where the teacher, student, program, institution/provider or course materials cross national jurisdictional borders. Cross-border education may include higher education by public/private and not-for-profit/ for-profit providers. It encompasses a wide range of modalities in a continuum from face-to-face (taking various forms from students travelling abroad and campuses abroad) to distance learning (using a range of technologies and including e-learning)." (source: "Guidelines for Quality Provision in Cross-border Higher Education jointly developed by UNESCO and the OECD"). Three generations of cross-border education are identified by J. Knight (2011):

First generation of international cooperation in HE had been characterized by student and researchers' mobility until 1990 (Chen & Barnett, 2000). However, mobility still remains an important element of HEIs activities, thus is an integrated part of second and third generation.

Cross-border education had been associated with outgoing student mobility for a long time, until the recent five years when study programme mobility (delivery abroad) and even institutional mobility – branch campuses (commercial presence) gained focus.

No less important than the aforesaid is mobility of the faculty. Significant part of cooperation projects with partners include mobility of academic and administrative staff.

Contemporary student mobility is inseparable from the following two dimensions: mobility of academic programmes and services providers, that have been increasing in number enabling more and more students to gain international experience without leaving their home country. Dual and franchise projects could be an example of programme mobility, whereas the mobility of academic service providers includes virtual universities and branches abroad. According to J. Knight (2011), such phenomenon marks the beginning of second generation of international cooperation in higher education.

Hence, 1990 is considered to be the start of second generation together with the emergence of "Internationalisation at home" concept (Altbach, Reisberg, & Rumbley, 2009; Knight, 2008; Teekens, 2005). B. Wachter (2000) defines IaH as any form of internationalisation in higher education institution except for outgoing mobility of students and staff. Internationalisation at Home consists of strategies and tools intended for the integration of international dimension into local education context. For instance, by attracting international students, researchers, or internationalising the curricula (Altbach, Reisberg, & Rumbley, 2009; Knight, 2008; Teekens, 2005).

In the theory of internationalisation of higher education three interested parties of IaH are excluded (Nilsson & Otten, 2003):

1. Students that come to study in foreign country in a different educational system and conditions than that of a home country.
2. Local students engaged in contact with foreign students and facing different cultures without leaving their home country.
3. Local staff engaged in contact with foreign students.

The term Internationalisation at home was started to use in literature some 15 years ago. The concern by the theorists was that higher education management was looking too much at student mobility numbers, in particular incoming students and not so much at the educational and cultural impacts of student interaction in the classroom and beyond. The number of mobile students has now reached over four million a year. However, this big number represents less than 2 per cent of enrolment worldwide, meaning that remaining 98 per cent of students were non-mobile. Therefore, the fundamental issue was widely addressed and many universities worldwide took actions.

The third generation of cooperation between HEIs is associated with the rise of education hubs or valleys (Knight, 2011). Education hubs may cover (comprehend) the modes of cooperation of first and second generation, however they represent the wider and more strategic configuration of participants and activities.

Education hubs are a rather new and little explored topic in higher education. The first education hubs began to be established in 2010 in Singapore, Malaysia, Hong Kong, UAE, Qatar and Bahrain. There is no one model fitting all the cases of education hub establishment – the practice differs in every country.

The following definition of education hub is suggested by J. Knight (2011): education hub (valley) is planned and coordinated attempt by a country (region, city, several organisations or institutions) to gather the critical mass of local and foreign players of education and research connected strategically in the processes of education, training, intellectual capital and innovation development.

J. Knight (2011) excludes three types of education hub:

1. The student hub.
2. The skilled workforce hub.
3. The innovation hub (including startup incubators, makerspaces).

The topic of education hubs still holds many unanswered questions for the researchers such as: the gradual change of core activities (whether it is necessary to move gradually from student hub to innovation hub, or is a sudden change/shift/switch/transition possible omitting the skilled workforce hub); categorising of existing hubs; criteria for hub performance evaluation (qualifycation, potential, productivity, sustainability), etc. An education hub can include various combinations of domestic/international institutions, branch campuses within the area. International branch campus is integral part of education hub.

Clearly, HE internationalisation is experiencing a vast change. While during the last century, higher education was considered a public good, today it is considered by many to be a lucrative business of the new service economy. One important rationale that is evolving in parallel with the changing forms of cross-border education – universities come more closely to resemble higher education analogues of multinational corporations (Etzkowitz, 2017; Fayolle & Redford, 2014). During the last decade more and more in literature higher education institutions are being compared to business corporations (Czinkota et al., 2009; Ennew, 2012; Kim & Zhu, 2010; Sánchez-Barrioluengo, Benneworth, 2019).

S. Gallagher and G. Garrett (2012 are discussing HE internationalization development into the MNU phenomenon (Multinational Universities). If we join this model with the J. Knight's theory, we could say that the export of educational services started by the time the second generation of cross-border education took place (programme mobility and "Internationalisation at Home"). The shift from national, to international and to multinational has been happening in the higher education arena globally over the past century (see Fig. 1.1).

The export of educational services started by the time the second generation of cross-border education took place (Knight, 2003). Mobility of students grew into mobility of programmes and finally, the education export has evolved into a

radical form – branch campus (first establishments: in 1998 in United Kingdom, in 1997 in Russia). Finally, the further development orientates towards the rise of MNUs – Multinational Universities, which are multiplying their institutional mobility experience and are having multiple international branch campuses (e.g. Limkokwing University, Stenden University).

The development of education internationalisation is illustrated in Fig. 1.1.

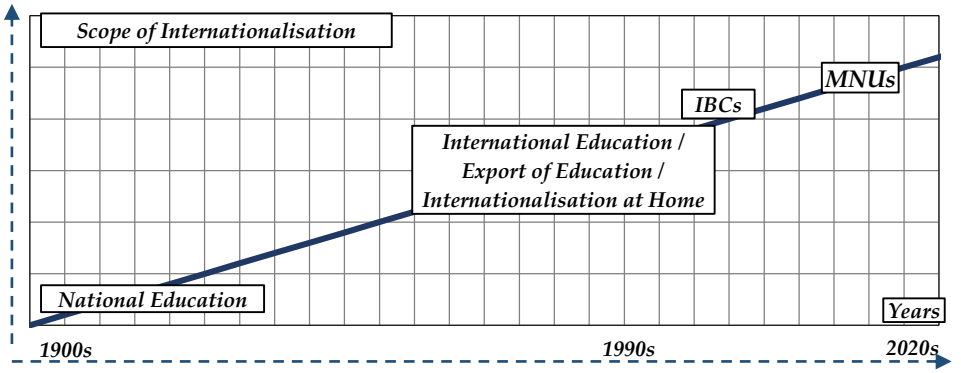

Fig. 1.1. The evolution of international education (source: Gallagher & Garrett, 2012)

Export of educational services is often referred to as transnational education in literature. One of the first definitions of TNE (1997) by Global Alliance for TNE: "Transnational Education denotes any teaching or learning activity in which the students are in a different country (the host country) to that in which the institution providing the education is based (the home country). This situation requires that national borders be crossed by information about the education, and by staff and/or educational materials." A decade later, more specific definition is suggested by INQAAHE[4] TNE 'includes distance education courses offered by higher education providers located in another country, joint programs offered between a local provider and a foreign institution, franchised courses offered with or without involvement of staff members from the parent institution, and foreign campuses of institutions developed with or without local partnerships." In comparison, international education does not require the crossing of borders. Table 1.2 for the TNE delivery modes description.

[4] INQAAHE – Australian Universities Quality Agency.

Table 1.2. Description of main transnational education delivery modes (source: British Council)

Name of institution	Definition
1. International branch campus	The sending HEI establishes a stand-alone satellite operation known as an international branch campus (IBC) in the host country and is responsible for all aspects of recruiting, admission, programme delivery and awarding of the qualification. In addition to faculty employed from the parent institution, the IBC may employ local and/or international faculty to assist with teaching. Quality assurance of the programme is the responsibility of the sending HEI and is often subject to additional accreditation processes by the host country.
2. Franchise/ twinning programmes	A sending HEI authorises a host HEI to deliver its (sending HEI) programme, with no curricular input by the host institution. The qualification is awarded and quality assured by the sending institution. The host HEI has primary responsibility for delivery of the programme but the sending HEI may assist with delivery of the programme by providing flying teaching faculty. Recruitment of students and provision of facilities (library, classrooms, IT) is provided by the host HEI. Franchise programmes are typically 3+0 or 4+0 with all study taking place in the host country. Where the student completes the study in the sending country, e.g. 2+1, this is commonly known as a twinning programme.
3. Articulation agreements	Allow host country students who have completed a specified curriculum (award not of the sending HEI) to apply to a sending country programme (either being taught in the sending or host country) and enrol with 'advanced standing'. (These agreements are sometime considered as a mechanism to recruit international students, but are included here as TNE due to the input the sending HEI has into the pre-articulation curriculum studied at the host HEI).
4. Double/dual degree programmes	Two or more partner institutions in different countries collaborate to design and deliver a common programme. Mobility of students and faculty between the partner HEIs varies by programme. The student receives a qualification from each partner institution. This results in a student receiving two or more qualifications for completion of one programme.
5. Joint degree programmes	The joint degree programme is similar to the double/dual degree programme in that two or more HEIs collaborate to design and deliver a new programme. The sole difference is that students receive one qualification which includes the badges of each partner institution on the award.

End of Table 1.2

Name of institution	Definition
6. Validation programmes	The process by which a sending HEI judges that a programme developed and delivered by a host HEI is of an appropriate quality and standard to lead to a degree from the sending HEI. The host HEI can develop a programme to meet local needs with the sending HEI contributing its quality assurance processes.
7. Other	Access/feeder programmes, credit transfer/study abroad programmes, short-term or partial credit programmes, distance learning programmes/ virtual universities, tuition providers/ teaching centres, bi-national campuses, independent campuses, corporate training and intermediary agencies.

International branch campus is not a mainstream foreign MEM tool for higher education institutions – so far just around 1% of HEIs worldwide undergo such venture. According to The Cross-Border Education Research Team (C-BERT) in 2017 there were 247 operating branch campuses globally, 22 new IBCs were planning to open, 42 were known to have closed (see Fig. 1.2). The numbers of new IBCs each year can be seen in the graph. By 2019 threre were around 250 IBCs. There have been at various times enumerations of the global stock of international branch campuses. These enumerations do not always agree and this may relate to changes in definition of what constitutes an international branch campus (Garrett et al., 2016; Kinser & Lane, 2012; Lawton & Katsomitros, 2012).

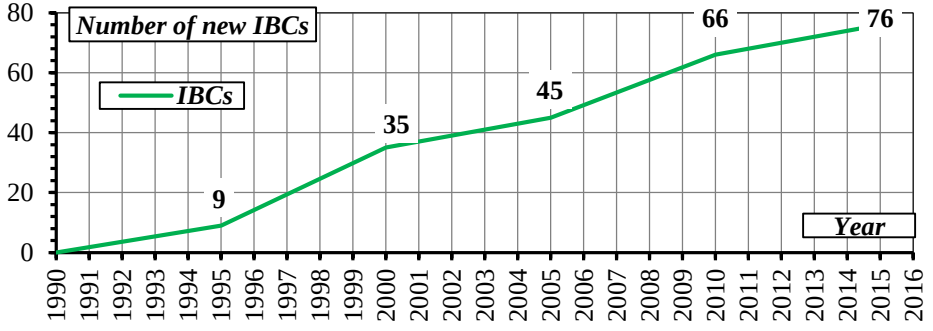

Fig. 1.2. The global accumulation of the growth international branch campuses from 1990 to 2017 (source: compiled by author)

However, about 15% of IBCs that were opened have subsequently closed (Garrett et al., 2016). This has happened sometimes with significant financial and

reputational consequences, such as the closure of the IBC of the University of New South Wales in Singapore after one semester of being open that resulted in a reported loss of US$38 million (Becker, 2009; Croom, 2010; Wilkins, 2016).

Other reasons for the scarcity of literature include the relative newness of the IBC phenomenon, and the relative distance of these ventures from home campuses (lack of communication) and in countries that make access to staff for qualitative researchers difficult and expensive (Healey, 2015).

Indeed, a scan of the literature using relevant keywords showed that there was a significant body of 'grey' literature, as well as studies in peer-reviewed journals, but neither started to appear until about 2004–2005. This published information aligns well with the growth of this phenomenon of international branch campus itself over the last two decades. The synergy of the scientific idea development and the growth of the number of international branch campuses in 1990–2017 is illustrated in Fig. 1.3. Green line marks the number of new IBCs each year, blue and red lines show the number of the publications on IBCs. One can observe that the phenomenon was growing earlier than the scientific idea around it. However, around the year 2011, the number of publications started to catch up the growth. These searches would not have uncovered the large body of information that is present behind membership barricades (Healey, 2015).

Evidently development of international activities in higher education is still an important subject for research especially the most recent topics: education export, branch campuses, and multinational universities. Mastering the measures of international cooperation would allow for maximization of gain in such initiatives.

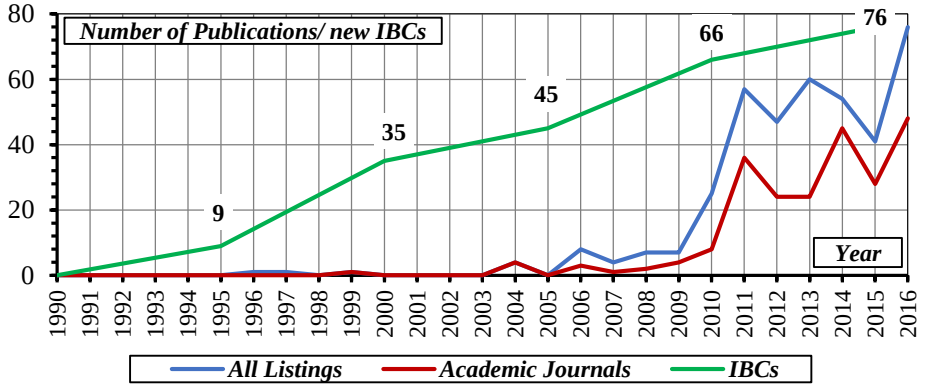

Fig. 1.3. Scientific idea development in 1990–2017: publications listed in EBSCO databases containing keywords* in all text by year; and the global accumulation of international branch campuses from 1990 to 2017 (source: compiled by author)

Internationalisation is an ultimate condition and the way for HEIs to operate. Due to its complexity internationalisation is an institutional change factor, is making strong influence on goals, culture, resources and behaviour of the HEIs, having crucial role for their competitiveness (Altbach & Knight 2007; Radzevičienė & Girdzijauskaitė, 2012). In response to external as well as internal pressure HEIs strive to increase the volume and enhance the quality of internationalisation activities. There is a high demand for the investigation of the critical factors and tools to enhance internationalisation in practice.

1.3. Business Principles Applied in Higher Education

Considerably more often it is argued in the literature (Clark, 1998; Gallagher & Garrett, 2012) that in order to succeed, HEIs shall need to develop perspective business models. Increased autonomy lead by globalisation encourages searching for new sources of funding and decreasing the dependence on government funding. Such situation illustrates the rise of an Entrepreneurial University – the concept of university applying business models into its activities (Clark, 1998; De Wit, 2009; Santiago et al., 2008).

A business model describes the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural or other contexts. The process of business model construction and modification is also called business model innovation and forms a part of business strategy (Geissdoerfer, Savaget, Evans, 2017).

It is suggested in the literature that internationalisation consists of the following steps (Gould, 2002): making a positive or negative decision whether to internationalise or not; a decision to explore internationalisation; performing the market screening to shorten the list; undertaking in-depth research on the short-listed markets; selecting the market or markets to enter; selecting the mode of entry; making a decision to proceed with the chosen market entry; preparing for and entering the chosen market; consolidation in the new market; repeating the process; expansion in the already entered markets; global rationalisation.

Classic theories analyse two fundamental determinants of internationalisation: market selection and market entry mode. Therefore, both, a business firm or a university that is seeking to enter a foreign market must make two important decisions: select the market and select the market entry mode (Gallego et al., 2009). In this thesis the above mentioned phenomena are analysed in a respective order.

Market selection is described as "…the decision-making activities that are employed in the selection of one or more suitable foreign markets, from at least two potential ones. The salient elements of the decision are the criteria on which

the decision is based, the sources from which the information is gathered, and the methods of analysis used." (Sheridan 1988, p. 15).

According to the Nordic School (Andersson et al., 1977; Kogut & Singh, 1988), market selection is constrained by two key concepts: psychic distance and experiential learning or the acquired knowledge in a foreign market. However, the born global firms suggest alternative ways to traditional internationalisation theories (Knight & Cavusgil, 2004). The power of psychic distance decreases due to recent developments in information technology and human resources with international experience.

Robertson & Wood (2001) in their empirical study on export decision making identify that the two most important criteria are information related to market potential (i.e. foreign buyers' ability to pay and the competition environment) and legal environment (i.e. non-tariff and tariff barriers). Interestingly, according to their empirical findings, the cultural environment was rated as least important, while in literature this criterion is given a lot of attention.

Various approaches to foreign market selection view the process as composed of the following stages: preliminary screening, identification/in-depth screening and final selection (Andersson et al., 1997; Kumar et al., 1994; Root, 1994). Robertson & Wood (2001) refer to it as primary environmental dimensions, subsidiary export dimensions and specific decision variables. Preliminary assessment or screening (the first stage) identifies potential markets as candidates for subsequent in-depth analysis (Root, 1994). Macro-level indicators are used to eliminate countries that do not meet the firm's objectives (Kumar et al., 1994). Market size, growth rate, fit between customer preferences and the product and competitive rivalry constitute proposed screening criteria. Identification stage involves assessment of industry attractiveness and forecasts of costs and revenues for the short-listed countries. The final selection stage determines the country market which best matches the company's objectives and available resource leverages (Andersson et al., 1997).

The process of market selection grounded some major research questions in the empirical research (such as the criteria of market selection), which were addressed in the expert survey on networking and branch campus case analysis in higher education.

1.3.1. Equivalents and Differentiation of Foreign Market Entry in Business and Higher Education

In search of the cases of business principles transfer to higher education and theoretical framework to enhance business-like behaviour, one can state that the main fields in which business and HE behaviour assimilates to the highest extent is the

internationalization of its activities, research priority given to foreign market entry modes, its selection and realization for service export.

Foreign market entry mode (MEM) is an institutional arrangement that makes possible the entry of a company's products and services, technology, knowledge, human capital, management, or other resources into a foreign country (Root, 1994). Service firms may enter foreign markets using a variety of entry modes: export, licensing, joint ventures, or establishing a subsidiary abroad (Blomstermo et al., 2006). The factors determining entry mode choice include the varying levels of control, resource commitment, and risk (Anderson & Gatignon, 1986; Blomstermo et al., 2006; Goi, 2015; Javalgi & Martin, 2007; Madichie & Kolo, 2013). World Trade Organisation (WTO) distincts the following market entry modes for business firms: consumption abroad (international consumers), cross-border supply, delivery abroad, commercial presence.

Increasingly, universities are being compared to business firms in HE literature (Czinkota et. al., 2009; Ennew, 2012; Kim & Zhu, 2010; Naidoo, 2008, 2009). In this thesis business theory is applied to HE context, therefore, the matching of concepts must be made. The classification of WTO terminology of service firms is increasingly applied to HE internationalisation (Czinkota et. al., 2009; Knight, 2003; Larsen et al., 2002; Naidoo, 2009). The earlier mentioned market entry modes by WTO could be associated with recruitment of international students, joint programmes, international programmes and international branch campus respectively. Branch campus being the most intensive, complex and risky form of export. The above mentioned classification has been adapted in this thesis as follows (see Fig. 1.4).

Four modes of internationalisation are listed in Fig. 1.4 according to the WTO typology: consumption abroad, cross-border supply, delivery abroad and commercial presence. The activities are listed downwardly according to the growing intensity and complexity of internationalisation. Terms equivalent to each other are listed horizontally in the same lines.

"Consumption abroad" in business refers to a situation when consumers from one country are using the service supplied by another country, or in other words, when the recipient of the service temporarily moves to the provider's location. In higher education this mode corresponds to student mobility and international movement of researchers (Czinkota et al., 2009; Ennew, 2012). One should note that from a perspective of a particular HEI inward mobility stands as an example here, when international students or researchers (consumers) come to the providing university for a temporary access to particular service (studies, research).

Second mode of service export in business context – cross-border supply – has a correspondent equivalent in higher education – programme mobility (joint

programmes, distance and online learning). Both in cross-border supply and programme mobility service is created in a country of origin, while the delivery is transferred abroad. It is revealed in HE research (Naidoo, 2009) that Australia is the most active exporter of programme mobility. The overall intensity of Australia's activity was 42.4 programmes per institution, compared with 12.7 programmes for UK based institutions. Increasingly, delivery abroad and cross-border supply are being combined to deliver courses by fly-in faculty combining with online resources (Ennew, 2012).

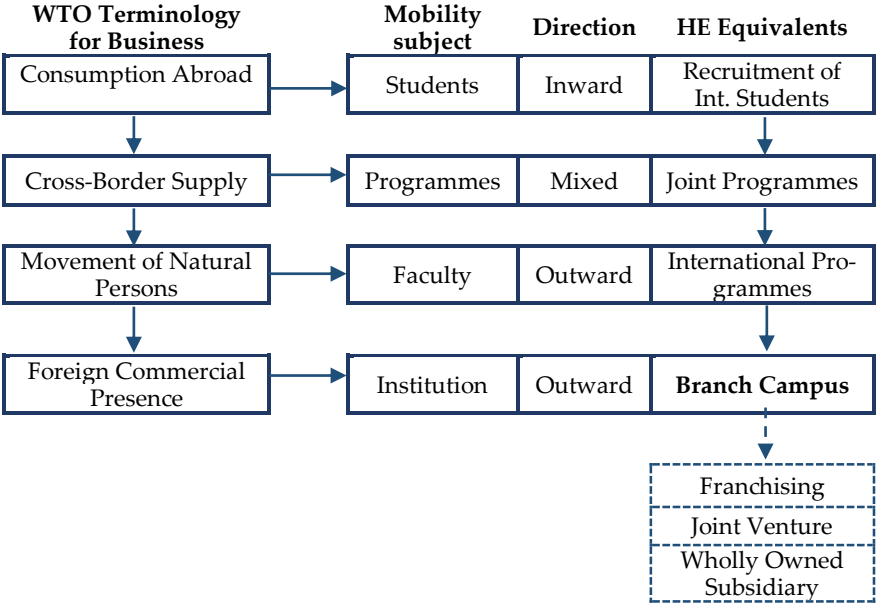

Fig. 1.4. Equivalents of cross-border activities in service industries in business versus higher education (source: compiled by author)

Another strategic mode of internationalisation of service industries according to WTO is movement of natural persons, when the service is both created and delivered in another country. This mode is also defined as temporary movement of service provider to the customers' location. In higher education this is practiced as faculty and academic mobility (Czinkota et al., 2009; Ennew, 2012) as well as research visits, fellowships, expert services (Ennew 2012).

The last mode indicated by WTO is commercial presence, where the providers of a service establish their commercial presence through subsidiaries and outlets internationally (Czinkota et al., 2009; Ennew, 2012). In higher education the said approach is referred to institutional mobility. Along with franchising there are different forms of equity-based participation, in higher

education this mode takes legal forms of joint venture and wholly owned subsidiary (international branch campus).

Offshoring education services in a form of a branch campus is analysed in this thesis as a foreign market entry and a form of a business model transfer into higher education practices. The entry to a foreign market is likely to be complicated by several factors related to the host market such as host government policy, culture, physical distance, etc. (Ghoshal, 1987), therefore the decision of market selection is no less important.

After the market entry mode conception analysis, the conclusion was drawn, that the factors determining market and market entry mode selection are coherent. The applicability of factors from business to HE is illustrated in Table 1.3.

Table 1.3. Factors in market and market entry mode selection process in business and its application in higher education (+ if applicable, – if not applicable) (source: compiled by author)

Factors of market selection	Applied in HE	Factors of entry mode selection	Applied in HE
Internal		Internal	
Company strategic orientation and objectives (Andersson et al., 1997; Hamel & Prahalad, 1994)	+	Company size/resources (De Villa et al., 2015; Lin, Ho, 2018)	+
Company international competitiveness and positioning (Lin & Ho, 2018)	+	Experience in using MEMs (De Villa et al., 2015; Lin & Ho, 2018; Paliwoda & Thomas, 1998; Root, 1994)	+
Overseas market selection experience (De Villa et al., 2015; Lin, Ho, 2018)	+	Management risk attitudes (Anderson & Gatignon, 1986; Johansson, 1997, p. 124)	+
Knowledge of the markets (Johanson & Vahlne, 2009)	+	Profit targets (De Villa et al., 2015; Johansson, 1997; Lin & Ho, 2018)	+ / –
	+	Competencies, capabilities and skills required/available for each MEM (Jagodka, 1997; Koch, 1997)	+
	+	Ownership (competitive) advantages of the firm (Dunning, 1988)	+
Legal environment (Laufs & Schwens, 2014; Robertson, Wood, 2001)	+	Market barriers (Johansson, 1997; Karakaya & Stahl, 1992; Lin & Ho, 2018; Paliwoda & Thomas, 1998)	+
Similarity/proximity of overseas market (psychic distance) (Root, 1994; Johanson & Vahlne, 1977)	+	Legal environment (De Villa et al., 2015; Laufs & Schwens, 2014)	+

End of Table 1.3

Factors of market selection	Applied in HE	Factors of entry mode selection	Applied in HE
Internal		Internal	
Networking relationships (De Villa et al., 2015; Johanson & Vahlne, 2009; Nouwens & Bouwman, 1996)	+		
Location advatages (Dunning, 1988)	+		
External factors		External factors	
Country market potential (Adersson et al., 1997; Lin, Ho, 2018; Robertson & Wood, 2001; Root, 1994)	+	Varying levels of control, resource commitment, and risk of the MEM (Anderson & Gatignon, 1986; Lin & Ho, 2018)	+
Competitive significance of the market (Elliott & Cameron, 1994)	+	Characteristics of the overseas country business environment (Lin & Ho, 2018)	+
Anticipated overseas market risks (Lin & Ho, 2018)	+		

An interesting finding has been made, that very little is researched on how the host country political, legal and economic environment affects the company's foreign market entry mode decision. This observation is supported by an extensive research on foreign market entry mode choice made by Laufs and Schwens (2014).

The factors indicated in the table above have been discussed in the context of higher education by various scholars (Jiang, Carpenter, 2011; Li, Roberts, 2012; Naidoo, 2010; Tayar, Jack, 2013).

All in all, a comparative analysis shows that the determining factors for market and market entry mode selection are coherent in business and higher education. This strengthens the thesis that business principles are transferable to higher education management. The practices of business are more widely used and analysed in research, and based on both theory and practical cases, new solutions for HEIs can be elaborated. This opens up opportunities for further research in higher education internationalisation.

1.3.2. Business Internationalisation Theories Applied in Higher Education Management

Increasingly, universities are being compared to business firms in HE literature (Ennew, 2012; Kim & Zhu, 2010; Naidoo, 2009). In order to analyse the scope of business internationalization theories application to higher education management, a review of 5 business internationalization approaches has been made. Sources discussing these approaches in the context of business and higher education have been distinguished accordingly (see Table 1.4).

Table 1.4. Internationalisation approaches in business and higher education research (source: compiled by author)

Approach	Sources in Business	Sources in HE
Uppsala model	(Buckley et al., 1979; Johanson & Vahlne, 1977, 2009, 2017; Rhee & Cheng, 2002)	(R. Edwards & J. Edwards, 2001; Girdzijauskaitė & Radzevičienė, 2014; Healey, 2008; Tayar, Jack, 2013; Li, Roberts, 2012)
Eclectic paradigm	(Dunning, 1980, 1988, 1997, 2015a, 2015b; Root, 1994; Twomey, 2000)	(Girdzijauskaitė & Radzevičienė, 2014; Healey, 2008; Shams and Huisman, 2012)
LLL model	(Liefner, Wang, 2013; Mathews, 2002, 2006)	(Radzevičienė & Girdzijauskaitė, 2012).
Resource based view	(Alexy et al., 2018; Barney, 1991; Barney et al., 2001, 2011; Hitt et al., 2016)	(Beerkens, 2004; Radzevičienė & Girdzijauskaitė, 2012)
Transaction cost analysis	(Anderson & Coughlan, 1987; Anderson & Gatignon, 1986; Brouthers & Hennart, 2007; Cheung, 2016; Eriksson, 2015; Klein, 1989; Laufs & Schwens, 2014)	NIA
Industrial network approach	(Axelsson & Easton, 2016; Håkansson, 2015; Håkansson & Ford, 2002; Håkansson & Johanson, 2002; Johanson & Mattsson, 2015; Johanson & Vahlne, 2009; Turnbull & Ellwood, 1986)	(Beerkens, 2004; Girdzijauskaitė & Radzevičienė, 2012, 2013, 2014; Waechter, 2000)

It is evident from Table 1.4 that classic internationalisation approaches are much more analysed in business context than in higher education and there is a need for contribution to the theoretical knowledge in HEIs internationalisation in order to fill the discovered gaps.

Hereby six business internationalisation approaches and their applicability to higher education management are being analysed: Uppsala internationalisation theory, eclectic paradigm, resource based view, transaction cost analysis and industrial network approach.

Classic research of the internationalisation of business suggests an evolutionary and sequential market commitment (Buckley et al., 1979; Johanson & Vahlne, 1977). This step by step incremental approach to internationalization is usually referred to as the "Uppsala model of internationalization". It's one of the most discussed theories of the Nordic school, that has been widely supported by the researchers around the world ever since its creation and also it is the earliest school of thought on the internationalization in business. The Uppsala internationalization model suggests four steps of entering a foreign market: exporting, licensing production, joint ventures and sole ventures.

According to traditional Uppsala model, business companies expand their operations in a foreign market gradually, beginning with entry into foreign markets that were close to the domestic market in terms of psychic distance, defined as factors that make it difficult to understand foreign environments, and similar institutional conditions before moving on to host countries that are more different. Overall, this approach is thought to protect TNCs from the downside risk of failure by increasing their overseas resource commitment over a certain time period (Johanson & Vahlne, 1977; Rhee & Cheng, 2002).

Following the above mentioned logic in higher education context, a university seeking to establish a branch campus abroad would choose a country with a smaller psychic distance. In practice, a part of IBCs is being opened in the previous colonies (i.e. Dutch universities establishing IBCs in Indonesia and South Africa). So, the Uppsala model applies in some, but definitely not all cases (Girdzijauskaitė et al., 2019).

When choosing the markets for the education export and analysing the countries in terms of psychic distance, the Hofstede cultural dimensions provide a good scale for measurement (Hofstede, 2009).

However, the economic and regulatory environments have changed dramatically since the Uppsala model of the internationalization was published in 1977 by Johanson & Vahlne. This approach based solely on the experiential knowledge has been criticized due to its reliance on just one variable. Moreover, the possibility of working the internationalization process backwards or decreasing the international commitment is not discussed in the original Uppsala model (De Villa et al., 2015).

In 2009 Johanson and Vahlne presented the extended Uppsala model by publishing their work "The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership" in the Journal of International Business Studies. The main factors in the new revisited model were

trust-building and knowledge creation in local networks. In other words, it is not the liability of foreignness that matters, but rather being an outsider to relevant business networks in a new market. According to Johanson and Vahlne (2009), the most important challenge in the internationalisation is not the psychic distance between the home market and the foreign market, but rather the difficulty to become an insider in local networks.

Following this line of thought, networks as an important moderator of entry mode choice was included into the revisited Uppsala internationalisation model (Johanson & Vahlne, 2009). This extension relates to the industrial network approach that also addresses the impact of networks in the process of foreign market entry (De Villa et al., 2015).

Johanson and Vahlne (2009) added two important factors in the revisited Uppsala model, which they called a Business network model of the internationalisation process: knowledge and learning, and trust and commitment building.

The original model was based on the assumption that knowledge is accumulated through the experience, while the revisited version adds that exchange within a network allows a firm to acquire knowledge about its relationship partners, including their resources, needs, capabilities, strategies, and other relationships. Network partners are also a source of relevant business information about their own partners and more distant actors in the network.

The revisited Uppsala model builds on the traditional definition describing network as a set of business units and relationships, emphasizing trust and commitment building within the network. It concludes that trust is not only an important ingredient for successful learning, but also for the development of new knowledge. Trust can also substitute for knowledge, for instance when a firm lacks the necessary market knowledge and so lets a trusted middleman run its foreign business (Arenius, 2005; Johanson & Vahlne, 2009).

In the context of higher education internationalisation similar frameworks seem to apply, as usually less risky modes are chosen before more aggressive ones in higher education internationalisation. For instance, following this logic in, traditional international student exchange between the countries could be the first step, before intensifying the activities in this market in more intensive forms (staff exchange, programme mobility, branch campus). Talking about branch campuses, a joint venture could be a step before a fully independent branch campus following this framework of intensifying export activities gradually. University of Reading in Malaysia, for example, found it effective to adopt a two-step approach when entering a new foreign market: firstly, setting up in partnership with a local institution that knows the local market, regulations, and business practices, and then later establishing an international branch campus independently (Wilkins, 2016).

However, if a joint venture is established with another HEI, the chances are not that high that it will be able to turn into an independent branch eventually, since the agreement is usually long term. University-business partnerships on the other hand are less likely to be long term, and therefore might be a choice to consider if aiming for a fully owned IBC in the future. (Girdzijauskaitė & Radzevičienė, 2014).

It is discussed in literature, that HEIs following this step by step Uppsala model are cautious and very controlling of their risks in the internationalization process (Tayar & Jack, 2013). However, the more entrepreneurial universities with more extensive international experience might jump the stages and try riskier moves of international expansion (R. Edwards & J. Edwards, 2001). HEIs from UK, Australia, and USA is a good example of not necessarily following a linear internationalisation path. And those are the countries with the biggest numbers of higher education export.

As a matter of fact, the authors of Uppsala model received considerable amount of criticism and the model has been developed further a few times (Johanson & Vahlne, 2009, 2017). After all, the Uppsala model was initially developed to describe the internationalisation of manufacturing companies. Therefore, it is not surprising the internationalisation of service providers like universities might follow a somewhat different path (R. Edwards & J. Edwards, 2001).

Looking for strategic decisions to enhance internationalization of HEIs several theories of business internationalization have been analysed to find the solutions applicable in higher education. One of the theories that seem to be relevant to the context and interaction ways in higher education market is so called eclectic theory of business internationalisation. Subsequent studies (Dunning, 1988; Dunning & Bansal, 1997) argued that explanations of a company's internationalization process should be rooted in economic theory and that the decisions to internationalise and choice of entry mode were motivated by culturally based ownership, location and internalization advantages. Economic theory was also used to model national attribute configurations that account for efficiency, competitive advantage in certain industries and clusters, enabling firms to export efficiency and enhancing their potential for successful internationalization (Porter, 1980, 1990).

According to Dunning's OLI theory, market entry mode is determined by three factors: Ownership advantages (O) of the firm, Location advantages (L) of the market, and the Internalization advantages (I) of integrating transactions within the firm.

Ownership advantages include trademark, production technique, entrepreneurial skills, the size of the firm, the extent of international experience, and the ability of the firm to differentiate its products and services (Dunning, 1993).

Location advantages include existence of raw materials, low wages, special taxes or tariffs.

Internalisation advantages include advantages by own production rather than producing through a partnership arrangement such as licensing or a joint venture.

In higher education setting, ownership advantages may be much less tangible and perhaps less secure than in business. The advantages that support the university at home may not apply overseas. The reputation of the university may be strongly impacted by its research output, however, if majority of widely known leaders are only available in a home campus, and the foreign campus is staffed with junior and/or local staff who have little involvement in research, the ownership advantage doesn't transfer in this case (R. Edwards & J. Edwards, 2001).

Another important theory is LLL-framework proposed by Mtthews (2002). It's closely connected to these firm-specific advantages of emerging country multinationals. In this framework, the international expansion of emerging country multinationals is driven by resource linkage, leverage and learning.

Linkage factor refers to the outward orientation of the latecomer firms, when latecomer firms seek to acquire resources and complementary assets in the foreign markets rather than locally. Joint ventures, networks and other forms of strategic collaborationare are commonly chosen modes of foreign market entry for the latecomers. These forms of foreign market entry allow for the linkage of resources (Mathews 2006, p. 18). The ability of taking advantage of the resources in these networks and accumulating knowledge lead to the leverage and learning factors of the LLL model.

LLL type of interaction is possible in dyadic as well as in multilateral interaction, thus in a form of cooperation of a strategic alliance, consortium, network (where learning and functioning is one service) (Radzevičienė & Girdzijauskaitė, 2012).

While the OLI model is quite useful for understanding FDI from developed to developing economies, while the LLL model is more powerful for explaining the FDI to developed economies (Liefner, Wang, 2013).

It could be presumed that typically universities that have entered education market later than their rivals seek for relations with mature firms in order to access best practices in the field. This interaction from latecomer's perspective consists of three stages: linkage, leverage and learning (LLL) called LLL algorithm (Mathews, 2002, 2006). A latecomer initiates linkage with a matured institution; resource leverage is posed in order to exploit the linkages; repetitive synergy of latecomer and incumbent through linkages and leverage enables latecomer to learning.

Practical example of LLL algorithm functioning in higher education could be European universities participating in projects to gather with beneficiaries from European Transition countries (i.e. former NIS, MEDA countries) to offer the best practices to learn. Resources from beneficiary universities are provided within a

project budget. After the end of a project, the beneficiary is responsible for sustainability and further dissemination of project products. This way former beneficiaries gain significant competitive advantage among other local players.

Life circle of any organisation is dependable on the resource base and its successful management. Assigning, monitoring and controlling company's resources has a great influence on overall performance. Thus it is important for any organization (not only in business setting, but also governmental and non-profit institutions) to understand and wisely use resource related management tools. Here the resource based theory (RBT) comes in help.

The concept of resource based view (RBV) was elaborated by J. Barney in 1991. Barney has introduced the basic principles of RBV, also presented the definition of resources, and listed the factors that make a resource a potential source for sustained competitive advantage. There have been other authors interpreting or trying to add to Barney's ideas, nevertheless the concept didn't change much from that time.

During the period of nearly 30 years' resource based view has reached the maturity of a theory, and recently more and more often is referred to as a resource based theory (RBT). The resource based theory is now one of the principal management theories being applied not only in business, but also in other forms of organisations, such as educational institutions.

The resource based theory is not only one of the main frameworks for all kinds of organisational partnerships, but also one of the most powerful theories that helps understanding how organizations operate (Barney, Ketchen, & Wright, 2011). J. Barney (1991) argued that resources and capabilities owned by a firm are a tool for gaining a competitive advantage, if wisely used. According to RBT firms gain competitive advantage from resources that are valuable, rare, imperfectly imitable, and not substitutable. Resources and capabilities contain firm's material and immaterial assets (Barney, 2001).

Main theoretical assumptions in resource based theory are:

- Resources are heterogeneously distributed among organisations.
- Such distribution is steady over time and long lasting.
- Strategic resources are linked to sustained competitive advantage.
- Competitive advantage is sustained only if resources are valuable, rare, in-mitable, and non substitutable.

Basic principles in RBV are complementarity and compatibility.

According to J. Barney (1991, 2001, 2011), there are three main steps in applying resource based theory:

1. Identifying firm's main resources that have a potential for gaining competitive advantage.
2. Investigating whether these resources meet the so called VRIN criteria:

Valuable – a resource must enable a firm to employ a value-creating strategy, by helping the company to surpass its competitors or reduce its shortcomings (Barney, 1991; Conner, 1991; Mahoney & Pandian, 1992).

Rare – to be valued in the market, the resource must be rare by its definition. The reflection of discounted future must be given by the price of resource (Barney, 1986; 1991).

In-imitable – in order to sustain a competitive advantage a value of a resource must be governed by only one firm. Moreover, a competitive advantage is not sustained if competitors are able to duplicate the strategic asset (Barney, 1986; Peteraf, 1993). Rumelt (1984) introduced a term – isolating mechanisms, which explains why firms might not be able to imitate another firm's resources to an extent (Mahoney & Pandian, 1992; Peteraf, 1993, p182–183) that it would be able to compete with the firm having great base of valuable resources. In case the resource is knowledge based, there are chances of ambiguity.

Non-substitutable – if a resource is rare, valuable and imperfectly imitable, a need for its substitutability arise to competitors. If competitors are able to counter the firm's value-creating strategy with a substitute, prices decrease to the point that the price equals the discounted future rents (Barney, 1986), leading to zero economic profits.

3. Taking care of key resources. Resources that meet the above criteria should be carefully protected – taking care of potential key resources improves the firm's performance (Crook, Ketchen, Combs, & Todd, 2008).

In business setting the Resource Based Theory is applied through managing project activities and international partnerships. In project activities the activities for projects are chosen accordingly to the resource base that is going to be needed and/or gained during the project implementation. In international partnerships companies choose their potential partners and regard their decisions to the resource base complementarity.

Universities have a resource base that is more difficult to define or put a value on comparing to business companies. However, this base tunes well with the one mentioned in the Resource Based Theory and just as in business setting needs to be wisely used.

Universities are facing a dynamic and strongly competitive environment. Growing numbers of student mobility, growing competitors and financial crisis inspire the heads of universities to improve their operations and look for new ways of successful management. In order to achieve this, RBT could be used in managing universities international partnerships and project activities, by choosing the potential partners and forming a rich partner portfolio in which partners are compatible and the resources are diversified.

Without active application of resource based theory universities are too often not making wise choices with partners. This is done because of conservative misbelief that the more partnerships the better for the institution. However, every agreement that is signed adds liabilities to institution and requires constant maintenance of institutional relationship (Radzevičienė & Girdzijauskaitė, 2012). This being said, if a partnership is not producing added value for partners, and if there is a weak base of resources to be exchanged (simply because the resources of institutions involved are two similar), institutions are wasting their resources and time. Therefore, application of RBT is highly relevant in managing an institution.

E. Beerkens in his study (2004) defines the collaboration paradox in global environment. The essence of his defined paradox is that inter-organizational collaboration (networking) is based on two principles: compatibility and complementarity. The study states that cooperation in a network is successful if the partners are selected similar yet different. Being similar partners satisfy the principle of compatibility, while being different the complementarity principle is being satisfied.

The essence of complementarity principle is that partners exchange certain benefits. In this case, universities, forming higher education networks, seek the discovery of new resources (Lavie, 2006). Meanwhile, the issue of organizational compatibility is addressed in the field of economic sociology. F. B. Evans (1963) argues that essence of the compatibility principle is that success of the partnership depends on the compatibility of institutional partners – the more compatible partners, the more successful partnership (Insch & Steensma, 2006).

Although the resource-based theory offers an economically rational perspective, sociology studies tend to describe university as an institution strongly dependent on its cognitive, normative and intra-organisation structure. One of higher education management research pioneers K. Polanyi (1944) argues in his study that institutional embeddedness provides both opportunities and constraints. On the one hand, institutional context ensures the legitimacy, clarity, and relationship development with its stakeholders. On the other hand, to quote J. DiMaggio (1983), it closes an institution to "iron cage."

The relationship between compatibility and complementarity is based primarily on resource-based perspective. This approach is derived from the strategic management theory (Beerkens, 2004; Lavie, 2006). Resource-based approach supporters argue that institution only achieves competitive advantage if the right resource base is collected and competitive advantage only remains sustained if the available resources are valuable, unique, immobile and irreversible (Purvis et al., 2001; Swart & Kinnie, 2003). Therefore, from the resource-based perspective, institutional cooperation is perceived as an access to

resources that otherwise would be inaccessible due to its value, uniqueness, immobility and indispensability.

However, the resource-based approach is very rarely used in researching higher education management. This phenomenon is partly explained by the fact that the set of strategic resources in modern university is difficult to determine. It is obvious that such resources as the quality of studies and research have a great value to universities, but very difficult to be identified, classified and evaluated (Altbach & Knight, 2007).

According to resource-based theory, resource sharing is one of the most important reason for inter-institutional cooperation, as well as networking in higher education (Lavie, 2006). However, it is not appropriate to see international cooperation solely as a tool for strategic resources obtainment. International cooperation is also a transactional cost cutting tool. Another reason for the universities to be involved in a network, consortium, or an alliance, is a group representation: often the public funding is assigned to universities on the condition that the research will be carried out collectively, as well as a collective representation opens up greater access to other international and regional institutions.

Despite these alternatives, resource based theory application in higher education has proved to be an approach that helps exploring opportunities for international collaboration.

To fulfil the principle of complementarity alone is not enough – institutional compatibility is necessary for successful co-operation. Higher education institutions are linked with their institutional context stronger than any other organizational form, therefore the fulfilment of compatibility principle in the development of international cooperation in higher education area is a very important condition (Beerkens, 2004).

In general, according to E. Beerkens, the connection between cooperation performance and institutional compatibility is rather weak. However, in those cases where the compatibility level is low, the cooperation efficiency suffers. This leads to the conclusion that, however, the minimum level of compatibility is necessary for successful cooperation (especially given that institutional context is more important in HEIs than in other organisations). However, most cases of networking among HEIs do not have a very close cooperation and tight integration, but it is possible that in case of intensified cooperation, irregularities in the institutional context would become more obvious (Beerkens, 2004). In this regard, in the process of international co-operation development it is recommended to draw attention to the compatibility of organizations, especially in cases where intense future integration is expected in forms of joint projects, institutional merger, etc.

Evidently, compatibility and complementarity of partnering institutions can be a great challenge when aiming for long-term strategic cooperation. In business strategic partnerships and joint ventures are formed and in case of success partners are well balanced in compatibility and complementarity. In higher education the practise is similar. Bilateral or multilateral strategic agreements between two or few partners are being formed in HE and partnering institutions find themselves optimally compatible and complementing. A case of foreign universities making strategic agreements with non-HE Malaysian colleges could be a good example. Universities from foreign countries and local Malaysian colleges are different type education institutions – therefore complementary, and are aiming for different market segment – therefore compatible.

However, the resource-based approach is not so often used in researching higher education management. This phenomenon is partly explained by the fact that the set of strategic resources in modern university is difficult to determine. It is obvious that such resources as the quality of studies and research have a great value to universities, but very difficult to be identified, classified and evaluated (Altbach & Knight, 2007).

TCA is the most popular theoretical perspective in the research on the international entry mode choice (Brouthers & Hennart, 2007). According to TCA approach, companies choose a certain MEM in order to minimize controlling and monitoring costs (Laufs & Schwens, 2014). The theory deals with the costs of outsourcing production of products or services such as the transaction costs, contracting costs, coordination costs, and search costs.

In case of higher education internationalisation, let's take an international branch campus for an example, were a university establishes a branch in order to reach the students (service buyers) in their countries. Such venture requires renting or acquiring property, hiring local academic staff and flying in academic staff from home campus, maintaining the administrative body of the branch, not to mention other operational costs. All in all, international branch campus is undoubtedly not only expensive, but also very risky. In the interviews executed by the author of this thesis in 2016 with the heads of IBCs globally, it has been revealed, that talking about the financial situation – it is rarely a goal to make profit with IBC initiative. It is considered to be successful if one meets the balance of costs. However, the number undergoing for this venture is growing globally. So how can this be explained?

In another research executed by the author of this thesis, the experts and heads of IBCs internationally were asked, what are the reasons relevant for the founding university when establishing a BC. The results illustrate high importance of brand development rather than financial gains. This gives us strong ground to believing that TCA approach is not the leading framework in IBC establishment.

Network could be defined as number of nodes related to each other by ties. In business theory and practise network is a set of business units and the relationships between them are the ties (Håkansson, 1997, Håkansson & Ford 2002). However, it is not necessarily business units. Especially in the case of clusters, public and private institutions and individuals are acting towards a common goal, and it is not necessarily cooperation, the new phenomenon – co-opetition consisting of two diametrically different logics of interaction is on the rise, where entities are cooperating with their competitors in order to reach the common goals having conflicting interests (Gnyawali & Madhavan, 2001; Luo, et al., 2006; Nugaras & Radzevičienė, 2011).

There are horizontal and vertical, internal and external networks. Just like in business, horizontal networking opens up opportunities for cooperation between different types of institutions (government, business, HEIs, research institutes, etc.). Networks organising mobility or groups of universities providing courses in distance learning platforms are considered as examples of vertical networking in HE.

Ties between the nodes in the network are connected to each other and different networks are connected to each other being bigger nodes in a set of related networks. The connectedness of the nodes could be illustrated by the following example. Say we have a number companies related through relationships. The interaction between any two of the companies will depend on the relation to the pother party/ies. And what happens in one relationship will affect all connected relationships (Håkansson, Ford, 2002).

Networking phenomenon has been widely discussed by international business researchers for the past two decades (Håkansson & Ford, 2002; Håkansson & Johanson, 2002; Johanson & Mattsson, 2015; Johanson & Vahlne, 2009; Turnbull & Ellwood, 1986). No less significantly is networking emerging in higher education practices.

International orientation while expanding the scope of activities and diversifying the partnerhips is a premise of business competitiveness. The more complex are the activities the more complex partner input is necessary and this is the situation where bilateral cooperation is transformed into multilateral partnerhips based on networking.

While networking is rather complex in partnerships and range of activities compared to the bilateral cooperation modes, it is far less complicated, risky and resource consuming than the other forms of internationalisation – wholy owned subsidiary or joint venture.

Networking is highly relevant as management tool to higher education institutions actively developing international activities in a limited resource situation, (which stands for many European HEIs), facing the need to expand geographical

presence, balance the risks, share the resources, and transfer the competences (Nugaras, 2013).

Networks play essential role in profile building and internationalisation of business companies and higher education institutions in emerging markets (Håkansson & Ford, 2002; Mathews, 2006; Radzevičienė & Girdzijauskaitė, 2012). Major principles of networking seem to be valid in international consortia, thematic networks of HEIs: flexibility; capacity to transform; project-based nature of activities; therefore, relatively short term focus for single activities; decentralised management by groups, binary logics of inclusion and reciprocal commitment; trust; shared resources; small group advantage; borderless systems (Beerkens, 2004; Castells, 2000; Håkansson & Ford 2002; Radzevičienė & Girdzijauskaitėe, 2012).

The network approach focuses on the relationship of the organisation and the benefits derived externally i.e. opposed to the view based on internal evolution of a firm's knowledge and resources. Major principles of business networking are valid in international consortia, and thematic networks of HEIs: flexibility; capacity to transform; project-based nature of activities; therefore, relatively short term focus for single activities; decentralised management by groups, binary logics of inclusion and reciprocal commitment; trust; shared resources; small group advantage; borderless systems (Castells, 2000; Beerkens, 2004; Radzevičienė & Girdzijauskaitė, 2012). Networking research might be especially relevant for institutions – latecomers in international educational market, which building up their international presence (Girdzijauskaitė & Radzevičienė, 2013).

No less significantly is networking emerging in higher education practices. The theory of the latter phenomenon, however, is slightly behind the practise: research of the field analyses occurrences rather than prospect or ties with other theories. Thus, the ties of networking with the Uppsala approach are analysed in this chapter.

As discussed above in this thesis, originally the Uppsala approach distinguishes two major factors when entering foreign markets: gradually moving from markets with lower psychic distance to markets with higher distance, and incremental step by step approach to intensifying the exporting activities. The Uppsala internationalisation approach was published originally in 1977 by Johanson and Vahlne and have received considerable amount of criticism since.

Therefore, the extended Uppsala model was presented in 2009. The main factors in the revisited model were trust-building and knowledge creation in local networks. As put by Johanson and Vahlne (2009), the most important challenge in the internationalisation is not the psychic distance between the home market and the foreign market, but rather the difficulty to become an insider in local networks. So, networking was considered a very important factor in the process of foreign market entry.

While the original Uppsala model was based on the assumption that market knowledge is gathered through the experience, the new version adds that the market knowledge is acquired through the exchanges within a network: knowledge is gathered not only about own partners, but also about more distant actors in the network. Johanson and Vahlne emphasizes trust and commitment building in the network as an important ingredient for successful learning and for the development of new knowledge (Arenius, 2005; Girdzijauskaitė et al., 2018b; Johanson & Vahlne, 2009).

The above mentioned extension relates to the industrial network approach that also addresses the impact of networks in the process of foreign market entry (De Villa et al., 2015; Girdzijauskaitė et al., 2018b; Håkansson & Johanson, 2002; Johanson & Vahlne, 2009; Turnbull & Ellwood, 1986).

Resource sharing is one of the most important motives for networking in higher education. International partnership is not only a tool to obtain strategic resources, but also to decrease some transaction costs. Another resources related reason to be involved in a network or consortium is a group representation: often public funding is assigned on condition that an activity will be carried in international partnership. Partnership facilitates a chance to change and develop resources of HEI. Organisations tend to exploit existing opportunities to generate and develop new combinations of resources to sustain its competitiveness in the future.

Mutual learning is crucial to network partners bringing the benefits of learning through know-how, best practices or technology transfer. Network partners have quite immediate access to the corporate knowledge of the network, which could be interpreted that the level of trust among partners is high and necessity to have all partners contributing into activities is basic work principle. Forming linkages and maintaining viable relations with the most influential players in a network helps to access downstream information leading to new activities.

Networking is a powerful tool to strengthen position against competitors. The reputation, influence, know-how of network leaders shared within the network, can significantly increase competitiveness of every single partner: not only because of learning effect and access to valuable resources of partner but also because of hallo effect around globally recognised partners (Radzevičienė & Girdzijauskaitė, 2012). In this way international partnership becomes a tool to increase local competitiveness of HEI.

Networking allows institutions pull away from competitors in terms of competition. It enables to form elite groups and networks (i.e. LEAGUE, LERU networks). Another example – business school that have EQUIS commit to cooperate solely with other EQUIS business schools. Such trend of elite groups and networks is spreading.

For these particular reasons internationalisation proves to be powerful instrument to strengthen position against the rivals containing respectively low risk and rewarding benefits.

When discussing networks, it must be pointed out that significant dependence on the partners creates the most limitations of this activity: getting the access to the network, gaining the influence, knowledge asymmetry, and some other issues must be concerned before making networking choice.

Network of HEIs is a group of organisations access to which is restricted by the agreement of other members (Beerkens, 2004). Therefore, the access to the network is the main barrier.

Positioning in the network and gaining influence is not less complicated than accessing it mostly because of the fact that the partners have long standing cooperation experience, and the power distribution is already established.

Depending on how different or similar the partners are, there might be a high level of knowledge, resource, and power distribution asymmetry between latecomers and mature established HEIs. The main means of knowledge accumulation in interorganisational cooperation are absorbing knowledge from a partner and creating new knowledge by interacting (Girdzijauskaitė & Radzevičienė 2013; Vialle, 2011). Absorbing partner's knowledge is more likely used by latecomer institutions at the beginning of their catch-up process. However, latecomer and mature institutions tend to have different views on knowledge absorption and imitation: for a mature institution knowledge is a resource to be protected as a competitive advantage source (Vialle, 2011), whereas according to a latecomer's view, all resources including knowledge should be accessed and replicated (Mathews, 2002; Vialle, 2011). This attitude might not satisfy the giving partner.

Partnership with strong, internationally recognized players may help to reach competitive advantage against other competitors. Although linkage and learning from partners is possible only if the HEI has specific asset to share in exchange. Ideas, access to local market, infrastructure, local support available for joint activities could be an example of the assets to be offered in exchange to know-how, education products, and brand of leading HEIs (Radzevičienė & Girdzijauskaitė, 2012).

While the financial and reputational risks of networking are respectively low comparing to that of other modes of foreign market entry, the benefits are split as well. This makes network a not so risky, hence not so rewarding mode of foreign market entry. This condition is seen as a drawback for mature institutions however serves well for the latecomer HEIs when considering the choice of international entry modes.

According to the industrial network approach (Håkansson & Johanson, 2002; Johanson & Mattsson, 2015) business company's network relationships (e.g., with

customers, suppliers, competitors) have an impact on the foreign market entry mode choice, rather than solely on firm-specific advantages (Laufs & Schwens, 2014).

Networking phenomenon has been widely discussed by international business researchers for the past two decades (Håkansson & Ford, 2002; Nugaras, 2013; Nugaras & Radzevičienė, 2011). No less significantly is networking emerging in higher education practices (Beerkens, 2004; Girdzijauskaitė & Radzevičienė, 2012, 2013, 2014).

Network could be defined as a number of nodes related to each other by ties. In business theory and practise network is a set of business units and the relationships between them are the ties (Håkansson & Ford, 2002). However, it is not necessarily business units. Especially in the case of clusters, public and private institutions and individuals are acting towards a common goal, and it is not necessarily cooperation, the new phenomenon – co-opetition consisting of two diametrically different logics of interaction is on the rise, where entities are cooperating with their competitors in order to reach the common goals having conflicting interests (Gnyawali & Madhavan, 2001; Luo, et al., 2006; Nugaras & Radzevičienė, 2011).

While networking is rather complex in partnerships and range of activities compared to the bilateral cooperation modes, it is far less complicated, risky and resource consuming than the other forms of internationalisation – wholly owned subsidiary or joint venture.

Networking is highly relevant as management tool to higher education institutions actively developing international activities in a limited resource situation (which stands for many European HEIs), facing the need to expand geographical presence, balance the risks, share the resources, and transfer the competences.

According to the industrial network approach (Håkansson & Johanson, 2002; Johanson & Mattsson, 2015) business company's network relationships (e.g., with customers, suppliers, competitors) have an impact on the foreign market and market entry mode choice, rather than solely on firm-specific advantages (Laufs & Schwens, 2014).

The industrial network is described as a network of firms engaged in production, distribution, and use of goods and services, through which lasting business relationships are established, developed, maintained and affected by all the members of such network (Turnbull & Ellwood, 1986). According to this definition, four groups of factors influencing both the foreign market and market entry mode choice have been identified: the interaction elements and processes, the characteristics of the parties involved (buyers, suppliers, etc.), the atmosphere of the interaction, and the environment within which the interaction takes place. (De Villa, 2015).

Finally, after analysing the six approaches of foreign market entry, the following matrix of approaches, theories, major themes and key factor has been developed (Table 1.5).

Table 1.5. Comparison between research approaches and theories of the market entry modes (source: adapted from De Villa et al. (2015) and complemented by the author)

Approach	Major themes	Key factors
Uppsala model	Incremental approach to resource commitment and risk	Experiential knowledge and networks Trust
Eclectic paradigm	Multi theoretical approach	Cost, size, experiential knowledge, organizational capabilities/FSAs, knowhow, risk, culture, competition, market characteristics Networks
LLL model	Firm-specific advantages Outward orientation	Linkage, leverage, learning
Resource based view	Firms gain competitive advantage from resources	Resources capabilities
Transaction cost analysis	Follows a cost efficient rationale	Cost
Industrial network approach	Argues industrial networks influence market entry modes	Networks

It is evident from the Table 1.5 that some approaches are interconnected through being based on the same themes or referring to the same key factors. For instance, networking is the core of industrial network approach and also a very important part of the Uppsala model (especially the new revised version of it (Johanson & Vahlne, 2009, 2017).

1.4. International Branch Campus as a Foreign Market Entry Mode in Higher Education

Branch campus is rather new, though quickly rising phenomena of transnational education. In transnational education learners are located in a country different to the one where the educational institution is based.

Naidoo (2009) suggests the following definition of a branch campus: a subsidiary/satellite campus established by a source country education institution in a

host country to deliver its own education programmes. Branch campuses can be established either through wholly owned subsidiaries or via joint venture partnerships with local host country partners.

Wilkins and Huisman (2012) defines international branch campus as an educational facility that fits three major attributes:

- owned, at least in part, by a foreign institution;
- operating under the name of the foreign institution;
- students receive face-to-face instruction to achieve a qualification bearing the name of the foreign institution).

The Commission on Institutions of Higher Education (CIHE) provides a more policy oriented definition: "a branch campus is geographically removed from the main campus, offers 50% or more of an academic programme leading to a degree, certificate or other recognized credential, is permanent in nature, has its own faculty and administration, and has its own budgetary and hiring authority".

A closer look at the international branch campuses being monitored by the Observatory on Borderless Higher Education (OBHE) and Cross-Border Education Research Team (C-BERT) reveals that finding a comprehensive definition of an IBC is difficult due to the relative newness of the IBC phenomenon, also the uniqueness and great variety of the cases (Healey 2014; Lane and Kinser 2012). Existing definitions of international branch campus by different researchers and organisations are listed in the Table 1.6.

Table 1.6. International branch campus definitions (source: compiled by authors)

Source	Definition
OBHE / C-BERT	An entity that is owned, at least in part, by a foreign education provider; operated in the name of the foreign education provider; and provides an entire academic program, substantially on site, leading to a degree awarded by the foreign education provider.
OBHE	An offshore operation of a higher education institution which meets the following criteria. The unit should be operated by the institution or through a joint venture in which the institution is a partner in the name of the foreign institution and upon successful completion of the course program, which is fully taken at the unit abroad, students are awarded a degree from the foreign institution.
The Commission on Institutions of Higher Education (CIHE)	A branch campus is geographically removed from the main campus, offers 50% or more of an academic programme leading to a degree, certificate or other recognized credential, is permanent in nature, has its own faculty and administration, and has its own budgetary and hiring authority.

End of Table 1.6

Source	Definition
British Council	The sending HEI establishes a stand-alone satellite operation known as an international branch campus (IBC) in the host country and is responsible for all aspects of recruiting, admission, programme delivery and awarding of the qualification. In addition to faculty employed from the parent institution, the IBC may employ local and/or international faculty to assist with teaching. Quality assurance of the programme is the responsibility of the sending HEI and is often subject to additional accreditation processes by the host country.
HESA (the United Kingdom's Higher Education Statistics Agency)	"Overseas campus" means a campus set up as a branch campus of the parent provider. As such it is seen as no different from any other campus of the provider. In some cases, a commercial partner may actually own the physical structure. However where the reporting provider effectively owns and manages the intellectual operation, this is regarded as an overseas campus of the reporting provider.
Naidoo (2009)	A subsidiary/satellite campus established by a source country education institution in a host country to deliver its own education programmes. Branch campuses can be established either through wholly owned subsidiaries or via joint venture partnerships with local host country partners.
Wilkins and Huisman (2012)	An educational facility that fits three major attributes: owned, at least in part, by a foreign institution; operating under the name of the foreign institution; students receive face-to-face instruction to achieve a qualification bearing the name of the foreign institution).
Wilkins and Rumbley (2019)	An international branch campus is an entity that is owned, at least in part, by a specific foreign higher education institution, which has some degree of responsibility for the overall strategy and quality assurance of the branch campus. The branch campus operates under the name of the foreign institution and offers programming and/or credentials that bear the name of the foreign institution. The branch has basic infrastructure, such as a library, an open access computer lab, and dining facilities, and, overall, students at the branch have a similar student experience to students at the home campus."

The definition by Wilkins and Rumbley (2019) (see Table 1.6) is used in this thesis as a foundation, since it is the most detailed, comprehensive and the most up to date.

Nigel Martin Healey (2014) claimed that instead of constantly trying to answer what is an international branch campus, we should look into the question – when is international branch campus. He discussed a metaphor of a child and parent relationship in his work "When is an international branch campus?".

Branch campuses start as dependent "infants", strongly reliant on the mother campus (university). Later they become "teenagers", chafing at parental control and seeking autonomy. As "young adults", they begin to develop their own personalities and the bond with the mother campus are weakened.

Depending on the target market a branch campus can be of the following types:

- Education: having undergraduate students as the main target.
- Research: preparing graduate and PhD students.
- Education & research: split attention to all three study cycles.

Depending on partnership form branch campus can take three modes:

- Branch campus as a subsidiary with certain individually offshored to a foreign country.
- Joint venture, in which a bilateral or multilateral merge of higher education institutions takes place.
- University-business venture.

An unexplored form of an IBC could be an innovation hub with integrated startup incubators and makerspaces. It would be a costly addition and perhaps would be more feasible in a joint venture with a business partner, however it would add a great selling point (Girdzijauskaitė et al. 2018a).

Branch campus phenomenon reaches to 15–20 years ago, hence has been little explored by scholars and policy makers. It should be noted therefore, that the definitions in theory illustrate perfect conditions; in practise every case is individual and not always fits the theoretical approach.

In the last decade there was significant growth in number of IBCs with 205% increase since 2006. In 2006 there were around 82, in 2019 – 250 international branch campuses around the world (C-BERT, 2019). The most popular destinations for the establishment of the international branch campuses (in order of campuses imported) are: China (32), United Arab Emirates (32), Singapore (12), Malaysia (12), and Qatar (11). The largest source countries are (in order of branches): United States (77), United Kingdom (38), France (28), Russia (21), and Australia (14). However, 250 branch campuses having a total of 29000 HEIs around the globe respectively take only a few to offshore their operations. Not to say a few strongest, but a few pioneering and proactive.

Establishing a branch campus is considered to be entrepreneurial activity. Income generated from transnational activities enables the financial diversification of an institution and lower dependency on local government allocations. However, offshoring the educational services require substantial investments and effort, therefore, even though the international branch campus is on the rise, majority of universities have deliberately chosen not to go that direction or have not considered such option at all (Becker, 2009; Wilkins & Huisman, 2012). This has triggered the interest of practitioners and researchers.

In this chapter we discuss the rationales of higher education institutions as well as barriers to undertaking the branch campus initiative.

Higher education institutions in many countries are considerably influenced and protected by the government. Sometimes branch campus establishment needs special agreement (approval) both from local and host country's government. Therefore, talking about the driving forces for international branch campus it is relevant to discuss the advantages for both the host and the providing country.

Financial, reputational and academic advantages are the main motives for both sides (Shams & Huisman, 2012). Talking about the host country, branch campus established helps to reduce the brain drain, as part of the students aiming for international degree are able to stay "at home", support income generation, and increase technology transfer (Shams & Huisman, 2012). Technology transfer processes in higher education institutions have been analysed by Kraujaliene (2019).

A new "brand" entering host country's market raises the local competition and therefore boosts the quality of education and research in the region. In Qatar's education hub, for instance, the critical factor for selection of foreign HEIs to be invited into the hub is internationally recognised curriculum and research in disciplines that are essential to expanding Qatar's range of higher education supply (Knight, 2011).

Some governments are showing extra attention to the IBC developers. The Abu Dhabi government has invited and provided full funding to the HEIs from France and USA for the IBC establishment in this city (Wilkins, 2016). Although, to the other extreme, local government can be just as unwelcoming, referring to the law in India making all foreign degrees illegal (Wilkins & Huisman, 2012a).

As for the providing country, it benefits by generating extra income, opportunity to exploit the foreign markets, and diversify the education and research portfolios (Becker, 2009; Shams & Huisman 2012). The advantages mentioned above encourage the government in a country of origin to support universities for branch campus establishment. Increasingly entrepreneurship and internationalisation are considered as top priorities by HEIs, and many governments support and encourage initiatives of education export. However, the circumstances determining the support from host country public authorities are unstable, influenced by politics, national education strategy, and local competition.

Apart from government incentives higher education institutions have various reasons to consider a branch campus, and these reasons can be ranked similarly to country benefits: academic, resource related, reputation and competitiveness driven (Croom, 2010; Girdzijauskaitė, Radzevičienė, 2014; Wilkins, Huisman, 2012).

Academic rationale to internationalise the activities by establishing a branch campus is one of the most important for HEIs (Coelen, 2014) First of all, organisation is learning through new experience and know-how, new educational services are developed, especially through the adaptation of the old ones to the peculiarities of a host country. Secondly, if talking about the stakeholders, expanding the circle of service users, attracting potential international students and staff, especially through graduate study programmes, and internationalising the overall student body of a university is a very important motive for branch campus establishment.

Many scholars argue that enhancing the reputation is one of the main rationales for establishing a BC (Marginson, 2006; Coelen, 2014; De Wit, 2010; van Vught, 2008). It is claimed that establishing a branch campus abroad has a significant positive effect on institutions prestige and image. Universities using their brand to enter new markets illustrate the use of eclectic paradigm, consisting of three pillars: ownership advantage, location advantage, and internalisation advantage (Dunning & Lundan, 2008). A university, that has offshored its operations abroad similarly to a business firm seeks to exploit its ownership advantages (Dunning & Lundan, 2008; Shams & Huisman, 2012), such as brand name, knowledge, intellectual property, reputation. The better the use of ownership advantages, the better will be the location advantages exploited.

Finally, just as the internalization advantages are signalling when it is better for a business company to produce a particular product in-house, in case of higher education, the parallel lies in comparing the provision of distance education from home to other countries versus establishing branch campuses abroad and providing education services locally (i.e. in case of high market saturation at home).

Another rationale for transnational activities in higher education is income generation and risk diversification via international operations. Revenues are generated through tuition fee, research commercialisation, new investors attracted by a branch. One of the early initiatives illustrating the income diversification rationale was Monash University (Australia), which established branch campuses in 1999 in Malaysia and South Africa in order to reduce dependence on state funding (McBurnie & Pollock, 2000).

An important motivator when choosing a country is economic environment – the case of Japan provides a good example of this. In the 1980s international branch campuses were being established by foreign providers in Japan in parallel with the strong economic development of Japan (Croom, 2010). The situation has been similar for the last 15–20 years in the Middle East. Businesses and HEIs are rushing to Dubai and Abu Dhabi attracted by the expansion and growing purchasing power. Private investors and government institutions are actively attracting foreign prestigious HEIs in order to raise the prestige of the region. This

shows a tendency of business and cross-border higher education flows moving the same direction. This notion shall be investigated further in this thesis (see subchapter 2.2).

Several public declarations from UK and US universities about declining the idea of implementing branch campuses have raised the interest of the motives that urge the negative stand against opting for a branch campus.

Universities are increasingly being compared to business firms in media and research, scholars are applying business theories to higher education research. University establishing a branch campus is compared to a business firm entering new markets (Shams & Huisman, 2012). Thus we can assume that similar managerial challenges arise for a university when entering a foreign market: resource (staffing, staff remuneration system, pricing of studies) and product adaptation (curricula) related, legal (legal form of IBC, legal and political environment in the host country), administrative, market positioning (marketing and communication, local competition, student recruitment) and other.

One of the main reasons sustaining from opting a branch campus is high financial risk. Implementing and sustaining a branch campus in foreign country requires substantial investment and there is a high risk of financial losses. As an example could be the withdrawal of the University of New South Wales from Singapore, as it lasted for two months and caused 38 million US dollar losses (Becker, 2009; Wilkins, 2016; Wilkins & Huisman, 2012). There were also cases in which the plans for BC establishment were covered by media but failed to materialise, e.g. BC of Indian Institute of Management in Singapore (Naidoo, 2009).

Another resource related challenge is staff. When offshoring the operations abroad a certain number of faculty must be assigned. It takes substantial input of human resource to adapt and deliver the curriculum, organise the equipment, etc. (Altbach, 2010). Travel expenses and higher wages arise as additional costs (Ennew & Yang, 2009; Gill, 2009). Local professionals contributing to the teaching process could be chosen as an alternative; however, it has to be considered that the quality of teaching may be impinged to some extent (Ziguras, 2008). However, the host country might set requirements on the percentages up to which local stuff has to be employed in a branch campus. University managers have to come to decision and find a rational balance on local and home staff policy.

Product adaptation challenges are mainly related to the curricula. In some cases, it has to fit certain requirements in a host country. Many scholars argue that it is a huge challenge for a providing university to adapt the curricula to local norms and maintain the identical content, quality and degree for both home and across the border students (Li & Baalen, 2007; Prowse & Goddard, 2010; Shams & Huisman, 2012). The mismatch is possible between the universities study programme and local cultural norms. However local students are attracted by the

foreign institution and expect to be treated exactly the same as home students and provided with identical materials.

Legal and administrative challenges are certainly important, such as choosing the legal form of and international branch campus (a joint venture or a wholly owned subsidiary) and of course adjusting to legal environment in the host country (Wilkins, 2016). In some cases, the host country government is providing strong assistance, which helps to ease the legal burden. Administrative challenges include the adaptation of administration model of the IBC and determining the relationship of home campus and the branches: the level of subordination and autonomy.

Moreover, one must consider, that such a move receives a lot of attention and is vastly visible, therefore the risks of reputational damage should be taken into account. A number of scholars argue that top managers often underestimate the risks of branch campus initiative (Shams & Huisman, 2012; Wilkins & Huisman, 2012).

International branch campus is the riskiest foreign market entry mode in higher education. (Beecher & Streitwieser, 2017; Girdzijauskaitė & Radzevičienė, 2014; Mazzarol et al., 2003; McBurnie & Ziguras, 2007).

The minimisation of risks is one of the most challenging tasks for the institutions when elaborating the foreign market entry strategy and considering branch campus as possible entry mode.

Building foundation of relationship with the foreign market before offshoring the educational services in a foreign market is strongly recommended. Not only can a local partnership be used as a source of knowledge, but it can also help navigating the local bureaucracy, create relationships and recruit both staff and students (Croom, 2010; Green, Kinser, Eckel, 2008; Neelakantan, 2008).

The difference and uncertainty in a foreign market is often high and it is wise to build linkages and gather market knowledge using far less risky entry modes. International networking is one of such measures.

Phillips et al. (2009) suggested a conception of institutional distance that provides four possible strategies for HEIs to enter the new market depending on the institutional difference and institutional uncertainty.

Analysis of the risk reduction strategies showed that when the uncertainty is high, joint venture with a local institution is recommended. For the universities that entered the education market later then their rivals, joint venture should be considered as less risky entry mode for HEI.

It was mentioned earlier that the main motives for a branch campus establishment are academic, reputational, and financial while the biggest challenges are resource and product adaptation related. The main difference between branch campus and joint venture is finance related. In other words, the reputational and academic motives are just as important, and the product adaptation risks remain

equally relevant in both cases, however the financial drivers and financial risks shift. As there is one service provider in a branch campus all liabilities and all benefits are owned by a single institution. In a case of joint venture, both liabilities and benefits are split in a number of partners, the risks are also shared.

Partnership with local players is important to gain local market knowledge which is crucial to be successful in education activities. Interpreting the Uppsala theory which explains how business firms gradually intensify their activities in foreign markets and analysing standard sequence of entry modes defined in Uppsala model, we might conclude accordingly that indirect export is the first step before direct export in business, and less risky modes could be chosen before more aggressive ones in higher education internationalisation. For instance, following this logic in our case, joint venture could be a step before branch campus. However, if an institutional presence in a form of joint venture is established with another HEI, it is hardly likely it will be able to turn into independent branch eventually, since the agreement is usually long term. University-business partnerships on the other hand are less likely to be long term, and therefore might be a choice to consider if aiming at the full ownership in the future.

Two foreign market entry modes have been analysed in this chapter. Networking was analysed as a tool not only to improving HEIs competitiveness, but also to providing HEIs with market knowledge and linkages before going for direct export such as a branch campus. Branch campus in higher education is little known and explored, however proves to have great potential in increasing the competitiveness of a HEI. This encouraged the further research in the above mentioned market entry modes. The following tasks were formed for the empirical research:

- Evaluate the factors of micro and macro environment of education export conditioning successful development of IBCs and evaluate the cases of international branch campuses.
- Determine the relationship and effect of IBC KPIs on the competitiveness of a university.

The following push and pull factors for IBC establishment have been listed for further analysis with experts: brand development, income generation, risk diversification, product portfolio diversification, host country government support, market saturation in home country, host market knowledge.

The following challenges were listed for further investigation with international experts in the field: academic staff management, funding of the venture, administration of the venture, student recruitment, curricula adaptation, local competition, local political environment.

The following objects for adaptation were recognised for further analysis with experts: strategic management, administration model, curricula, staffing,

teaching styles, staff remuneration system, marketing communication, admission requirements, pricing of studies.

1.5. Conclusions of Chapter 1 and Formulation of the Objectives of the Thesis

1. The vast changes happening in higher education sector bring HEIs closer to becoming entrepreneurial universities operating internationally: in order to fully exploit their potential universities seek income diversification, as well as the ways to enhance their international activities and make their educational services attractive in the foreign markets. One of such initiatives is establishing an IBC abroad.
2. The latecomer HEIs of emerging economies, including Lithuania and other CEE countries are quite often in less favourable competitive position in global HE rivalry due to unclear brand in international HE market, limited resources, insufficient experience and knowledge in international development. Thus, research on transnational education is timely and relevant for the enhancement of internationalisation and increasing the volume of educational services provided for foreign customers.
3. Business models are increasingly used both in higher education theory and practices. After the theories analysis it is evident that concept equivalents from business are present in HE research such as educational service export, market share, market segmentation, full equity investment, etc. New kind of players in higher education market – business corporations providing educational services – are seen as potential partners as well as rivals. For-profit corporations are now targeting the higher education market.
4. In search of the cases of business models transfer to higher education and theoretical framework to enhance business-like behaviour, one can state that the main fields in which business and HE behaviour assimilates to the highest extent is the internationalization of activities. The research priority is given to foreign market entry modes, its selection and implementation of service export.
5. Forms of international cooperation between institutions when entering foreign markets vary accordingly to the scope of possible risks, benefits, and the distribution of responsibilities between partners. International networking is considered to be traditional, more secure, less risky, “soft” approach to create an international presence of the institution whereas branch campus is riskier and more “hard” approach to

internationalisation. While branch campus (which is an equivalent of business unit engaged into direct export activities) is rich with benefits, this mode requires far more resources and commitment than networking. The first mode of foreign market exploration applies for the institutions willing to reduce the risks (networking), the second one – for more aggressive market players (branch campus).

After evaluating the conclusions, the following objectives are formulated for the thesis:

1. Evaluate the trends of higher education management and internationalisation, focusing on the transnational activities and IBCs.
2. Summarise the main business internationalisation theories in order to identify their applicability in higher education management and define the theoretical basis of the dissertation.
3. Summarise the foreign market entry modes in business and higher education, identifying their applicability in higher education internationalisation, focusing on the international branch campus.
4. Evaluate the factors of micro and macro environment of education export conditioning successful development of IBCs and evaluate the cases of international branch campuses.
5. Determine the relationship and effect of IBC performance indicators on the competitiveness of a university.
6. Develop and approve by empirical study the decision support model for international branch campus establishment, incorporating the business theories and principles in the context of higher education.

2

Empirical Research for the International Branch Campus Development

Chapter 2 starts of by reviewing the research methodology for the development of the decision support model for international branch campus establishment enhancing the university competitiveness. The following sections present the empirical research for the development of the decision support model.

The following research methods have been used: analysis of statistical data, 4 expert surveys (3 on IBC development, 1 on networking), semi structured interviews, framework analysis using computer assisted qualitative data analysis (CAQDAS), multicriteria decision support method (FARE), and Delphi method.

The findings of this chapter have been published in 4 scientific papers (Girdzijauskaitė, Radzevičienė, & Jakubavicius, 2016, 2019b, 2019c; Radzevičienė & Girdzijauskaitė, 2012).

2.1. Methodology of the Research on the Development of the Decision Support Model

In order to reach the goal of this dissertation, extensive theoretical and empirical analysis has been done in the context of higher education internationalisation. Theoretical analysis is strongly connected to the empirical analysis. The course of this disertation research has been illustrated in Fig. 2.1.

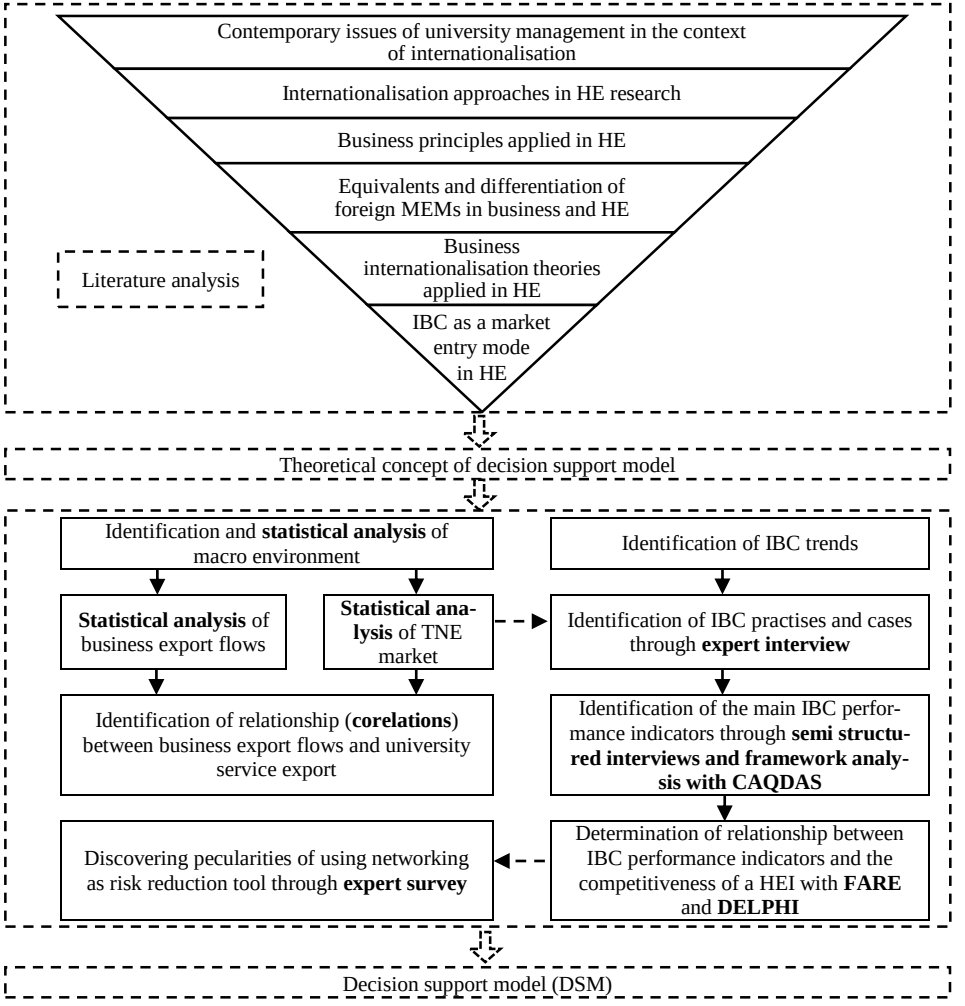

Fig. 2.1. Methodology model of theoretical and empirical research of the dissertation (created by the author)

A critical review of literature along with the methods of interpretation and conceptualization has been used to defining the problem of the thesis and analysing the context of the problem.

The literature review discussed the scientific problem in-depth and pointed out the necessity for the development of a decision support model for international branch campus establishment enhancing the university competitiveness. In order to reach the aim of this thesis the relevant theories were selected, to study the theoretical links between international education and the business approaches.

Theoretical model of the dissertation includes main theories and concepts that shape the research and interactions between the identified theories and concepts.

Firstly, contemporary issues and internationalisation approaches in higher education were analysed, with the emphasis on transnational education. Secondly, the main HE market players were defined, emphasizing the latecomer university. Then, the main market and market entry mode selection equivalents in business and higher education were analysed. The identified steps of market selection in the theory grounded some major research questions in the empirical research (such as the criteria of market selection), which were addressed in the expert survey on networking and branch campus questionnaire.

Later, business internationalisation theories and their applicability in higher education were analysed. Resource based theory analysis illustrated resource compatibility and complementarity issue in an international partnership. Eclectic theory of business internationalisation analysis showed linkages in business and higher education practice. LLL algorithm analysis exposed interesting peculiarities of latecomer universities behaviour in international markets. Networking was analysed as a risk reduction tool in foreign market entry. Finally, international branch campus was presented and analysed as a foreign market entry mode. On the basis of the theoretical analysis results the objectives for empirical research were drawn and research methodology determined.

For the empirical part of the research the following research methods were applied: analysis of statistical data, 3 expert surveys (2 on IBC development, 1 on networking), semi structured interviews, framework analysis using computer assisted qualitative data analysis (CAQDAS), case study, multicriteria decision support method (FARE), and Delphi method.

Statistical data analysis has been executed in order to identify the tendencies between the export of business and education services. Micro and macro environment analysis illustrated the rapidly growing trend of students – as TNE consumers. International education market value showed the significance of transnational education and its activities to the economy.

In order to recognise the good practices of IBC establishment the expert survey was executed with the heads of IBCs internationally and cases of international branch campuses worldwide were analysed.

In order to determine the main key performance indicators of IBCs, semi structured interviews with leading experts of IBCs have been executed and framework analysis using Computer Assisted Qualitative Data Analysis (CAQDAS) using Nvivo software has been used.

In order to identify the impact of IBCs on the university competitiveness and recognize the relationships between the KPIs of IBCs and university competitiveness, two methods have been used: expert survey using the Delphi method and one of the multicriteria decision support methods – FARE. Delphi method was used in order to check the credibility of the results from the expert survey.

In order to analyse the peculiarities of using the networking as a risk reduction tool in the international branch campus establishment process, the international expert survey was executed.

The abovementioned methods provided the valuable data on the key performance indicators of international branch campuses, illustrated global trends and helped forming the framework of the decision support model.

The proposed model can be considered as a theoretical basis for the development of a decision support model for international branch campus establishment enhancing the university competitiveness.

2.2. Analysis of the Study Export Market

In order to identify the tendencies between the export of business and education services statistical data analysis has been executed. Micro and macro environment analysis illustrates the rapidly growing trend of students as the consumers of transnational education. International education market value shows the significance of transnational education and its activities to the economy.

It is important for HEIs to have a sufficient knowledge about the global HE market trends when planning penetration into foreign market and seeking to be competitive. Some of the most important micro and macro environment trends are: dynamics of market growth, distribution of TNE customers and providers' flows, main source countries by customers' number, main destination countries by service providers.

The factors driving the increase of global student mobility vary from the increasing demand for higher education worldwide and the perceived value of studying at prestigious post-secondary institutions abroad, to specific policies that aim to foster student mobility within a geographic region (as is the case in Europe), to government efforts to support students in studying specific fields. In addition, some countries and institutions increasingly undertake major marketing efforts to attract international students. Development of national education valleys could be an example of such initiatives.

Income related to incoming international students may vary up to 20 per cent in majority of European universities. So long the most advanced countries in this field have been the USA, UK and Australia (major TNE providers): HEIs in the above mentioned countries generate up to 60 per cent of total income by attracting international students paying tuition fees (British Council, 2018). This enables universities to decrease the dependency from government funding and proves economic value of HE international activities.

Distribution of international students by destination countries (% of total international students) is illustrated in Fig. 2.2. The biggest proportion of international students choose USA (17%), UK (13%), Australia (6%) and Germany (6%) for their studies abroad.

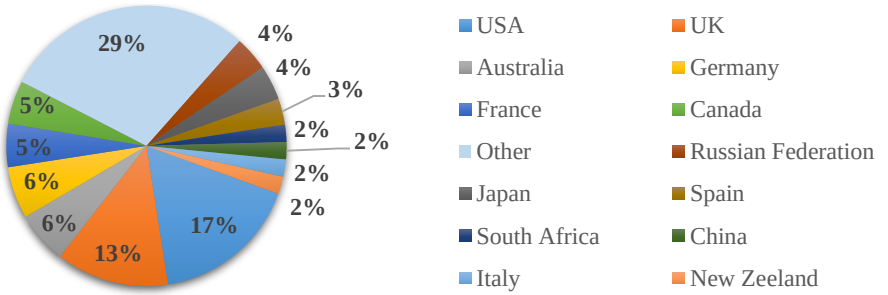

Fig. 2.2. Distribution of international students by destination countries (source: OECD, 2018)

It is important to note that Asian students represent 53% of total number of foreign students enrolled worldwide. The largest numbers of foreign students are from China, India and Korea. (OECD, 2018). See distribution of international students by source region in Fig. 2.3.

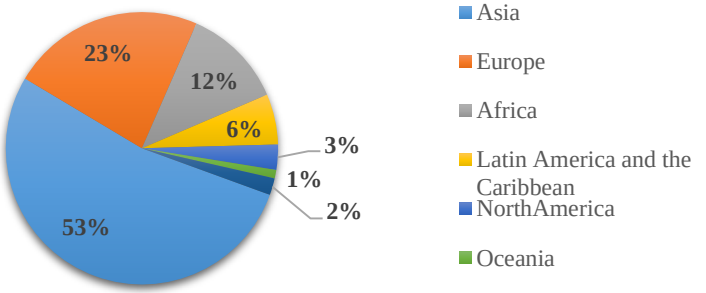

Fig. 2.3. Distribution of international students by source regions (source: OECD, 2018)

The numbers of internationally mobile students are increasing and destinations diversifying. By 2025, this number is expected to hit 8 million. So, it's clear the value for studying abroad is experiencing steady, long-term growth. The current growth of international students worldwide is presented in Fig. 2.4.

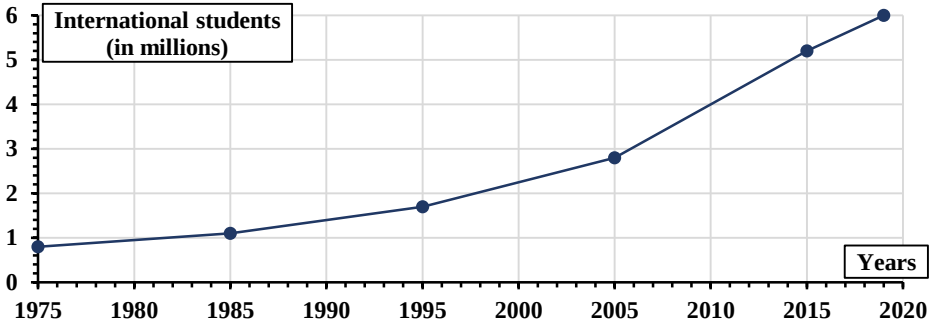

Fig. 2.4. Long term growth of international students worldwide (in millions), 1975–2019 (source: UNESCO; compiled by author)

The growing number of international students worldwide is correlating with the numbers of international migrants residing in the country region worldwide. (see Fig. 2.5). However, the movement of international students is growing at a faster rate.

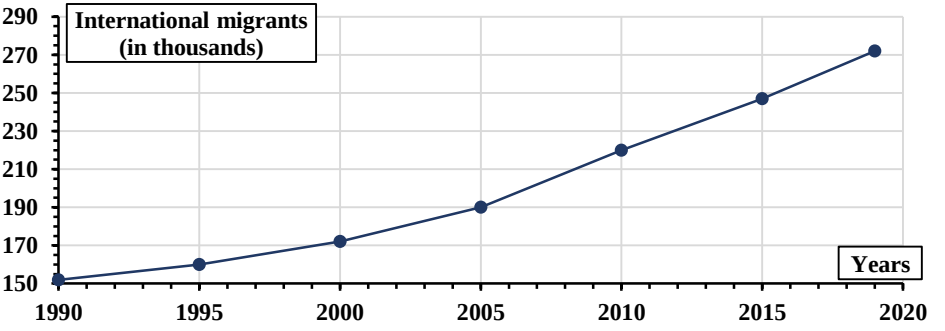

Fig. 2.5. Long term growth of international migrants residing in the country region worldwide (in thousands), 1990–2019 (source: United Nations; compiled by author)

The number of international migrants globally reached an estimated 272 million in 2019, an increase of 51 million since 2010. Currently, international migrants comprise 3.5 per cent of the global population, compared to 2.8 per cent in the year 2000, according to the estimates released by the United Nations in September, 2019.

For the transnational education development HEIs are increasingly turning to developing markets: India, China, Indonesia, Vietnam, Central Asian countries (Boston Consulting Group, 2018). For the purpose of this research, the relationship between the economic wealth in these countries and enrolment to tertiary education has been explored (see Annex B for data). In Fig. 2.6–Fig. 2.9 correlation between GDP per capita and enrolment to tertiary education (% gross) in India, China, Indonesia and Vietnam is showed.

Correlation coefficient indicates strong stochastic relation. This shows, that growing purchasing power in these countries is affecting the increasing enrolment to tertiary education. This way the customer segment is growing which is also the target group of foreign providers. The above mentioned and other developing countries are ones of the most important destination countries for TNE education services. One can assume that GDP per capita is one of the most important factors when segmenting foreign markets for international expansion of a HEI.

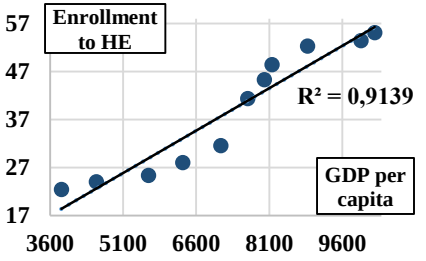

Fig. 2.6. Correlation of GDP per capita (US dollars) and enrollment to tertiary education (% gross) in China. R = 0.9139 (source: compiled by author)

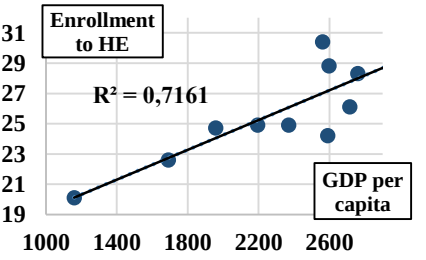

Fig. 2.7. Correlation of GDP per capita (US dollars) and enrollment to tertiary education (% gross) in Vietnam. R = 0.7161 (source: compiled by author)

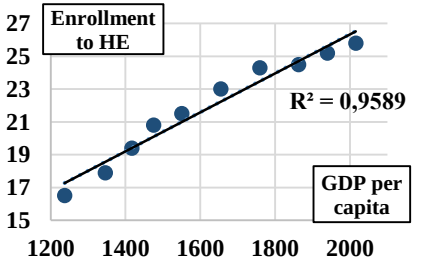

Fig. 2.8. Correlation of GDP per capita (US dollars) and enrollment to tertiary education in India. R = 0.9589 (source: compiled by author)

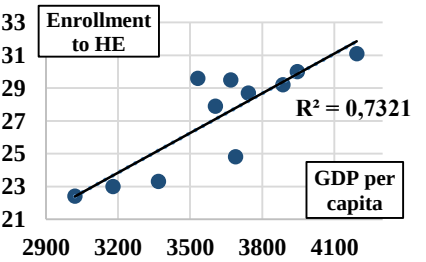

Fig. 2.9. Correlation of GDP per capita (US dollars) and enrollment to tertiary education (% gross) in Indonesia. R = 0.7321 (source: compiled by author)

Comparative analysis of international higher education market value in Australia, UK, and USA has been mande. Higher education is among the top service sector exports in Australia, United Kingdom and United States resulting in US$21.45[5], US$26.0 and US$42.4 billion respectively in 2019.

In this chapter market conditions of the most important TNE source countries are analysed. Later in the research HEIs from above mentioned countries were chosen for the analysis of organization behaviour.

International education activity contributed US$21.45 billion in export income to the Australian economy in 2019. This presents a strong growth from the previous years (see Fig. 2.10).

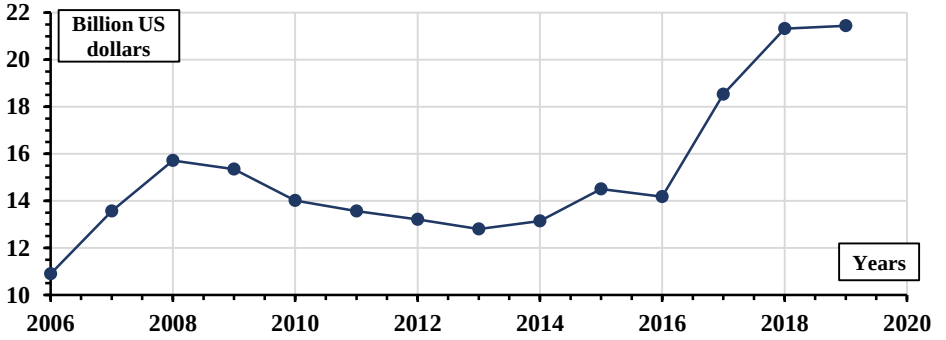

Fig. 2.10. Export income in Australia from education services 2006–2019, billion US dollars (source: Australian Financial Review; Australian Bureau of Statistics)

In Australia, in 2008–2014, the growth in international student numbers and in branch campus expansion has slowed and even begun to decline since the global financial collapse. 2008 was the last peak and that, since then, the income generated from the declining number of foreign fee-paying students – notably from India – fell from US$15.7 billion in 2009 down to almost US$13.2 billion in 2013. However, recently the numbers have picked up and are presenting the never seen heights.

The previously mentioned decline could be a result of higher market saturation because of the many new higher quality entrants from elsewhere, including exporters from Europe, North America, some Asian countries that are now targeting Asian students with offers with which Australian universities cannot easily compete. Plus, three additional factors have affected Australia uniquely and negatively: a doubling in the value of the Australian dollar over the

[5] Australian international higher education market value has been converted from A$ to US$ according to current rates

past decade; tougher visa and post-study work restrictions; and bad media coverage – particularly in India on Australian treatment of its foreign students.

The top five nationalities for Australian offshore higher education provision were Singapore, Malaysia, China, Vietnam and Hong Kong. This is relatively different to the top five nationalities (China, Malaysia, India, Hong Kong and Vietnam) represented in enrolments onshore in Australia.

International education activity contributed US$26 billion in export income to the UK economy in 2019 (see Fig. 2.11). The numbers demonstrate strong economic impact of the UK higher education sector. However, although UK university education is still in high demand, the growth of international education market began to drop recently. This trend migt be partly impacted by the changes to student migration policy in UK made in 2012.

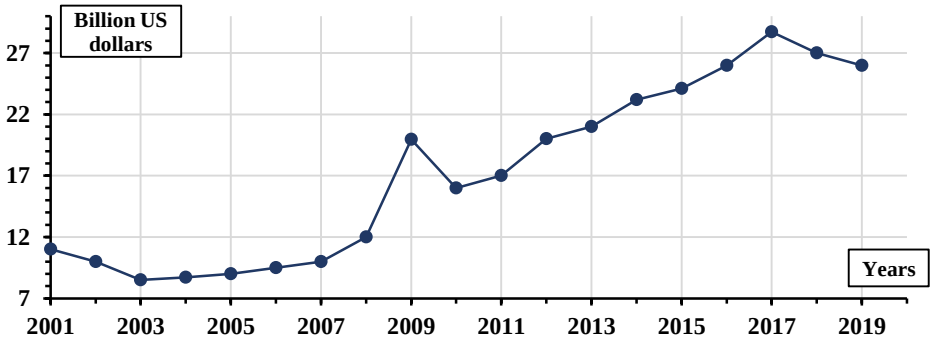

Fig. 2.11. Export income in UK from education services 2001–2019, billion US dollars[6]

In order to explore the relationship between business and education the following correlations have been calculated and analysed. Correlation between UK education export and GDP per capita of India is illustrated in Fig. 2.12 (see Annex B for data). Stochastic relationship between business and education indicators have been analysed in various research and analytics by British Council.

Research results show that growing purchasing power in India (one of the most important UK TNE source countries) increases UK education services export to a vast extent. This allows a proposition that local HEIs are not able to meet the growing need of customers, thus opening opportunities for foreign providers.

[6] UK international higher education market value has been converted from £ to US$ according to current rates

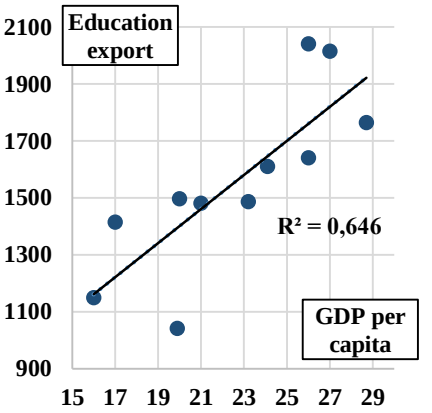

Fig. 2.12. Correlation between UK education export (billion US$) and GDP per capita (US$) of India (R = 0.646)

Numbers indicate that International students contribute more than US$ 42.4 billion to the U.S. economy through their expenditures on tuition and living expenses on American universities (2019) (see Fig. 2.13).

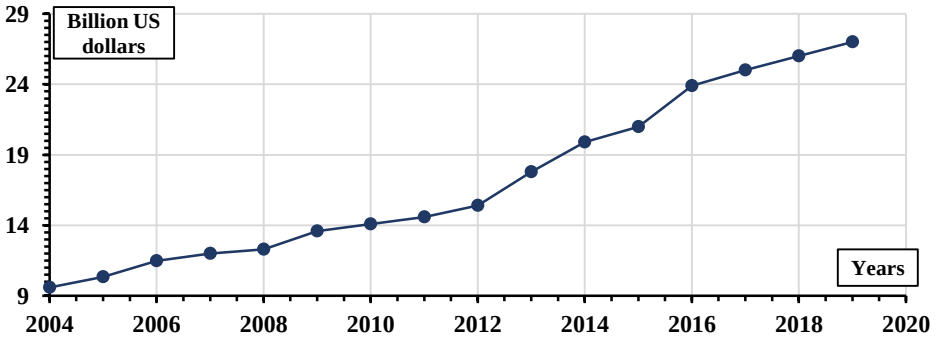

Fig. 2.13. Export income to USA from education services 2004–2019, billion US dollars (source: US Department of Commerce Bureau of Economic Analysis)

Correlation between USA education export and GDP per capita of China is illustrated in Fig. 2.14. China is the largest source country of USA international students and the largest education system in the world. Investment in education in China accounts for 4% of GDP. Correlation coefficient (R = 0.9363) indicates

strong stochastic relation between USA education export and GDP per capita of China (see Annex B for data).

It is important to note, that when calculating the correlations and analysing stochastic relationships, certain factors were neglected, such as political environment and delay of impact.

According to The Cross-Border Education Research Team (C-BERT) in 2017 there were 247 operating branch campuses globally, 22 new IBCs were planning to open, 42 were known to have closed (see Fig. 2.15). There have been at various times enumerations of the global stock of international branch campuses. In 2019 there were 250 international branch campuses around the world (C-BERT, 2019).

The following data has been analysed in all of the cases: host and founding countries as well as the year of establishment. After having analysed all of the cases globally, the following findings and regularities were discovered.

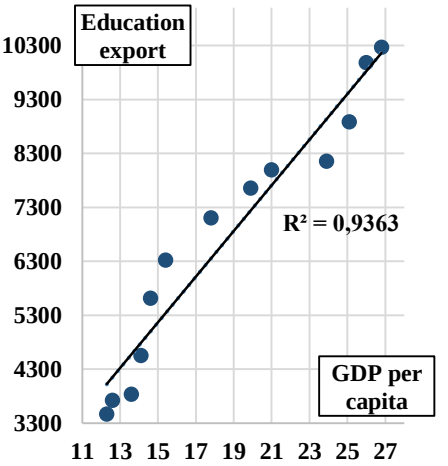

Fig. 2.14. Stochastic relation between USA education export and GDP per capita (US$) of China (R = 0.9363)

Having 29 000 higher education institutions in the world it takes around 1% to offshore their educational services in a form of Branch Campus. The largest source countries are (in order of branches): United States (77), United Kingdom (38), France (28), Russia (21), and Australia (14). 31% Branch Campuses are founded by universities from United States (77 IBCs), 15,2% are from United Kingdom (38 IBCs). 27% of Branch Campuses have been founded by European Universities (63 IBCs). European Countries having the most IBCs are United Kingdom (38 BCs) and France (28 IBCs).

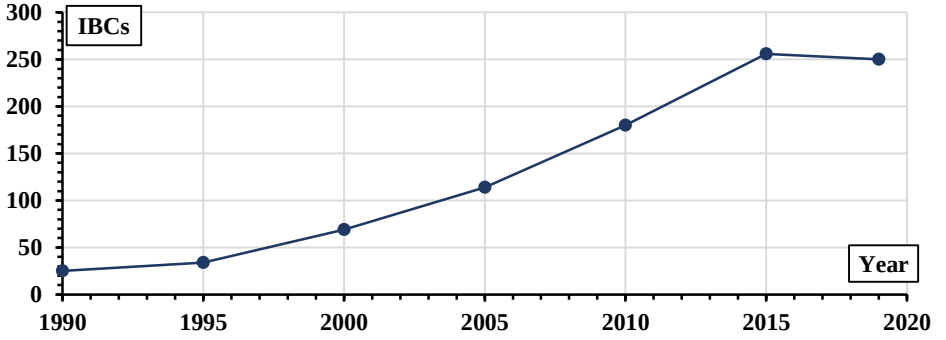

Fig. 2.15. Cumulative number of IBCs by year for 1990 to 2019 (source: compiled by author)

The receiving countries are centred in the Middle East and the Far East. The most popular destinations for the establishment of the international branch campuses (in order of campuses imported) are: China (32), United Arab Emirates (32), Singapore (12), Malaysia (12), and Qatar (11). The biggest part of branch campuses was hosted in China (13%) and UAE (13%). Both the Middle East and the Far East had less developed tertiary education systems, and the importation of campuses was a rapid way of fulfilling a pressing need.

Out of all 311 IBCs researched for this thesis (some of which have been closed since the beginning of this research), 40% where established by the countries with strong colonial or occupational history (UK, Germany, France, Russia, and the Netherlands).

Out of all these colonial countries, 70% IBCs where established exactly in their previous colonies. Almost entirely all IBCs (96%) fall under at least one of two conditions:

1. Official language of the home country is one of the 10 most spoken languages in the world.
2. The home country of the IBC is the former colonial country.

86% of all IBC home and host countries have matching languages (i.e. official language of the home country matches one of the top spoken languages in the host country or is taught as compulsory at schools).

89% of all IBC home and host countries have strong trading relationships (i.e. are among the top 10 trading partners with each other).

The abovementioned findings contribute to the statements that there is a relationship between the international development of a higher education institution and historical context of the countries (previous colonies, psychological distance, shared language) and that there is a relationship between business export flows and export of education services.

Comprehensive list of IBCs around the world with host and founding countries is presented in Annex A.

2.3. Analysis of the Unique International Branch Campus Establishment Frameworks: Expert survey

In order to investigate the aspects of creating and managing international branch campus and elaborate the recommendations for latecomer universities on establishing a branch campus as entry mode to foreign education market, an expert survey has been executed.

Qualitative expert survey has been chosen seeking in-depth understanding of organisational behavior and the reasons that govern such behaviour in the context of IBC development.

The survey is a systematic method for gathering information from a sample of entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members. The population under study may include the inhabitants of a town or a country, or the members of a specific category (Groves et al., 2004).

The research question explored in this research – how to exploit an international branch campus as a foreign market entry mode for latecomer universities. The interview questions have composed accordingly to answer this research question. All the questions were closed ended. 10 of them were using semantic differential scales, 3 of which were presented in a form of matrix. All the questions are presented in Annex C.

In order to carry this qualitative survey, firstly, out of 250 IBCs existing around the world at that time with available data, 70 IBCs were picked to survey. Assuming that the size of general population in this context is 250, the sample size was calculated with 95% confidence level and 10% margin of error according to formula (2.1). The determined sample size with this data is 70.

$$n = \frac{N \times 1.65^2 \times p \times q}{\varepsilon^2 \times (N-1) + 1.65^2 \times p \times q}. \quad (2.1)$$

Here n – is a sample size, N – is a population size, 1.65 – value of standard normal distribution, at the confidence level α = 0.1, p – the predicted probability of the event occurring in the chosen population (p = 0.5) (Schwarze, 1993), q – the predicted probability of the event not appearing in the population (q = 1 p = 0.5), ε – margin of error (ε = 0.1) (Schwarze, 1993).

Semi-structured questionnaire combining multiple choice[7] and open questions were sent out to the respondents. Finally, 7 cases were picked out as applicable and are analysed in this thesis. There was extended communication for information specification with experts before the final analysis. Respondents of this research are the top managers of respective units with over 10 years of experience.

Additionally, 7 cases of the universities who are operating international IBCs were picked out to investigate the peculiarities of this foreign market entry mode. The cases were picked out to represent a wide variety in terms of size, age, form, expansion direction, etc. In order to protect information of the confidential character, the names of the institutions are not disclosed and have been codified as cases A, B, C, D, E, F, G, as agreed with the experts. Due to respondent profile and the relatively rare occurrence of IBC in practice (0.8 % of HEIs globally have IBCs) every case is of significant value to the research. The selection of cases has been done accordingly to have the diverse global coverage of different existing practices.

The empirical research aimed at analysing different cases of BC. 4 cases out of 5 are of mature universities, in order to get insight of the renowned and longstanding "good, practises", and 1 latecomer in order to check the applicability of BC mode by latecomer institutions. Cases different in terms of BC timing were chosen: 1997 – absolute beginner in the field (claimed to be the among the first mover institutions worldwide), 2006 – established in a period of time during the rise of the phenomenon, 2011 – very recent practise. As well, cases A, B, C were chosen as examples of traditional host country (Singapore, Qatar) and predominant providing countries (UK, USA), as well as the examples of untraditional host (Russia, Finland) and providing countries (Sweden, Estonia). The key data describing the cases is provided in the Table 2.1.

The sequence of incremental steps of foreign market entry has been analysed. Along with rationales behind and paths to BC establishment. There has been also checked the possible coherence of the BC establishment practices with Uppsala internationalisation model used in international business practices.

IBCs analysed were founded from 1997 to 2011. One of them was initiated by the host country government, two – by the founding HEI itself, and four of them – by other body in a host country. The IBCs were founded by HEIs from USA, UK, Sweden, Malaysia, Australia and Estonia in the following host countries: Australia, Singapore, Qatar, Russia, Finland, Vietnam, Cambodia. Expansion direction was from developing to developed country in four cases, and from more saturated to less saturated market in four cases. The founding HEI

[7] Using scale from 1 to 10 where 1 – not relevant/not important at all, 10 – extremely relevant/important.

profiles varied from latecomer to mature, and from private to public. Four of the cases chosen already have multiple IBCs operating in foreign markets.

Table 2.1. Branch campus data. Cases: A, B, C, D, E, F, G (source: compiled by author)

Data	A	B	C	D	E	F	G
BC established	2006	2006	2011	1997	2011	2001	2008
Who initiated	Host country govern-ment	Other body in a host country	Other body in a host country	Found-ing HEI	Found-ing HEI	Other body in a host country	Other body in a host country
Student no. initially	20	45	30	30	55	36	200
Student no. in 2013	150	600	75	250	160	4929	300
Student no. in 2018	I/N	I/N	I/N	140	270	I/N	I/N
Permanent staff initially	I/N[8]	5	4	10	10	5	30
Staff in 2013	I/N	19	10	30	25	186	80
Staff in 2018	I/N	I/N	I/N	26	39	I/N	I/N
Home Country	USA	USA	UK	Sweden	Estonia	Aust-ralia	Malay-sia
Host Country	Aus-tralia	Singa-pore	Qatar	Russia	Finland	Viet-nam	Cambo-dia
Field	IT & Public Policy	Hospi-tality Man-agement	Archae-ology	IBM	IBM	IBM, IT	Multi-ple[9]
University profile	Mature / Private	Mature / Public	Mature / Public	Mature / Private	Late-comer/ Private	Mature/ Public	Late-comer/ Private
BC Model	Joint Venture	Strate-gic Alli-ance	Strate-gic Alli-ance	Fully owned IBC	Fully owned IBC	Fully owned IBC	Joint Venture
Partner/agent in a host country (yes, no)	Yes	Yes	Yes	No	No	No	Yes

[8] Information not available due to high fluctuation of temporary staff contracts.
[9] Creative Industries, Arts, IBM, Computer Science, IT, Tourism, Communication.

End of Table 2.1

	A	B	C	D	E	F	G
Local agent type (HEI, non HEI)	HEI	HEI	Non HEI	-	-	-	HEI
Expansion direction (from developed to developing country)	No	No	Yes	Yes	Yes	Yes	No
Expansion direction from more saturated to less saturated market	No	No	No	Yes	Yes	Yes	Yes
Multiple/serial BCs practices existing by the founding HEI	No	No	Yes	Yes	Yes	No	Yes

Various market entry models were chosen for the IBCs in the above mentioned cases: fully owned subsidiary, strategic alliance and a joint venture with a partner or agent in a host country. Most partners proved to be HEIs, case C being the exception with a non HEI partner in a strategic alliance. The initial number of students varied from 20 to 200, and the initial staff number – from 4 to 30. The biggest growth has been seen in case F – a branch campus founded by Australian HEI in Vietnam. The student number has grown from 36 in 2001 to 4929 in 2013. The fields of IBCs vary from IT (information technology), public policy, IBM (international business management) to hospitality management and archaeology.

The expert survey has been executed with 70 professionals and consisted of 23 questions, 14 of which were dedicated to finding out statistical and strategic data about the BC (student and staff numbers, market entry model, expansion direction, etc.) and 9 questions were dedicated for analysing the expert opinions on strategic rationales of establishing and managing an international branch campus: push and pull factors, competitive advantage, government support, sequence of internationalization steps, product adaptation, challenges, consumer behaviour, risk management, and further market exploration. The previously mentioned rationales are analysed in more detail in the discussion of results.

The answers of the respondents on the reasons relevant of the founding university when establishing an IBC in a multiple choice questionnaire illustrate the high importance of brand development and host country government support (55% of the respondents found it relevant). It is interesting to note that host market knowledge and market saturation in a home country is seen as relevant to a little extent in most cases (only 13% of respondents found it relevant). It might mean, that institutions have already gathered knowledge through other international

activities in particular markets before IBC establishment. Only 28% of the respondents marked income generation for the founding HEI, risk diversification via international operations and possibility to diversify product portfolio important. This suggests the idea, that IBC doesn't have such a strong emphasis on the economic factor and supports the proposition that brand development might be even more important when establishing an international branch campus. See Fig. 2.16 for the distribution of answers.

As a result of research, we can state that both international reputation of the founding HEI and reputation of the national education system is one of the most important factors determining successful entry of IBC implementation. This is also supported by the global branch campus analysis, which shows that most IBCs are established by universities coming from countries with strong education brand (USA, UK, France).

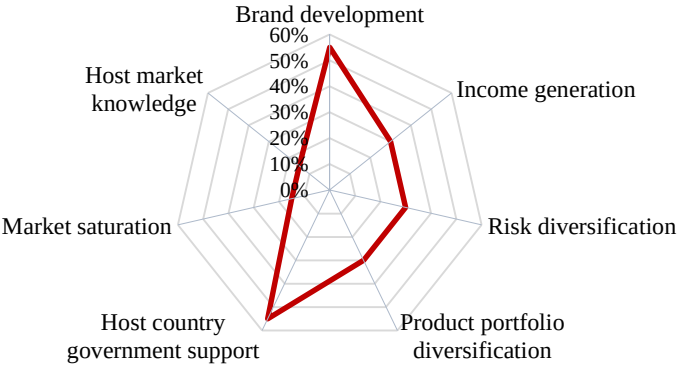

Fig. 2.16. Push and Pull factors when establishing a BC. By number of cases in which relevant (source: compiled by author)

Another factor pointed out as a competitive edge by the experts is unique product in a market (e. g. study programme, course, degree). One of the unique products example provided by experts – western education in a Russian context, is extremely relevant for European latecomer HEIs (i.e. in CEE countries) who are planning to offer degree education recognized in EU for students of non-EU countries. Having a respectively good knowledge of NIC countries and a product – degree recognized in European labour market, creates a competitive edge for educational service export for universities of CEE countries.

The following are the factors determining the IBC success indicated by case respondents. Results were obtained from an open question. 55% of the experts indicated, that international reputation and ranking of the university is the key factor determining the IBC success. It was also added that differentiation in local market (i.e. Western education in a Russian context) is important in this context.

This is quite strong data, knowing that there were no options suggested and more than half of the respondents said the same thing. One expert elaborated on the success factors as follows: "Matching demand and supply i.e. matching economic growth projections of host country with the education offered by the providing university ("country emphasis on tourism development, although limited availability of programmes along hospitality management, and strong reputation of US-based Hotel College in hospitality management")". Another one emphasized flexibility, proactiveness and agile behaviour: "being a respectively small privately owned university we can adapt, decide and implement decisions quickly; the offered study programmes have good balance of academic and practical (real business) part; the offered programme in branch was a module-study BA programme, which was unique in the host country". One respondent thought that the reason why their IBC succeeded was the fact that it was the 1st foreign university in the market and due to the product differentiation.

In 70% of analysed cases the support was received from the host country government. In two cases (E and F) – both from home and host country. As higher education belongs to the government regulation area being a strategic sector for national development, in many countries protectionism of the host country might have key impact (positive or negative) on this initiative and successful operations later.

According to the experts, political environment is key determinant when establishing an IBC in a foreign market. In fact, in most cases government support was evaluated as a top reason to establish an IBC. Average evaluation of 8 (out of 10) was assigned equally in both stages of establishing and operating a IBC. The importance of economic growth of a host market is also high according to experts slightly differing at stages of IBC establishment (7.6) and operating (8) at scale 1–10.

When asked, if there was any activity in the host country before establishing an IBC, there were 57% negative (2 latecomers, 2 mature) and 43% of positive (all mature HEIs) answers. This illustrates that the stepwise gathering of knowledge and entering foreign market (as it is supposed by Uppsala internationalisation model) is not necessarily applied in IBC cases. Some institutions are able to skip the processes of sequential market knowledge gaining which in a way contradicts the classic assumptions of Uppsala internationalisation model.

Out of 9 factors evaluated, marketing communication requires the most extreme adaptation, followed by strategic management, administration model, staffing and staff remuneration system and pricing of studies (see Fig. 2.17). As expected, teaching style is hardly an object for adaptation as well as curricula and admission requirements. This is where institutions keep their uniqueness and quality assurance policy.

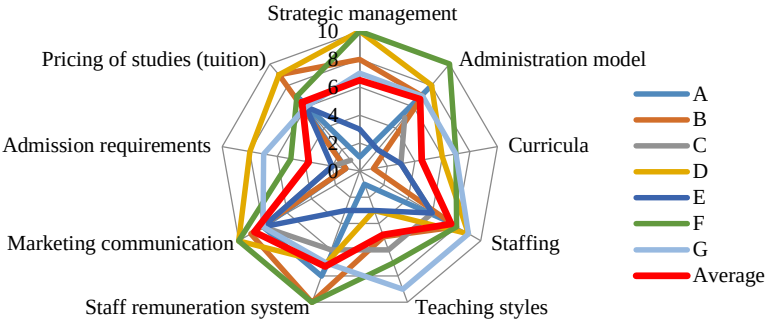

Fig. 2.17. Objects for adaptation in an international branch campus. By expert evaluation in a scale 1–10, were: 1– no adaptation, 10 – totally adapted (source: compiled by author)

In most cases the good practices are being transferred to a little extent. Only in 27% of the cases it is "Constant exchange of practices between home and host locations". This seems to be an unexplored opportunity for institutions. The practices are more likely to be transferred further to other IBCs, rather than back home, for multinational universities having several IBCs (e.g. Limkokwing University, NHL Stenden University).

The biggest challenges when running a branch campus according to the representing experts are student recruitment, academic staff management, funding of venture and coping with local political environment (see Fig. 2.18). Curricula adaptation is a lower challenge, since it is not objected for adaptation. However, it is interesting, that experts don't think of competing with local players as a challenge, which is contradictory to the statement that student recruitment is one of the biggest challenges indicated.

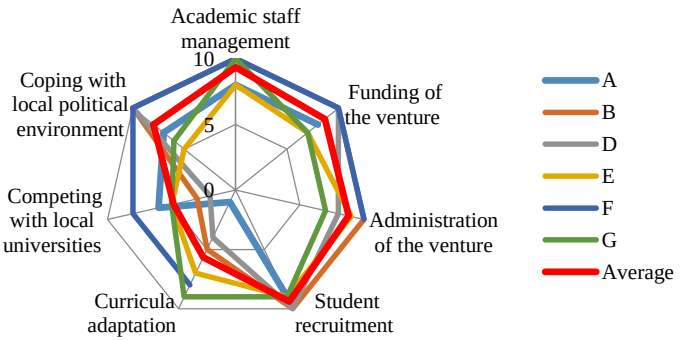

Fig. 2.18. Main challenges related with BC establishment. By expert evaluation in a scale 1–10, were: 1 – not relevant at all, 10 – extremely relevant (source: compiled by author)

The validity of the proposition "an independent branch campus operated by a providing university is riskier than a joint venture" was evaluated as 3 in a scale 1–10. This is rather unexpected answer, cause due to theory analysis primary conclusions differ. But the variance of notions can be an unconsidered factor. Even though, resources, especially financial, are at lower risks in a joint venture due to shared liabilities, a joint venture is contracted activity terminated in time, which makes the venture inflexible and dependent on a partner. This limits quick reaction and independent risk management decisions such as reorganisation, location change or a shut down.

When asked about the possibility to enter a new foreign market in the nearest future, a positive trend as expected was illustrated by the cases results: 70% stated that multiplication of the same market entry could be explored in the future.

The analysis showed that an international branch campus is applicable as a foreign market entry mode by mature as well as latecomer institutions of higher education. IBCs in a form of joint ventures are treated as riskier modes than primarily assumed, due to contractual agreements and high partner dependency.

The most important factor when establishing an international BC proved to be government support. Favourable political environment and economic growth of the host country are very important both when establishing and operating an IBC. Also, international reputation and unique product serves as a competitive advantage when establishing IBC.

The biggest challenges when running a branch campus according to the representing experts are student recruitment, academic staff management, funding of venture and coping with local political environment. Foreign rivals' existence in a foreign market is not determining when establishing an international BC, local competitors seem to be quite ignored or treated as less influential when sharing the market.

Marketing communication is up for the most extreme adaptation when offshoring educational services, followed by strategic management, administration model, staffing and staff remuneration system and pricing of studies.

The proposition of possible coherence of the IBC establishment practices with Uppsala internationalisation model used in international business practices has been checked in this research. Although there were many promising signs of the coherence, at the end, the research results didn't provide the unambiguous confirmation of the proposition. Due to this research, some institutions are able to skip the process of sequential market knowledge gaining and the Uppsala model woukd seem to be applicable for latecomer HEIs only to a certain extent. However, the analysis of 311 existing cases performed in the subchapter 2.2 shows different results. It is evident from the existing cases analysis, that majority of HEIs are following the Uppsala model, however, whether it's intentionally or not.

However, it was noticed that the role of local partnership (government, agents) is recognized to a vast extent. It is believed that potentially there is a possibility of higher coherence between the IBC establishment practices and the revisited Uppsala internationalisation model, which is based on the relationships and market commitment. This could be a continuation of this research probably followed by the testing of OLI theory and LLL (linkage, leverage, learning) algorithm elaborated by Mathews (2002) in higher education internationalisation. It would be interesting to check the sustainable establishment in the market in future research.

2.4. Determination of the Main Key Performance Indicators of International Branch Campuses

In order to determine the main key performance indicators for the multicriteria analysis semi structured interviews were executed with the top managers and other stakeholders of international branch campuses globally and the framework analysis has been performed on the gathered qualitative data using the computer assisted qualitative data analysis (CAQDAS) for data coding with Nvivo software.

There are many different approaches to qualitative data analysis and these have been widely debated in the social sciences literature (Bazeley; 2013; Bazeley, Jackson, 2013; Bryman & Burgess, 1994; Coffey & Atkinson, 1996; Dey, 1993; Grbich, 2012; Harding, 2018; Mason, 1993; Miles & Huberman, 1994; Silverman, 1993; Strauss, 1987).

There is usually agreement that most researchers will "organise" the data (Creswell, Miller, 2000), which can be done by coding text and breaking it down into more manageable chunks. The data is "indexed" in order to generate or develop analytical categories and describe or explain certain phenomena. These categories are usually derived inductively – that is, obtained gradually from the data. This approach was also taken in this thesis.

The research for this thesis was executed at a European university having multiple international branch campuses in 2016–2017. The university chosen for this study conducts programmes in 5 different countries across the globe (the Netherlands, Indonesia, Thailand, South Africa and Qatar) and is among 1% of HEIs having an IBC abroad. This was the reason for choosing it as a case for this study.

24 face-to-face semi structured interviews were carried out with central university managers, IBC managers and staff. 24 respondents were selected according to their function, campus location, as well as minding the female and male balance, in order to include all relevant groups: central managers of university, IBC managers, academic staff and administration staff. The exact

distribution of the respondents was as follows: 10 senior management members (decision makers), 9 academic staff members at IBCs, 5 administrative staff members at IBCs.

The interviews were around 30–45 minutes long and audio taped, which later were transcribed and left the author with 600 pages of data. In order to be able to look through the information more efficiently and find valuable relations, it was decided that it would be necessary to use a software package for the full study. This decision was initially made on the basis of volume of data. Nvivo was chosen over other packages primarily because it was very new at the time and it had therefore addressed some of the earlier problems of other packages.

In the case of Computer Assisted Qualitative Data Analysis (CAQDAS), some researchers are expressing concern that the software may "guide" researchers in a particular direction (Seidel, 1991). Others have commented that using CAQDAS could serve to distance the researcher from the data, encourage quantitative analysis of qualitative data, and create a homogeneity in methods across the social sciences (Barry, 1998; Hinchliffe, Crang, Reimer & Hudson, 1997). However, proponents of CAQDAS argue that it serves to facilitate an accurate and transparent data analysis process whilst also providing a quick and simple way of counting who said what and when, which in turn, provides a reliable, general picture of the data (Morison & Moir, 1998; Richards & Richards, 1994).

While a structured interview has a rigorous set of questions that do not allow one to divert, a semi-structured interview is open, allowing new ideas to be brought up during the interview as a result of what the interviewee says. The interviewer in a semi-structured interview generally has a framework of themes to be explored (Edwards, Holland, 2013).

Finally, framework analysis has been executed in order to find patterns and explanations of the data. The following steps were taken: familiarization: transcribing & reading the data; coding: using textual codes to identify specific pieces of data which correspond to the research questions posed; mapping and interpretation: searching for patterns, associations, concepts and explanations in the data (Ritchie, Lewis, 2003).

The interviewees were posed three general questions. The core topics/questions of the interviews for all stakeholder groups in this research were the following:

- What do you think about your university having multiple branch campuses?
- What are the most important performace indicators of IBCs that are influencing the overall competitiveness of a university?
- What do you think about intercampus staff mobility (at your university)?

The interviewers only asked further questions to follow-up, to probe, specify, or interpret and did not broach any new topics. Thus, the respondents were in

control to determine the nature of the aspects discussed and the interviewers only sought to clarify or deepen the topics addressed.

Average time of the interview was 30–45 min. In the usual scenario, the interviewer and the interviewee was talking on the 1st topic for around 40–60% of time, and then zooming in deeper to the topic by switching the conversation to intercampus staff mobility. The sub-questions were formulated on the spot in order to enable the interviewee to elaborate on his/her expressed opinions with no predetermined directions.

Interviews were audio taped which provided around 15 hours of audio data. Audio data was then transcribed to text providing around 600 pages of data which was then coded and analysed with the Computer Assisted Qualitative Data Analysis (CAQDAS) in order to decode the motivators and blockers in different contexts from the answers of different stakeholders. Nvivo software was used for this, allowing to code all the text data and be able to look through the matrixes of thematic nodes and discover relationships. All the text was cut down into smaller segments (sentences or paragraphs) and assigned to the specific theme nodes they were referring to.

Example: If a professor says "I felt so disconnected from my family when I was working for 3 months on campus X", it is decoded as a "Blocker" in the "Individual context", sub-context "Personal" in an "Academic staff" stakeholder group.

The following table shows the matrix of expert views that has been resulted by the coding and qualitative data analysis (Table 2.2). Their views have been coded in three major groups and sub groups: individual context (personal; professional), institutional context (profit; resource acquisition; education; research; reputation; operations and processes), external context (cultural context; local involvement / social responsibility).

Individual context demonstrates the respondent view from his/her perspective from either personal or professional side. External context reflects the opinion of the respondents from the outward perspective and has two subcategories: cultural context, local involvement or social responsibility.

Institutional context demonstrates the respondent's opinion from the organisational point of view and has 6 subcategories. Profit logic signifies that an IBC represents a branch that offers economic goods for the parent university. Resource acquisition logic identifies that IBC are support entities that tap new streams of resources and strengthen the competitiveness of the whole organization. Education logic refers to the fact that IBCs are an instrument for amplifying the coverage of students and for improving teaching methods. Research logic implies that IBCs offer a great opportunity to extend research because research may be restricted to certain areas. Reputation logic means that IBCs function as an enlargement of the visibility of the home university and as a brand ambassador

abroad. Operations and processes logic suggests that IBCs are complex and unique from on the operational level.

Table 2.2. Matrix of the expert views on international branch campus management coded with Nvivo (source: compiled by author)

Context group	Context subgroup	Central managers	IBC managers	Acad. staff	Admin. staff	Performance indicators recognised
Individual context	Personal	Motivator	Motivator / Blocker	Blocker	Blocker	–
	Professional	Motivator	Motivator	Motivator	Motivator	–
Institutional context	Profit	Blocker	Blocker	–	Blocker	B
	Resource acquisition	Motivator	Motivator	–	Motivator	D
	Education	Motivator	Motivator	Motivator	Motivator	A, F
	Research	–	–	Motivator	–	–
	Reputation	Motivator	Motivator / Blocker	Motivator	Motivator	E
	Operations and processes	Blocker	Blocker	Blocker	Blocker	C
External context	Cultural context	Motivator	Motivator	Motivator / Blocker	Motivator / Blocker	–
	Local involvement / Social responsibility	Motivator	Motivator	Motivator	–	–

In the matrix, it is evident, which stakeholder groups were concerned or not concerned about which topics, and on which topics did the opinions contradicted. The semi-structured interview allowed to witness which topics are ignored by certain groups, which provides interesting data, whereas in questionnaires the interviewees get hinted on the topics, contrary to this case, where they were independently expressing their opinion and steering the conversation. So, i.e. a

branch campus manager talking freely about the challenges of running an IBC and not mentioning the personal issues of staff would be alarming already, while in the case of this research it is even more intriguing – personal issues are seen as a motivator by the IBC managers and as a blocker by staff itself. This provides valuable data for the direction of improvement.

All in all, there are several important challenges for the university management in relation to international branch campus development. These challenges include: developing the process of staff mobility in between the campuses in the face of staff concerns about vertical movement (Salt and Wood, 2014), financial aspects and staffing needs, particularly in relation to the smaller campuses abroad, finding or developing appropriate senior managers to ensure sustainability and expansion of IBC activities (Salt and Wood, ibid.), the contribution of staff mobility to quality assurance of transnational programmes, and the issues related to empowerment of the campuses abroad as more equal partners in co-creation of programmes and the overall educational environment.

However, the most pressing question in this research was to find out what are the most important performance indicators of IBCs. Since the research was done in following the method of semi structured interviews, it was an open question and the answers were various. In the course of analysis, the patterns started to emerge and in order to narrow down the input of the experts to specific performance indicators, their answers were coded and assigned to certain institutional context (as seen in Table 2.2).

Evidently, the experts were relating to the following institutional context mostly, when sharing their insights about the most important performance indicators of IBCs that are influencing the overall competitiveness of a university: profit, resource acquisition, education, research, reputation, operations and processes. Research was consistently neglected in this context.

Analysing the input from experts in the above mentioned categories, specific nodes of data related to the performance of IBCs related to the competitiveness of a university started to emerge. In the context of education, the experts distinguished the number of study programmes, in the context of profit – the yearly income of an IBC. When talking about the complex operations, processes and management of branch campuses, an indicator of having partners in a form of joint ventures emerged. Research acquisition resulted in an indicator of the number of international staff. And finally, in the context of reputation experts distinguished the importance of social partners. All the above mentioned indicators have been listed in their respective order in Table 2.2.

The aim of this study was to identify the key performance indicators of IBCs that are influencing the overall competitiveness of a university. Through the analysis of the interview material, the conclusion was drawn that the following are the main key performance indicators having the biggest effect on the

competitiveness of a HEI according to the respondents of the interviews: number of study programs taught at IBC, yearly income of IBC, having partners in IBC establishment in a form of joint venture (number of partners), number of international staff (not local) in IBC, number of social partners in a host country of IBC, student number in IBC.

2.5. Determination of the Effect and Relationship Between the Branch Campus Performance Indicators and University Competitiveness

After having identified the key performance indicators of IBCs that are influencing the overall competitiveness of a university (see Table 2.3) the multicriteria evaluation using the FARE and Delphi methods have been performed in order to discover how each of the key performance indicators of international branch campuses influences the overall competitiveness of a higher education institution.

The need to test the internationalization of HEIs through quantitative methods has been discussed in the literature (Goi, 2015; Jiang & Carpenter, 2011). However, usually the qualitative analysis methods are used in such research.

The multicriteria evaluation using the FARE method has been performed in order to discover how each of the key performance indicators of international branch campuses influences the overall competitiveness of a higher education institution.

Despite of which method would have been chosen to use, all of them require to have the values of criteria and their influence weights. Usually the criteria weights are determined by experts. The limitation is predetermined by the fact that the accuracy of expert evaluation has a strong dependency on the number of criteria chosen for the research. The bigger the number of criteria, the more complicated it is for the expert to compare the alternatives and determine the weights. In this thesis, a FARE (Factor Relationship) method (by Ginevicius, 2011) is used, allowing the determination of weights of a large number of criteria based on the relationship between the criteria.

The reliability of the results acquired by using the multicriteria evaluation methods usually depends on the level of accuracy of weight determination by the experts. The main drawback of multicriteria evaluation methods is using them with large number of criterions, in which case the reliability of method significantly decreases. Therefore, the Factor Relationship (FARE) method implemented by Ginevičius (2011) becomes an accurate counterbalance to solve this issue. The main idea behind the FARE method is that the minimum amount of data from experts is required initially and then, based on the relationship between

other criteria with their direction are identified analytically in concordance with the data gathered in the first stage (Ginevicius & Podvezko, 2008).

The accuracy of the results reached while using the multi-criteria evaluation methods tend to depend on the determination of the criteria weights which are based on their interrelationship with each other (Ginevicius, 2006). FARE method was chosen for this research as one of the most accurate multi-criteria evaluation methods at the moment, as it allows to increase the accuracy of calculations and to reduce the expert work (Ginevicius, 2011; Stankeviciene, Vaiciukeviciute, 2016).

Table 2.3. The key performance indicators chosen as the criteria for the multicriteria evaluation using FARE method (source: compiled by author)

Criterion No.	Criterion
Criterion 1	Number of study programs taught at IBC
Criterion 2	Yearly income of IBC
Criterion 3	Having partners in IBC establishment in a form of joint venture (number of partners)
Criterion 4	Number of international staff (not local) in IBC
Criterion 5	Number of social partners in a host country of IBC
Criterion 6	Student number in IBC

After analysing the interviews, the conclusion was drawn that the following are the main key performance indicators having the biggest effect on the competitiveness of a HEI according to the respondents of the interviews: number of study programs taught at IBC, yearly income of IBC, having partners in IBC establishment in a form of joint venture (number of partners), number of international staff (not local) in IBC, number of social partners in a host country of IBC, student number in IBC. Hence, the above mentioned six KPIs were chosen for the evaluation of the interrelationship (see Table 2.3).

The number of indicators was chosen to be six, because of two reasons. Firstly, this was the number of consistently reccurent factors when analysing the interview data on this topic. Secondly, the author of the FARE method and other scholars have been using six criteria with this method in similar contexts. (Ginevicius, 2006; Stankeviciene, Vaiciukeviciute, 2016) Also, the bigger the number of criteria, the more difficult it is for experts to evaluate them all, therefore the number has not been not increased.

The criteria weights were determined by the experts (see Table 2.4). The experts for the criteria weight determination were chosen based on their experience in the field of international branch campus management. Therefore, the experts were the top executives from universities and IBCs all over the world. In total 9 experts were chosen for this study. 6 experts were present and former

executives of the IBCs in South Africa, Quatar, Thailand, Bali who are directly responsible for the decision making at the IBCs. 3 experts were top executives at the HEI having multiple international branch campuses. All the experts were working in a European latecomer HEI having multiple branch campuses.

The experts were interviewed and asked to determine the weights for 6 criteria, evaluating which key performance indicators (KPIs) of the international branch campuses (IBCs) has the highest influence on the overall competitiveness of the university. The exact questions formulated to the experts are concluded in the annex D.

Table 2.4. Ranks assigned by experts for each criteria in the system (source: compiled by author)

Criterion No.	Criterion	Rank
Criterion 1	Number of study programs taught at IBC	1
Criterion 2	Yearly income of IBC	5
Criterion 3	Having partners in IBC establishment in a form of joint venture (number of partners)	3
Criterion 4	Number of international staff (not local) in IBC	4
Criterion 5	Number of social partners in a host country of IBC	6
Criterion 6	Student number in IBC	2

Firstly, the experts ranked all the criteria by assigning them the relative standing positions against each other. In this way, the relationships between all the criteria were determined. Based on this logic, the 1 to 6 ranking amplitude was formed, where the total number of criteria (in our case – 6) was the lowest influence indicator, and 1 was the highest. Aforesaid meaning that, the criterion which was ranked as the first has the highest influence on university's overall competitiveness in comparison with others (see Table 2.4).

Secondly, the experts were asked to determine the scope of the transfer for the highest ranked criterion. This has been done by using the following scale of quantitative evaluation of interrelationship between the system's criteria (see Table 2.5).

The important point behind this ranking is that the criterion of a lower rank has relatively smaller impact on the criteria having higher ranks. Thus, it transfers a larger part of its potential impact to them. It follows that the ranks of the calculated criteria weights should match their numbers in the priority list, which means, that the higher ranked criteria should be assigned higher criteria weights. This important remark shall be referenced to in further calculations, where the strength and direction within the relationship between criteria is determined.

Table 2.5. The scale of quantitative evaluation of interrelationship between the system's criteria (source: compiled by author)

No.	Type of the Effect Produced	Rating of the Effect Produced by the Interrelationship (in Points)
1	Almost none	1
2	Very weak	2
3	Weak	3
4	Lower than average	4
5	Average	5
6	Higher than average	6
7	Strong	7
8	Very strong	8
9	Almost absolute	9
10	Absolute	10

The scope of the transfer for the highest ranked criterion as assigned by the experts can be seen in Table 2.6.

When the relationship between the main criterion (in our case it is criterion No. 1) and other criteria was determined, the concordance coefficient of Kendall (1970) was calculated in order to revisit the compatibility of the results. The concordance coefficient showed the sufficient consistency of expert's evaluations.

Table 2.6. The relationship between the first main criteria and other system's criteria determined by the experts (source: compiled by author)

Criteria	1	6	3	4	2	5
1	–	+7	+6	+5	+4	+3

After having checked the expert evaluations with the concordance coefficient of Kendall (1970), the relations between the remaining criteria groups and their strength were analytically measured in accordance with the relationships established at the first stage (see Table 2.7).

Based on the formula (2.2) (Ginevičius, 2011), the part of the criterion's potential impact was transferred to the first criterion.

$$a_{1i} = \mathrm{S} - \widetilde{a_{1\iota}}\ , \tag{2.2}$$

where a_{1i} is the impact of *i*-th criterion on the first main criterion; $\widetilde{a_{1\iota}}$ is the part of *i*-th criterion's potential impact transferred to the main criterion.

Table 2.7. The part of the criterion potential impact transferred to the first main criterion (source: compiled by author)

Criteria	1	6	3	4	2	5
1	–	+3	+4	+5	+6	+7

Thus, a criterion of the higher rank takes a part of the lower rank criterion's potential, because the criterion of a lower rank has smaller impact on the criteria having higher rank, therefore it respectively transfers a larger portion of its potential impact to them. In our case, the experts have ranked the criteria No. 3 by number +6, meaning that the effect on the main criterion No. 1 from criteria No. 3 is higher than average. Therefore, criteria No. 3 transfers it's potential impact equal to +4.

As shown in Table 2.7, the first criterion is ranked first, while the second criterion is ranked fifth. It follows that the second criterion should transfer a part of the potential of its impact to the first criterion.

The relationship direction is indicated by a plus or a minus sign, showing that the considered criterion either influences another system's criterion or depends on it. A negative relationship shows that the considered criterion is less significant than the one to which it is related. Therefore, it transfers a part of its potential to it. A positive relationship on the other hand means that the considered criterion accumulates the potential of another criterion, therefore increasing the potential of its impact. Then, the matrix of calculations was represented in Table 2.8 as a summary matrix of the potential equilibrium:

Table 2.8. A summary matrix of the potential equilibrium of the criteria describing the research object (source: compiled by author)

Criteria	1	2	3	4	5	6
1	–	+6	+4	+5	+7	+3
2	–6	–	–2	–1	+1	–3
3	–4	+2	–	+1	–11	–1
4	–5	+1	–1	–	+2	–2
5	–7	–1	+11	–2	–	–4
6	–3	+3	+1	+2	+4	–
Total	–25	+11	+13	+5	+3	–7

When the matrix of the potential equilibrium of the criteria describing the research object was calculated, the total potential impact using formula (2.3) (Ginevičius, 2011) was calculated based on the data presented in the first row of the matrix. The results of these calculations can be seen in the Table 2.9. As it is

evident in the Table 2.9, the results are compatible with each other when the total effect (dependence) is equal to zero.

$$P_i = P_i - \mathrm{m}a_{1i}\,, \tag{2.3}$$

The actual total impact with the actual total impact of each criterion of the system on the research object were found, in order to be able to calculate the weights of criteria based on formula (2.4) and formula (2.5) (Ginevičius, 2011).

$$P_S = \mathrm{mP} = \mathrm{mS(m-1)}; \tag{2.4}$$

$$P_i^f = P_i + \mathrm{P}. \tag{2.5}$$

Table 2.9. The results obtained in calculating the total effect (dependence) of the criteria describing the research object (source: compiled by author)

Criteria	1	2	3	4	5	6	Total effect, (Dependence) P_i	P_i^f
1	–	+6	+4	+5	+7	+3	+25	+75
2	–6	–	–2	–1	+1	–3	–11	+39
3	–4	+2	–	+1	–11	–1	–13	+37
4	–5	+1	–1	–	+2	–2	–5	+45
5	–7	–1	+11	–2	–	–4	–3	+47
6	–3	+3	+1	+2	+4	–	+7	+57
Total	–25	+11	+13	+5	+3	–7	0	300

Finally, the normalized values of the total impact of the criteria on the research object were calculated based on formula (2.6) (Ginevičius, 2011). Firstly, for main criterion No. 1, the results are represented in table below (see Table 2.10).

$$w_i = \frac{P_i^f}{P_S} = \frac{P_1 - ma_{1i} + S(m-1)}{mS(m-1)}\,. \tag{2.6}$$

Table 2.10. The results of weight calculation of the criteria describing the research object (source: compiled by author)

Data	1	2	3	4	5	6	Total
The relationship between the main (first) criterion with other systems criteria	-	+6	+4	+5	+7	+3	$P_1 = 25$
Weights of criteria group w_i	0.25	0.13	0.12	0.15	0.16	0.19	$\sum_i^n w_i$=1.0

Consequently, the normalized values of the total impact of the criteria on the research object were calculated for all other criteria in the created matrix (Table 2.11).

Finally, the effect and relationship between international branch campus key performance indicators and university competitiveness were determined and evaluated using FARE method and resulted in the priority line of all the considered alternatives. In order to check the credibility of these results, the Delphi method was used (Okoli, Pawlowski, 2004).

Table 2.11. The calculation of the criteria weights of IBC KPIs by FARE Method (source: compiled by author)

Crite-ria	1	2	3	4	5	6	Total effect, (Depend-ence) P_i	P_i^f	w_i
1	–	+6	+4	+5	+7	+3	+25	+75	0.25
2	–6	–	–2	–1	+1	–3	–11	+39	0.13
3	–4	+2	–	+1	–11	–1	–13	+37	0.12
4	–5	+1	–1	–	+2	–2	–5	+45	0.15
5	–7	–1	+11	–2	–	–4	–3	+47	0.16
6	–3	+3	+1	+2	+4	–	+7	+57	0.19
Total	–25	+11	+13	+5	+3	–7	0	300	1

The Delphi method is a structured communication technique or method, originally developed as a systematic, interactive technique which relies on the input by a group of experts. (Dalkey & Helmer, 1963) The experts are asked to answer questionnaires in two or more rounds. After each round, a facilitator provides an anonymised summary of the experts' opinions and justification from the previous round. (McLaughlin, 1990) In this way, experts are enabled to revise their own answers in the context of the input by other experts from the group. It is believed that during this process the range of the answers will decrease and the "correct" answer shall be reached. At the end, the process is stopped after a predefined stop criterion (e.g. number of rounds, stability of results) and the final "correct" answer is being formed from the results of the final round (Rowe & Wright, 1999, 2001).

In case of this particular research, in order to reach more precise results, Delphi method was combined with the FARE method as follows (Fig. 2.19). Delphi method has been used in combination with MCDM methods in similar contexts (Afshari, Yusuff, Derayatifar, 2012; Karabasevic et al., 2017).

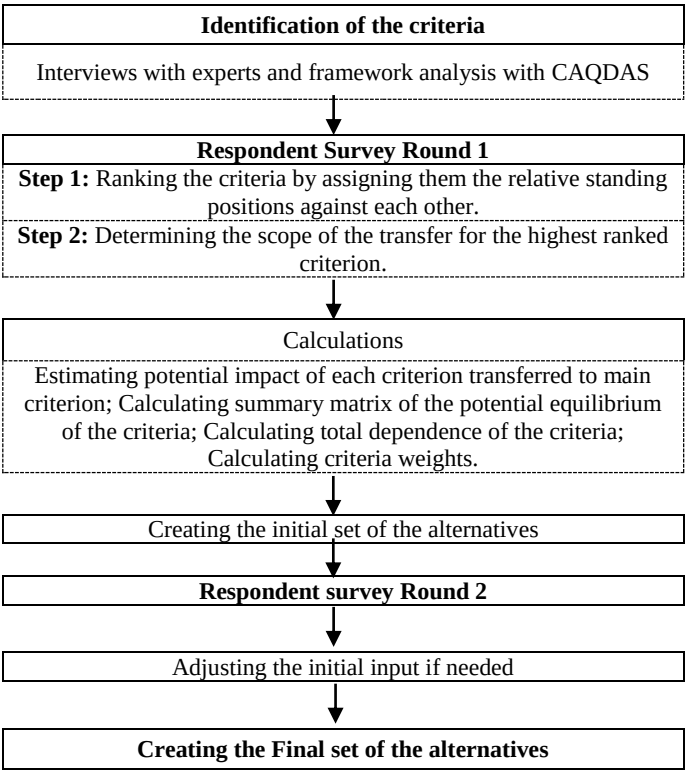

Fig. 2.19. The determination of the weights of criteria based on the application of the FARE method and Delphi technique (source: compiled by author)

The figure illustrates the process of combining multi-criteria decision making method of determining the criteria weights – FARE (Factor Relationship), based on the relationships between all the criteria describing the phenomenon considered and the Delphi method for the defining of criteria weights. As can be seen in the figure, in previous parts of this thesis research the key performance indicators of IBCs that are influencing the overall competitiveness of a university have been identified through expert interviews and coding with the computer assisted qualitative data analysis. These indicators were used as the criteria for FARE evaluation. Then, the first round of expert survey was performed and FARE method was applied using the gathered data.

After the calculations performed by using the FARE method resulted in the priority line of all the considered alternatives, a second round of survey has been executed. The same respondents were given anonymised summary of the experts' opinions from the previous round of survey. In this way the respondetns were enabled to revise their own answers in the context of the input by other experts.

However, no respondents expressed the desire to adjust their input and the research results remained unchanged.

Finally, a system of indicators has been developed to assess the impact of HEI international development on the university's competitiveness and a relationship between the key performance indicators of the IBCs and the university's competitiveness has been revealed. The following indicators have been identified and listed according to the strength of a positive impact they have on the university competitiveness: number of study programs taught at IBC (0.25), student number in IBC (0.19), number of social partners in a host country of IBC (0.16), number of international staff (not local) in IBC (0.15), yearly income of IBC (0.13), having partners in IBC establishment in a form of joint venture (number of partners) (0.12).

The next step was approbation and testing the system of indicators on real cases, in order to compare 7 IBCs according to the six criteria. The cases for the research have been chosen anonymicaly from the IBC list enclosed in the Annex A. The data has been gathered online.

Table 2.12. Data of 7 IBCs for the comparison according to the six criteria (source: compiled by author)

Criterion No.	Criterion	A	B	C	D	E	F	G	Weights
Crit. 1	Number of study programs taught at IBC	2	4	1	2	2	20	5	0.25
Crit. 2	Yearly income (thous)	660	3000	330	1500	928	29574	2100	0.13
Crit. 3	Having partners in IBC establishment in a form of joint venture (number of partners)	1	1	1	0	0	0	1	0.12
Crit. 4	Number of international staff (not local)	16	14	6	20	18	150	60	0.15
Crit. 5	Number of social partners in a host country	8	25	7	8	15	70	15	0.16
Crit. 6	Student number in IBC	150	600	75	250	160	4929	300	0.19

Data of 7 IBCs has been gathered in order to compare them against each other according to the six criteria analysed with the FARE method. The data is presented in Table 2.12. The cases have been named A, B, C, D, E, F, G. Then, in order to compare the data, it has been normalised by dividing each value in the horizontal

line from the biggest value in that line. The normalised values are presented in Table 2.13.

Table 2.13. The normalised data for the IBCs comparison (source: compiled by author)

Criterion No.	Criterion	A	B	C	D	E	F	G	Weights
Crit. 1	Number of study programs taught at IBC	0.1	0.2	0.05	0.1	0.1	1	0.25	0.25
Crit. 2	Yearly income of IBC	0.02	0.10	0.01	0.05	0.03	1.00	0.07	0.13
Crit. 3	Having partners in IBC establishment in a form of joint venture (number of partners)	1	1	1	0	0	0	1	0.12
Crit. 4	Number of international staff (not local) in IBC	0.11	0.09	0.04	0.13	0.12	1	0.4	0.15
Crit. 5	Number of social partners in a host country of IBC	0.11	0.36	0.1	0.11	0.21	1	0.21	0.16
Crit. 6	Student number in IBC	0.03	0.12	0.01	0.05	0.03	1	0.06	0.19

In the next step, the normalised values of the IBCs have been multiplied with the criteria weights. The results are presented in the Table 2.14.

Table 2.14. Calculated weights of IBCs (source: compiled by author)

Criterion	A	B	C	D	E	F	G	Weights
Number of study programs taught at IBC	0.025	0.05	0.013	0.025	0.025	0.25	0.062	0.25
Yearly income of IBC	0.003	0.013	0.001	0.007	0.004	0.13	0.009	0.13
Having partners in IBC establishment in a form of joint venture (number of partners)	0.12	0.12	0.12	0	0	0	0.12	0.12

End of Table 2.14

Criterion	A	B	C	D	E	F	G	Weights
Number of international staff (not local) in IBC	0.016	0.014	0.006	0.02	0.018	0.15	0.06	0.15
Number of social partners in a host country of IBC	0.018	0.057	0.016	0.018	0.034	0.16	0.034	0.16
Student number in IBC	0.006	0.023	0.003	0.01	0.006	0.19	0.012	0.19
Calculated weights of IBCs	0.188	0.277	0.159	0.079	0.088	0.88	0.298	1

The normalised values presented in Table 2.13 multiplied with the criteria weights have resulted in the calcultated weights of all the seven IBCs. The calculated weights are presented in Table 2.14. According to the results, IBC case F is the leader and is the most competitive among the presented IBCs. Interestingly, some IBCs with lower income have been ranked higher than their competitors with higher income. All the cases have ranked in the following order (from the most competitive to the least): F, G, B, A, C, E, D.

2.6. International Networking of Higher Education Institutions: Expert Survey Analysis

In order to investigate the aspects of creating and managing higher education networks (consortia, alliances, associations, etc.) and elaborate the recommendations for latecomer HEIs how to use advantages and opportunities of networking for the development of internationalisation, an expert survey has been executed. In the context of this particular research networking is analysed as a platform to get access to foreign education market through network partners operating there.

Network is described here as a form of multilateral cooperation of higher education institutions within boundaries of certain partners' group, with repetitive interaction models and fixed channels of interaction in order to achieve common or individual institutional goals by sharing resources, information, markets and technology. Typical networking examples in higher education are consortia, associations, alliances and other networked structures. The research question executed in this research – what are the peculiarities of using the networking as a risk reduction tool in the international branch campus establishment process. The interview questions have composed accordingly to answer this research question.

This survey is qualitative rather than quantitative, therefore a certain number of professionals was surveyed, i.e., as many as it is enough to investigate the current situation. The questionnaires were mainly sent to top management of international relations at the member HEIs of European HE networks (see Table 2.15). 85 were picked out as applicable for result analysis. The sample size was calculated using the same formula (2.1) for sample size calculation as in subchapter 2.3. Assuming that the size of general population in this context is 669 (the toal number of institutions in all the surveyed networks from Table 2.15), the sample size was calculated with 95% confidence level and 10% margin of error according to formula (2.1). The determined sample size with this data is 85.

All survey respondents are the international relations professionals of higher education institutions in EU. Respondents are distributed by positions as follows: 4% – vice rectors IR; 36% – directors IR; 34% – coordinators IR (institutional and department level); 26% – group leaders at IRO and IR managers. Average respondents working experience in the field of IR in higher education – 15 years. More than 50% has a relevant experience of 15 to 35 years. This is corresponding with the requirement to have survey participants with high expert knowledge profile.

Table 2.15. Data of European HE networks (source: compiled by author)

Network title	HEIs	Countries	Only EU countries	Lithuanian HEI in a network	Established	Annual fee
LERU (League of European Research Universities)	21	10	Yes	–	2002	I/N[10]
UNICA (Network of universities from the capitals of Europe)	43	32	Yes	VU	1990	I/N
Coimbra Group	40	23	Yes	–	1985	I/N
Santander Group	34	16	No	–	1992	€3315
Utrecht Network	31	29	Yes	VU	1987	I/N
Eucen (EU association for LLL)	222	43	No	KTU, ŠU, VU, VGTU	1991	I/N

[10] Information not available for public.

End of Table 2.15

Network title	HEIs	Countries	Only EU countries	Lithuanian HEI in a network	Established	Annual fee
UNEECC (University Network of the European Capitals of Culture)	42	24	Yes	VGTU, MRU	2006	€300
ECIU (European consortium of innovative universities)	11	10	No	–	1997	I/N
SEFI (European Society for Engineering Education)	162	31	No	KTU, VGTU	1973	D11
EAN (European Access Network)	I/N	I/N	I/N	VGTU, N/I	N/I	D
BSRUN (The Baltic Sea Region University Network)	32	7	Yes	VGTU, ŠU, LŽUU, VU, MRU, LEU, KU, KTU	2000	I/N
BALTECH	7	4	Yes	KTU, VGTU	1997	I/N
NORDTEK	24	5	Yes	-	I/N	I/N

All the questions were close ended. A semantic differential scale from 1 to 10 was used to rate the answers in order to raise the accuracy and comparability (Loken et al. 1987; Dawes 2002, 2008), where 1 – not relevant/important at all, 10 – extremely relevant/important. All the questions are presented in Annex E.

International activities require significant cost allocation and are in general recourse demanding. Therefore, minimization of costs and other inputs when working in international markets seem to be important to stimulate cross-border activities of HEIs. Multilateral partnerships were presumed to serve as shared resource system. The distribution of the responses to the questions "To what extent is networking seen as an instrument to reduce costs of the activities undertaken?" and "To what extent partners tend to share different resources with network partners?" shows common awareness that networking can reduce costs, facilitate sharing of non-core, non-exclusive resources. The responses about sharing unique exclusive assets, related to comparative strategic advantages, have

[11] Depending on the membership time, activities, etc.

been not coherent; it seems that complementarity principle has been not systematically followed in network practices (Fig. 2.20).

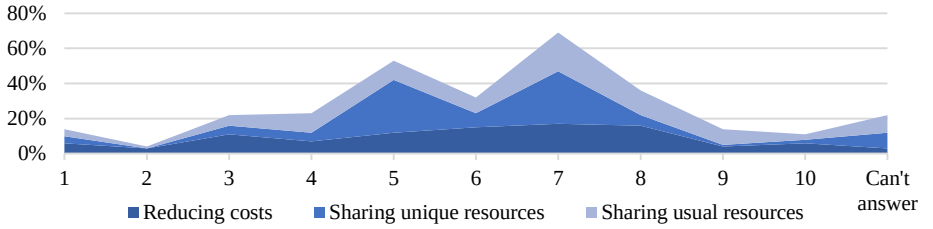

Fig. 2.20. The extent to which: networking is seen as an instrument to reduce costs of the activities undertaken; and partners tend to share resources within network (source: compiled by author)

Mutual learning has been evaluated as very important to network partners; similar opinion has been expressed regarding the benefits of learning through "know-how", best practice or technology transfer (Fig. 2.21). We can presume that network partners can be a source to gather foreign market knowledge, which is crucial to enter that market. Learning in terms of testing the advantages of the institution, detecting best practices, benchmarking the best products, services or processes against similar ones within the network could serve for identification of competitive advantage of a particular institution and competitiveness of respective educational services in international settings.

Survey results have revealed that network newcomers have quite immediate access to the corporate knowledge of the network, which could be interpreted that the level of trust among partners is high and necessity to have all partners involved into activities is basic work principle in the networks.

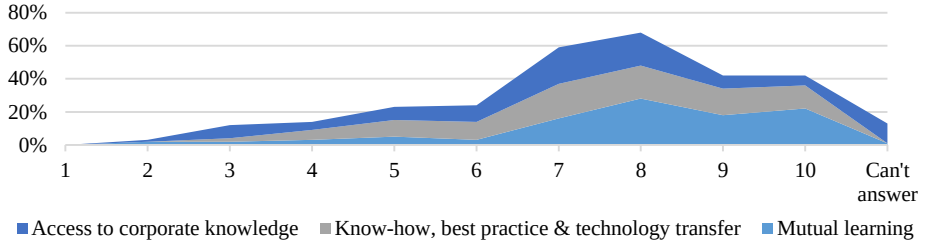

Fig. 2.21. Answer distribution regarding the extent of different learning types practiced in international networks (source: compiled by author)

Networking is a powerful tool to strengthen position against competitors. The reputation, influence, know-how of network leaders shared within network, can

significantly increase competitiveness of every single partner: not only because of learning effect and access to valuable resources of partner but also because of "hallo effect" around globally recognised partners. International partnership is recognised as a tool to increase local competitiveness of HEI (Fig. 2.22), therefore host country institutions might be interested in establishing joint ventures to strengthen their own local profile and competitiveness, choosing this as alternative instead of competing alone in home market.

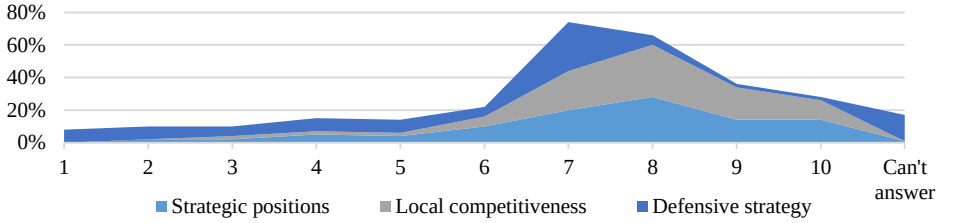

Fig. 2.22. The extent to which networking is used to improve strategic position, increase local competitiveness and/or reduce external competition (source: compiled by author)

The survey showed that networking is rarely used as the instrument to consolidate power and resources against forces that are too strong for one organisation to withstand. Involvement of competitors into the network is also rarely used as defensive strategy to reduce hostility of competitors. Competition techniques seem to be little used among HEIs.

Survey results illustrate that there is almost equal power distribution among different players and bodies in networked structures: individual experts, work groups, steering committee/council or informal mutual agreement (Fig. 2.23). Decentralised network management facilitates potential centres for international activities.

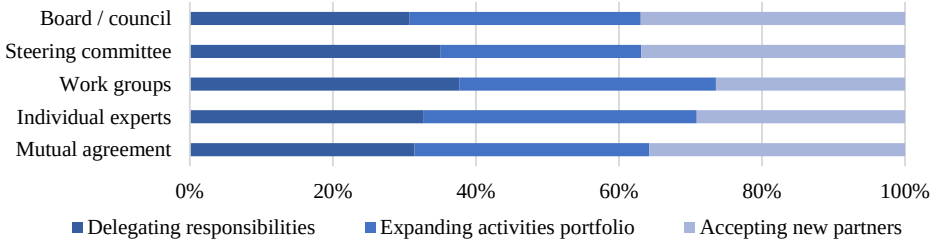

Fig. 2.23. Power distribution among different players and bodies in networked structures (source: compiled by author)

The responses give a room for interpretation that there is a variety of decision making paths, therefore every partner institution has a chance to choose appropriate channel (or available at that moment) to access decision makers and "gatekeepers" and make influence on decisions regarding network activities. In that way there are clear chances to shift activities into direction of strategic importance for that particular partner.

Forming linkages and maintaining viable relations with the most influential players in a network is rewarding with useful information about project activities and power weight distribution, it helps to maintain interactive position and access downstream information in order to build links leading to new activities. Viable relations are vital for a network, as contrariwise the essence of networking loses its meaning. In addition, the influence of key contact persons was highly rated by the respondents as a factor when gaining influence in a network.

The survey of the determinants, important to be invited as a partner to already existing network showed that activities and projects undertaken, international experience and previous interaction within the network partners are more significant than image and general recognition (rankings), size and age of the HEI (Fig. 2.24). The importance of same determinants for gaining influence within the network is very similar. This finding confirms that networks are structures with pragmatic and result oriented corporate mind: reciprocal commitment and participation is a major connector of international networks of HEIs.

F1 – Size of an institution
F2 – Age of an institution
F3 – Projects and activities undertaken
F4 – Ratings
F5 – International experience
F6 – Position in emerging markets
F7 – Contacts owned
F8 – Contact persons' influence
F9 – Previous mobility flows with the partners
F10 – Profile compliance
F11 – Institutional status

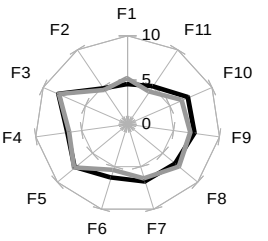

Fig. 2.24. Determinants, which are important to be invited as a partner to already existing network and to gain influence (source: compiled by author)

Geographical expansion of international networking in future seems to be quite balanced according to survey results: HEIs are looking for global distribution of partnerships. North American and South East Asian HEIs have been less attractive than expected, although indicated as the most feasible destinations. HEIs from Eastern and Central Europe have been considered very positive as future destination for multilateral partnerships, this opinion could be the reflection

of increasing HEIs competition for less saturated education markets, where demand for international education is still growing and purchasing power of population is increasing (Fig. 2.25). HEIs from NIS and Central Asian countries have promising perspectives for partnership leading to joint educational services.

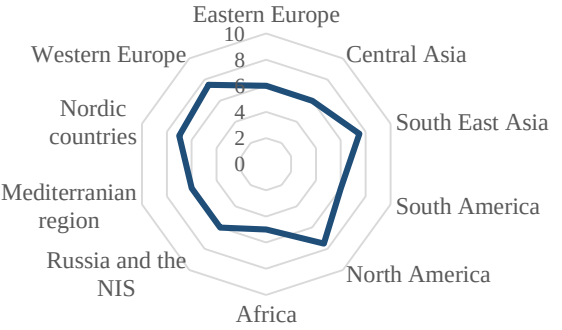

Fig. 2.25. The importance of regions when considering possibility to join new network in a 3 years' period (source: compiled by author) thous

The opinion of top internationalisation managers on optimal number of international networks manageable for a middle sized European university (15–30 thous. students) is as follows: almost 30% of responses indicated that 5 to 10 networks seem to be manageable for one institution (Fig. 2.26). It seems that an attitude – the more partnerships, the better for the institution – is vanishing. Every partnership adds liabilities to institution and requires constant maintenance of institutional relationship. If partnership is not producing added value for partners, if there is a weak base of resources to be exchanged, institutions are wasting their resources.

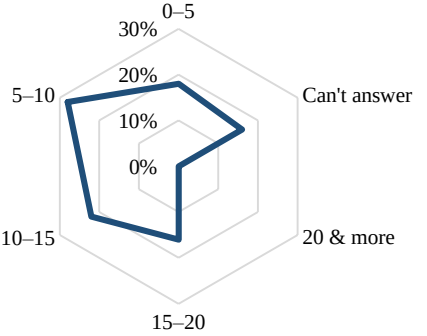

Fig. 2.26. Answer distribution on how many networks are manageable for middle sized European HEI (15–30 students (source: compiled by author)

Summarizing the networking research results conclusion can be drawn that this internationalization mode might be eligible to test best institutional practices and single educational services from the perspective of the competitiveness in an international market. Networks is a system that suits institutions having insufficient resources for internationalisation, but are willing to develop international activities intensively by the time shortages are met. Networking systems are rather open, therefore latecomer institutions have reasonable opportunities to participate and develop their international activities. Network serves as a platform to finding partners for future activities and gaining experience by engaging with those partners in foreign markets.

2.7. Conclusions of Chapter 2

1. Research results showed that for mature HEIs having long standing national brand of education branch campus might have great potential. For the latecomer universities from the countries with unestablished international reputation of education system despite growing attempts branch campus establishment is a very risky decision and sometimes exceeds the institutional capabilities.
2. However as proved in this thesis, branch campus is not beyond latecomer institutions limits. Both theoretically and empirically it is possible and there is a less risky approach to direct export of educational activities. However, HEI-HEI or HEI-business partnership in a form of joint venture holds its own risks, i.e. high dependence on joint venture partners complicating possible change of strategy or retreat from the market.
3. The demand and supply of educational services is imbalanced in many countries. HEIs from the countries were the supply exceeds the local demand are induced to attract foreign students. Markets with growing middle class and increased purchasing power are emerging with attractive conditions for educational service providers. However, the local institutions are not always able to meet the growing customer needs in terms of quality and quantity. Thus, the market share is captured by international providers. This trend together with the decreasing public funding for higher education in many countries and transition from free to paid education conditions evolution of HEIs from local to international market players.
4. Using network partners as agents in their home countries enables HEI to test the competitiveness of individual activities, services or products in foreign market with low risk and investment and use experience further

when entering foreign markets by means that are more proactive and less dependent on partners.

5. There is a relationship between the international development of a higher education institution and historical context of the countries (previous colonies, psychological distance, shared language) and geopolitical circumstances (proactiveness of the host countries, development of national education valleys).
6. There is a relationship between business export flows and export of education services. Business export serves as an accelerator for the export of educational services. The established pattern indicates that universities are expanding to those markets where there are large flows of business exports. It has also been found that increasing purchasing power in countries that are the main importer of education increases the flow of education export to those countries.
7. It has been discovered that IBC establishment can have a considerable effect on the competitiveness of a higher education institution. A system of indicators has been developed to assess the impact of HEI international development on the university's competitiveness and a relationship between the key performance indicators of the IBCs and the university's competitiveness has been revealed. The following indicators and their weights have been identified and listed according to the strength of a positive impact they have on the university competitiveness: number of study programs taught at IBC (0.25), student number in IBC (0.19), number of social partners in a host country of IBC (0.16), number of international staff (not local) in IBC (0.15), yearly income of IBC (0.13), having partners in IBC establishment in a form of joint venture (number of partners) (0.12).
8. Income generation is not the main goal when establishing an international branch campus. The process of image formation of the institution in local and foreign markets has a greater influence in this process.

3

Decision Support Model for the Establishment of International Branch Campus

Chapter 3 suggests and explains in detail the decision support model for the establishment of international branch campus. The model is based on the synergy of theoretical and empirical research results. Theoretical and empirical research executed in previous chapters confirms practical applicability of the decision support model for international branch campus establishment enhancing the university competitiveness and reveals the perspectives and limitations for its use.

The findings of this chapter have been published in 2 scientific papers (Girdzijauskaitė et al., 2018b, 2019c).

3.1. Application Assumptions of Decision Support Model for the Establishment of International Branch Campus

In this Chapter it is discussed how the new knowledge discovered in the first and second chapters of this dissertation and research executed by other scholars have

been incorporated into the model suggested in subchapter 3.2 and formed a theoretical basis for the decision support model.

The object of present thesis is international branch campus as a foreign market entry in higher education. Considerable amount of research discusses what is the international branch campus. Naidoo (2009), Wilkins and Huisman (2012), Wilkins and Rumbley (2018) suggest different definitions. The premise of their research was used in this thesis to analyse the object and form the presumptions for the empirical research and the model itself.

The main result of this thesis is a decision support model for international branch campus establishment enhancing the university competitiveness. One of the preconditions of the model is that an international branch campus enhances the competitiveness of a HEI.

The incremental approach of the model and the step by step approach to internationalisation has been applied from the works of Johanson & Vahlne (1977).

The business approach is applied in the model. The model suggests business-like organisational behaviour for HEIs entering foreign markets as it was proved to be increasingly and successfully applied by mature and experienced HEIs. This precondition has been supported by the entrepreneurial university phenomena by Clark (1998). Kirby (2005) argues that HEIs shall need to develop perspective business models in order to be successful. Etzkowitz (2017) stresses the importance of the increased collaboration with industry. Czinkota et. al. (2009), Ennew (2012) and Naidoo (2008, 2009) are comparing universities to business firms in their research and support the application of business theory to higher education context. Therefore, the matching of concepts was made and used in this model accordingly.

Wilkins & Huisman (2012) supports the notion that some HEIs seek competitive advantage by focusing on the quality and reputation of local operations while others might achieve the competitive advantage by undertaking transnational activities such as opening an international branch campus. Impact of internationalisation and transnational activities on the competitiveness of a university has also been confirmed by other scholars (Altbach & Knight 2007; Radzevičienė & Girdzijauskaitė, 2012). The insights of these authors have been used to extend the scholarly discussion on the competitiveness. Firstly, the key performance indicators of IBCs that are influencing the overall competitiveness of a university were determined, and later the multicriteria evaluation using the FARE and Delphi methods have been performed in order to discover how each of the key performance indicators of international branch campuses influences the overall competitiveness of a higher education institution.

The first part of the model discusses the market selection. Ghoshal (1987) argued that when choosing the country for international expansion, one must consider the following factors related to the host market such as host government

policy, culture and physical distance. These factors have been incorporated into the model suggested in chapter 3.2. Also, the little psychic distance factor is strongly supported by the Uppsala theory (Johanson & Vahlne, 1977). According to traditional Uppsala model, business companies expand their operations in a foreign market gradually, beginning with entry into foreign markets that were close to the domestic market in terms of psychic distance, defined as factors that make it difficult to understand foreign environments, and similar institutional conditions before moving on to host countries that are more different. Following this logic, it is discussed in this thesis that a HEI seeking to establish a branch campus abroad would choose a country with a smaller psychic distance.

Another geopolitical indicator playing a very important part in choosing a foreign market for HEI international is education hubs. The following definition of education hub is suggested by J. Knight (2011) and used in this thesis when implementing education hubs into the model: education hub (valley) is planned and coordinated attempt by a country (region, city, several organisations or institutions) to gather the critical mass of local and foreign players of education and research connected strategically in the processes of education, training, intellectual capital and innovation development.

The model proposed in this thesis emphasizes the importance of risk reduction stratiegies when selecting the market entry mode. Various researchers agree that IBC is the riskiest foreign market entry mode in higher education (Beecher & Streitwieser, 2017; Mazzarol et al., 2003; McBurnie & Ziguras, 2007). Various researchers address the risk factor in implementing an IBC in more detail. Wilkins & Huisman (2012) and Krieger (2008) claim that high risk can be tolerated when one of the biggest motives for an IBC is influence and status. Phillips et al. (2009) suggested a conception of institutional distance that provides four possible strategies for HEIs to enter the new market depending on the institutional difference and institutional uncertainty. These strategies were implemented into the model presented in subchapter 3.2 of this thesis.

Networking plays a great role in the second part of the model. The phenomenon has been widely discussed by international business researchers for the past two decades (Håkansson & Johanson, 2002; Johanson & Mattsson, 2015; Johanson & Vahlne, 2009) and some of their findings and insights have served as a strong premise for the research and results of this thesis. Luo, et al. (2006) has stressed the essential role of networks in profile building and internationalisation for business companies and higher education institutions in emerging markets. (Nugaras, 2013) discussed that networking is highly relevant as management tool to higher education institutions actively developing international activities in a limited resource situation, (which stands for many European HEIs), facing the need to expand geographical presence, balance the risks, share the resources, and transfer the competences. Johanson and Vahlne presented the extended Uppsala

model in 2009. The main factors in the revisited model were trust-building and knowledge creation in local networks. As put by Johanson and Vahlne (2009), the most important challenge in the internationalisation is not the psychic distance between the home market and the foreign market, but rather the difficulty to become an insider in local networks. So, networking was considered a very important factor in the process of foreign market entry. All this knowledge served as a strong premise in forming the model presented in subchapter 3.2 of this thesis. It is stated in the model that knowledge gathered through previous partnerships allows examining the demands in the markets.

Market testing, and learning stages are mentioned in the model. The basis for these concepts were grounded by two theoretical approaches. Firstly, the LLL algorithm by Mathews (2002, 2006), which consists of three stages: linkage, leverage and learning (LLL). Secondly, the already mentioned Uppsala theory. Johanson and Vahlne added two important factors in the revisited Uppsala model in 2009: knowledge and learning, and trust and commitment building.

The last part of the model raises the question of "HOW" to enter the foreign market. The definition of foreign market entry mode (MEM) by Root (1994) has been used when developing this model: an institutional arrangement that makes possible the entry of a company's products and services, technology, knowledge, human capital, management, or other resources into a foreign country. The main WTO market entry modes (consumption abroad or international consumers, cross-border supply, delivery abroad, commercial presence) have been parallelized with recruitment of international students, joint programmes, international programmes and international branch campus respectively. Branch campus being the most intensive, complex and risky form of export. The classification of WTO market entry modes of service firms is increasingly applied to HE internationalisation by scholars such as Czinkota et. al., 2009, Knight, 2003, Larsen et al., 2002, Naidoo, 2009.

The model proposed in subchapter 3.2 is a tool for the owners, managers and decision makers of HEIs, which are planning on expanding the education export activities and are open to explore international branch campus as a means to do this. The model is used as an indicator roadmap. In order to make the important decisions, the before mentioned decision makers need to gather and test the data according to the criteria suggested in this thesis. This will help to shortlist the potential options when choosing what services should be exported to which markets and by what market entry modes.

3.2. Decision Support Model for the Establishment of International Branch Campus

Decision support model for the establishment of IBCs is suggested in this chapter. Three stage model is demonstrated in the figure below (Fig. 3.1).

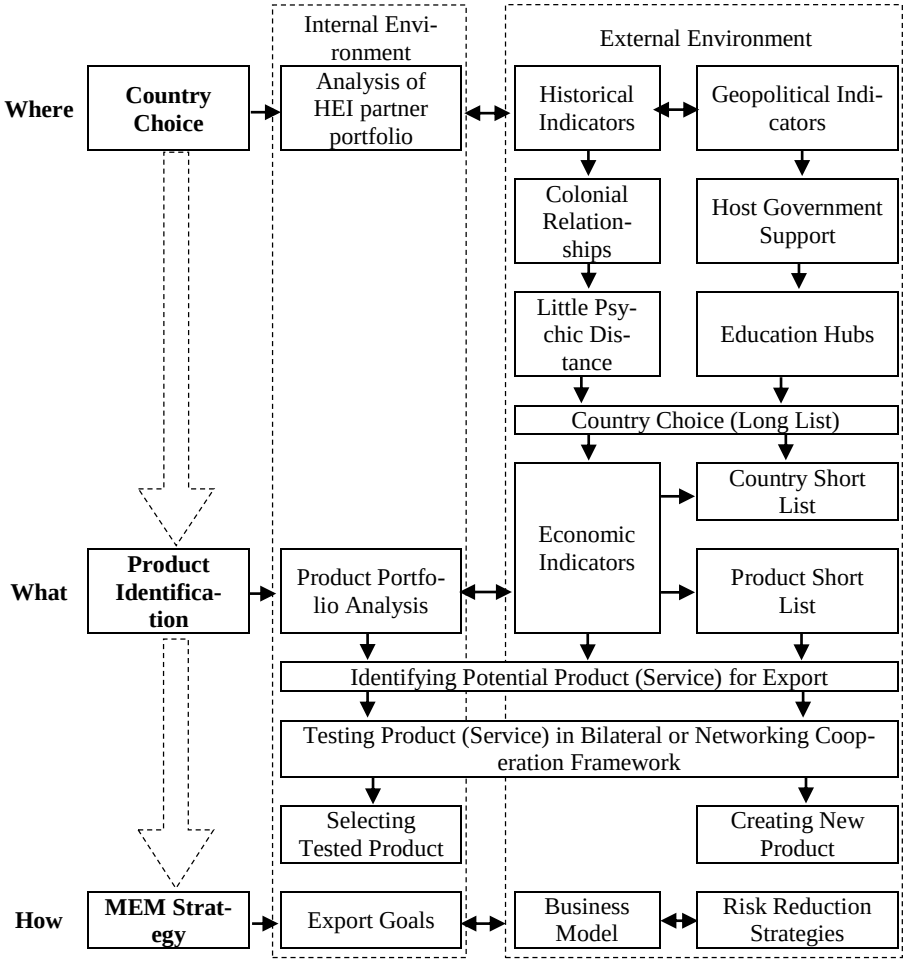

Fig. 3.1. Three stage model of international branch campus establishment as a foreign market entry mode (source: compiled by author)

The main principles of the model implementation are the following:

– The incremental approach. The sequence of the phases is recommended however some steps can be excluded by mature experienced institutions.

- The interrelatedness of the phases. In every phase preconditions for the further process are made.
- Business approach. The model suggests business-like organisational behaviour for HEIs entering foreign markets as it was proved to be increasingly and successfully applied by mature and experienced HEIs.

The literature review has disclosed the scientific problem and a need for the decision support model for HEIs that are planning to implement an IBC. This chapter focuses on giving a general overview of the decision support model and on an accurate description of the methodology in it. The most general idea of the model is to create a system offering components and linkages in order to guide the decision of a particular HEI in the IBC establishment process.

The decision support model for the establishment of IBCs consists of three horizontal blocks: the first block deals with the country choice – long listing and short listing of the potential markets, the second one – with the product identification for the export, and the third one discusses the market entry mode strategy (Fig. 3.1). Also, two vertical sections divide the processes into the internal and external environment of the international branch campus environment.

Starting with the first country choice block, as for the internal environment analysis, there is a need for taking into account the HEI partner countries. Previously created and successfully maintained relationships with partners ir certain countries provide valuable knowledge of a foreign market and future prospects of market testing and immersion through networking. Knowledge gathered through previous partnerships allows examining the demands in the markets and the coherence of those demands with the products (services) which shall be identified in the next step.

As for the external environment of the country choice analysis, two groups of indicators are recognized: historical and geopolitical. Historical indicators are indicated as previous colonial relationships and little psychic distance. Good practice of existing IBCs illustrates the importance of historical context (colonial relationships, past unions, large historical emigration flows) in the international branch campus establishment through choosing the markets that are possibly in the previous colonies of the exporting country or have little psychic distance (i.e. sharing similar culture or the same language).

According to Vahlne and Nordstrom (1992) the following factors are associated with country-based diversities:

- Linguistic differences and translation difficulty.
- Cultural factors – societal norms, level of individualism or collectivism, values and customs.
- Economic situation – existing trading links, infrastructure, local conditions, competition and investor confidence.

– Political and legal system – government stability and risk of instability, import tariffs, legal protection and taxation levels.

Talking about the cultural factors, the Hofstede's dimensions of the national cultures are used in this model (Hofstede, 2009). The economic situation is not analysed at this step, since it is part of step 4 of the first part in this model. Political environment is in the limitations of this thesis and is not enclosed in this analysis.

Geopolitical indicators play very important part in choosing a country and are categorized as follows: host government support and education hubs. According to the experts host government support is highly determining when establishing a BC in a foreign market, therefore should be well considered. It serves as a risk minimising factor. Local governments tend to provide foreign HE providers with certain protectionism and as a risk minimisation factor could be an alternative to local agent during the initial phase of market entry. Education valleys is also a form of host government creating favourable environment for foreign providers and creates a very strong foundation for choosing the country.

Host government attitude towards the import of international education services might go from one extreme to the other: from financing the initiative to creating laws against it. Negative attitude towards foreign HE providers might be key factor to retreat from the market and reconsider another option from the markets list.

After having taken into consideration these indicators, a long list of countries for the possible IBC establishment is developed. The next step towards shortlisting possible markets goes along with the economic environment analysis. This analysis is twofold: examining the trading partners of the providing country (prioritising the top ten trading partners or higher) and checking the economic growth in the markets (the higher the purchasing power the better). After this step the shortlist of potential markets is produced.

The second block of the decision support model deals with the product identification. As for the internal environment part, an institution must perform a current product portfolio analy sis in order to identify possible products at large for the export via IBC. In order to identify and long list the potential products (e.g. programme to be franchised), institutional self-analysis of the product portfolio must be made: which programmes would be resourceful and fit for the export.

As for the external environment evaluation, economic indicators must be evaluated when identifying the product for export. In this part, economic relationships between the countries selected in previous rounds are analysed and the sector demand coherence to the products potentially available for the export. The purpose of this step is to identify the education services matching the economic growth projections of host country. An example could be identifying a market with strong emphasis on tourism development with rather low education market saturation in this field and offering hospitality management programmes. This way, the product short list is developed.

After the few potential products identified as potentially demanded in foreign market, the products should be tested in bilateral or networking cooperation framework. Bilateral cooperation might allow for more close interaction and direct feedback on the quality of the whole service (or product). It might as well turn out that absence of the service (product) is identified and it must be developed. Examples of the products suitable for exporting are the following: undergraduate/graduate study programmes, joint or double degree programmes, online courses, single modules, professional training courses, non-degree courses, etc.

The third block deals with market entry mode strategy development. Talking about the internal environment, the main aim of this phase is defining the export goals. Six performance indicators of an IBC, enhancing the HEI competitiveness have been formed in the thesis and lists as follows: number of study programmes taught at IBC, student number in IBC, number of social partners in a host country of IBC, number of international staff (not local) in IBC, yearly income of IBC, having partners in IBC establishment in a form of joint venture (number of partners). All of the abovementioned indicators should be considered and according to the values set to these indicators, the resource base and overall IBC policy should be formed.

Generating and assigning resource base and forming the IBC policy are an integral part of the market entry mode strategy. The resource and IBC policy related measures are finance resource base management and human resource base management, staff recruitment strategy formation, staffing and remuneration policy, developing the tuition policy and product adaptation.

IBC establishment requires certain financial resource base. IBC activities in most countries are funded mainly from university generated revenue. Some IBC related initiatives might be supported financially by the host country government (e.g. to support educational services which are oriented to solving the country specific problems, etc.). A branch campus is a rather resource consuming initiative requiring substantial initial investment which usually buys off in 2–3 years. Usually IBC funding is formally and strictly limited to own generated income, clear validation of specific resource base prevents from possible misunderstanding related to incorrect use of budgetary funds and income from the taxpayers.

Human resources, is an extremely important institutional factor in this case. Evidently from the IBC research it is possible to start running an IBC with 4–10 permanent academic staff and 20–50 students. However, the IBC establishment and pre-establishment phase is likely to lead to additional workload and/or unusual tasks for the faculty and administration. It is important, therefore, to develop the recruitment strategy of local staff members as well as proper remuneration policy introducing new forms and rules of work organization. Moreover, it is recommended that motivation would play an equal role in faculty

and administration preparation process: professional placements, work task diversification, to mention a few means.

During the primary phase of IBC establishment HEI is likely to face a shortage of human resource, especially the administrative kind, because of unusual and rare in the market activity. In order to meet the shortages and/or set the example for current staff, it is recommended to consider hiring local professionals. If relevant, a person responsible for coordinating the IBC activities in subordinating university could be appointed and working groups formed. Rank of a coordinating person (vice-rector, head IRO, etc.) depends on the size of an institution, internationalisation scale and usual management.

Lastly, tuition policy and curricula adaptation are to be considered. These two factors were evaluated as not raising major issues of adaptation by IBC experts. Tuition policy – mainly because it is a flexible factor and is easily adjustable in case of an IBC. Curricula – because original curricula, foreign teachers and teaching methods are the main value for the customers, seeking authentic experience in an IBC of a foreign university.

The aim of the third block from the perspective of external environment is to determine the specific market entry mode and identify a risk reduction strategy of entering a foreign market in a form of branch campus. As discussed in the 1.4 subchapter, important factors in determining the strategy are institutional difference and institutional uncertainty in a host country. See Fig. 3.2 for the matrix of risk reduction strategies.

Institutional difference in a host country	Institutional uncertainty in a host country: Low	Institutional uncertainty in a host country: High
High	**Adapt** Moderate risk, complexity, effort Establish international branch campus, but adapt structures and processes to suit institutional context in host country	**Avoid** High risk, complexity, effort Do not establish international branch campus in this host country – the risks are too high
Low	**Transfer** Low risk, complexity, effort Establish international branch campus using the same structures and processes used at the home campus	**Hedge** Moderate risk, high complexity, effort Establish international branch campus but as a joint venture with a local partner or obtain funding and assurances from host country government

Fig. 3.2. Transnational strategies for a university based on institutional difference and institutional uncertainty (source: Phillips et al., 2009)

If the institutional difference between a home and a host country's institutions is low, and the institutional uncertainty in the host country is low, then a university can transfer the operations to a branch without major changes; same processes can be adapted and the same programmes can be delivered with little to no adaptation. This mode for instance is applicable for American HEIs having or about to have branch campuses in Western Europe, Australia, New Zeeland.

If institutional differences are high, but the uncertainty in a host country – rather low, then the branch campus can be established, however it is recommended to execute a careful revision and adapt structures and processes to the institutional context of the receiving country.

The situation of low institutional differences, but respectively high uncertainty is likely in developing countries (e.g. institutions in a host country are in different marketing stage, have different study model and organisation structure). In such setting risk reduction is possible through a local partnership (with HEIs, non-university educational institutions, business companies, etc.) – then, a university is able to convey an image of legitimacy, and when the strategy is seen to be successful, it is likely to be imitated by other universities. An example of a respective strategy is well applied in branch campuses established in Malaysia between 1996 and 2007 between foreign universities and local colleges, where the colleges provided foreign HEIs with market intelligence, capital and physical infrastructure, while HEIs took the lead in educational components.

Both the institutional differences and uncertainty between home and host countries result in vast risks and the effort required might not be worth the possible benefits. In India, for instance, there is a huge undersupply of higher education, yet the complex regulatory frame decreases the country attractiveness to foreign universities seeking overseas expansion.

Analysis of the risk reduction strategies shows that when the uncertainty is high, joint venture with a local institution is recommended. For the universities that entered the education market later then their rivals, joint venture might be considered as less risky entry mode for HEI.

To sum up the whole process of decision making, according to this decision support model, decision of a country choice for an international branch campus establishment should be supported by long listing the countries in the following manner: having existing partnerships (partnership portfolio analysis), having previous colonial relationships and / or little psychic distance (similar culture or language), having favourable host government attitude and possibly but not necessary having an education valley strategy in place.

After long listing the countries in this manner, the economic conditions should be analysed and the countries short listed accordingly: examining the trading partners of the providing country (prioritising the top ten trading partners or higher) and checking the economic growth in the markets (the higher the

purchasing power the better). After this step the shortlist of potential markets is made.

Next, the product identification takes place. Firstly, by performing a current product portfolio analysis in order to identify which programmes would be resourceful and fit for the export. For further analysis, economic indicators must be evaluated in order to identify the education services matching the economic growth projections of host country. This way, the product short list is developed.

After the potential products are identified (undergraduate/graduate study programmes, joint or double degree programmes, online courses, single modules, professional training courses, non-degree courses, etc.), they should be tested in bilateral or networking cooperation framework.

Lastly, the export goals are formed according to the suggested indicators and specific market entry mode is identified by using the matrix of risk reduction strategies.

3.3. Theoretical and Empirical Validation of Decision Support Model for the Establishment of International Branch Campus

This chapter focuses on the validation of the decision support model through the theoretical and empirical research in the thesis. Different blocks of the model have been validated with the insights recognised in the thesis research. Four international expert groups from different HEIs and IBCs participated in the empirical research.

The first country choice block starts with the internal environment – analysis of HEI partner portfolio. Many authors in the field agree that having partners in the market is a key factor in establishing and sustaining an international branch campus (Croom, 2010; Green, Kinser, Eckel, 2008; Neelakantan, 2008). The notion of partnerships being valuable information source has been formed due to the renewed Uppsala theory (Johanson & Vahlne, 2009), which claims that the knowledge in certain markets is gathered through the partners in networks. After recognising this in theory analysis, the question was raised among the experts in the field in a qualitative international expert survey (subchapter 2.3) on the unique international branch campus establishment frameworks. It was confirmed by the experts, that the role of local partnership (government, agents) is very important for gathering knowledge when planning the foreign market entry in higher education.

In another international expert survey (subchapter 2.6) where networking is analysed as a platform to get access to foreign education market through network

partners operating there, a question of learning in the network was raised. The conclusion was drawn that network partners can be used as a source to gather foreign market knowledge and therefore HEI partnership portfolio analysis has been decided to be added as a starting point of decision support model. Mutual learning through know-how, best practice or technology transfer has been evaluated by the experts as very important to network partners. One more important reason to consider existing partnerships in this step, is that some countries require an in-country partner in order to initiate any kind of international education services in that country at all.

Further in the country choice block, two groups of indicators are recognized as the elements of external environment: historical and geopolitical indicators. Historical context has been broken down into two smaller subcontexts: colonial relationships and small psychic distance. Firstly, the assumption that universities are choosing culturally similar countries for education export was made after analysing the Uppsala theory and its possible application in higher education context. This notion was investigated more deeply in the empirical part. Analysis of the study export market and analysis of 311 international branch campuses worldwide in subchapter 2.2 led to the conclusion, that there is a relationship between the international development of a higher education institution and the historical context of the countries (previous colonies, psychological distance, shared language). 96% of all IBCs fall under at least one of the following conditions: official language of the home country is one of the 10 most spoken languages in the world or the home country of the IBC is the former colonial country. This allowed for the assumption that following the practice of existing IBCs it is rational to be shortlisting the countries with little psychic distance or previous colonial relationship in the process of choosing a market for an international branch campus.

Another group of indicators in the country choice block (external environment) is geopolitical indicators, which play very important part in choosing a country: host government support and education hubs. It has been observed in the theory analysis that the host government can either complicate or facilitate the entry to a foreign market possibly going from one extreme to another, influencing a very strong motivation by fully funding the IBC establishment or making foreign degrees illegal locally (Ghoshal, 1987; Tayar & Jack, 2013; Wilkins, 2016). This issue was investigated deeper in the empirical part (subchapter 2.3): international experts were asked the most important motivators for an international branch campus establishment and one of the top factors was identified as host government support.

Education hubs have been recognised as the third generation of internationalisation of higher education institutions, as a planned and coordinated attempt by a country (region, city) to gather the critical mass of local and foreign

players of education and research connected strategically in the processes of education and innovation development (Knight, 2011). Regions seeking to raise the impact, brand and value of the region, attract foreign HEIs, again, serving as a very strategic and proactive aid by the local government. All in all, Theoretical assumptions were met by the expert opinions and geopolitical indicator has been added to the decision support model.

The analysis of possible markets for IBC establishment through historical and geopolitical indicators results in the long list of countries. The next step towards shortlisting possible markets goes along with the economic environment analysis. Economic environment in the host country has been recognised as an important motivator when choosing a country for an international branch campus establishment in the literature analysis (Croom, 2010). The tendency of business and cross-border higher education flows moving the same direction has been investigated further in the empirical part of the thesis. Stochastic relationships between the GDP per capita in the host countries and education export of the providing allowed a proposition that local HEIs in developing countries are not able to meet the growing need of customers, thus opening opportunities for foreign providers. Also, it has been discovered when analysing 311 existing IBC cases, that 89% of all IBC home and host countries have strong trading relationships (i.e. are among the top 10 trading partners with each other). These findings contributed to the notion that there is a tendency between business export flows and export of education services. Further in the empirical part, this notion was tested with the experts, who confirmed that economic growth of the host market is an important factor. Summarising all this, the economic indicator has been added to the model in the country choice block as the key indicator for shortlisting the markets for education export.

The second block of the decision support model deals with the product identification. The internal environment part of the block represents a current product portfolio analysis. As the application of the eclectic paradigm is analysed in the theoretical part (Dunning & Lundan, 2008; Shams & Huisman, 2012), it is noted that the product (service) portfolio should be analysed based on the internalization advantages and alternatives identified: when it is better to provide certain programmes in a form of distance education from home to other countries versus establishing branch campuses abroad and providing education services locally (i.e. in case of high market saturation at home).

As for the external environment analysis, the economic environment is used once again to shortlist the potential products (services) for the export. The need for such step has been confirmed both in theory (Croom, 2010) and in practice. Experts participating in the research of this thesis (subchapter 2.3) claim that it is important to recognise the market gaps and fill them with supply accordingly: in

other words, match future demand of labour with current supply of education. Hence, economic environment has been added in the product identification block.

According to the model, after a few potential products (services) are identified, the products (services) should be tested in networking or bilateral cooperation framework. The basis for the market testing, and learning concepts is grounded by the two theoretical approaches analysed in the theoretical part of the thesis: the LLL algorithm by Mathews (2002, 2006), consisting of three stages: linkage, leverage and learning (LLL), and the already mentioned Uppsala theory. It was tested also with the experts (subchapter 2.6), concluding and confirming the previous statement.

The third block of the decision support model is focused on how to establish a branch campus. Internal part of the block deals with forming the export goals. The categories for these export goals have been formed in the empirical research using four methods: semi structured interviews and framework analysis (subchapter 2.4), expert survey using the Delphi method and a multicriteria decision support method (FARE) (subchapter 2.5). These categories are discussed in more detail in subchapter 3.2. The criteria important for export goals list as follows: number of study programmes taught at IBC, student number in IBC, number of social partners in a host country of IBC, number of international staff (not local) in IBC, yearly income of IBC, having partners in IBC establishment in a form of joint venture (number of partners) and has been added to the model for consideration.

External environment of the market entry mode strategy block deals with the business model creation. Different modes of market entry have been discussed in the literature, from the adaptation of WTO terminology in business context to applications in higher education. Since it has been confirmed in literature, that business principles and modes are transferable from business to higher education Czinkota et. al., 2009; Knight, 2003; Larsen et al., 2002; Naidoo, 2009), this question was raised for the experts in the empirical research. It was confirmed by the expert that principles of business internationalisation are used in higher education export (subchapter 2.3) and finally the business model block has been added to the decision support model with a focus to different modes of market entry, based on business principles. Risk reduction strategies that were analysed in the theoretical part and the conception of institutional distance by Phillips et al. (2009) has been chosen as applicable in this thesis. It was discussed that important factors in determining the risk reduction strategy in international branch campus development are institutional difference and institutional uncertainty of a host country. Four different risk reduction strategies were suggested in the model.

3.4. Approbation of the Decision Support Model

In order to approve the relevance of the model, it has been tested in the case of the biggest technical university in Lithuania – Vilnius Gediminas technical university. It is a leading higher education institution situated in Vilnius with over 9 400 students (13.5% of which are international) and 110 study programmes (30% of which are taught in English).

In practical application of the model, the following steps must be taken: 1) gathering the data, 2) analysing the data, 3) shortlisting the alternatives, 2) checking for errors, and 3) interpreting the data. The detailed application guidance of the model is illustrated in Tables 3.1–3.4.

Table 3.1. Outputs and results of the first stage of the model (country choice) (source: compiled by author)

No.	Steps of the model	Process	Output	Results
1.	Partner portfolio analysis	Identifying the countries of VGTU partner HEIs.	The number of countries. Generating "Export markets list 1.0"	67 countries in Europe, Asia, Australia, Africa, South and North America
2.	Historical indicators	Narrowing down the list according to the historical context.	See steps 2.1 & 2.2	See steps 2.1 & 2.2
2.1.	Colonial (past unions) relationships, emigration flows	Narrowing down by listing the countries with historical relationships.	Generating "Export markets list 1.1"	Belarus Latvia Poland Ukraine Georgia Uruguay Argentina USA
2.2.	Little psychic distance	Narrowing down by listing the countries with little psychic distance.	Generating "Export markets list 1.2"	Latvia Belarus Poland
3.	Geopolitical indicators	Narrowing down the list according to the geopolitical context.	See steps 3.1 & 3.2	See steps 3.1 & 3.2

End of Table 3.1

No.	Steps of the model	Process	Output	Results
3.1.	Host government support	Checking the host government attitude towards the import of international education services and the geopolitical environment.	Adding to the "Export markets list 1.2"	Ukraine Georgia
3.2.	Education hubs	Identifying active (or soon to be active) education hubs in the preselected markets and analysing other HEIs experience in these countries.	Generating the "Export markets long list"	Latvia Belarus Poland Ukraine Georgia
4.	Economic environment analysis	Listing the main trading partners (top ten or higher) and checking the economic growth in the markets.	Generating the "Export markets short list"	Latvia Ukraine

As explained in Table 3.1 above, the first part of the model consists of 4 steps in total. Firstly, the partner portfolio analysis is executed. In the case of VGTU, the output of this analysis was 67 countries of the main institutional partners in Europe, Asia, Australia, Africa, South and North America. The next step is analysing the historical indicators: colonial (past unions or large emigration) relationships and little psychic distance.

When analysing the historical relationships with the countries from "Export markets list 1.0", firstly the past historical relationships were analysed (colonial relationships, large historical emigration flows, past unions). Following this logic, Belarus, Latvia, Poland, Ukraine and Georgia are shortlisted due to the past unions and close historical relationship. Moreover, USA (Chicago), Uruguay, and Argentina are added to the list due to the large emigration flows.

Belarus, Latvia, Poland, Ukraine and Georgia are sharing special relationship with Lithuania due to the joint history with Soviet Occupation and various unions formed earlier in the history (i.e. the Polish–Lithuanian Commonwealth).

Lithuanians have been documented as arriving in the US since 1918, when Lithuania re-established its independence from Imperial Russia. The first wave of emigration has been stopped when the U.S. Congress passed the Immigration Act

of 1924 restricting the Eastern and Southern Europeans entering the country in large numbers beginning in the 1890s. The second wave of Lithuanian emigration to the United States started as a result of World War II and the Soviet occupation of Lithuania in 1940 and the Nazi occupation that followed in 1941. Since then the Lithuanian community in USA is very active having the biggest population in Illinois (around 100 thousand Lithuanians) with Chicago alone having the second biggest population of Lithuanian Americans.

Statistics of Lithuanians in Latin America vary wildly, putting the number anywhere between 60 000 to 1 000 000. The main wave of immigration to Latin America was the interwar period (1920s–1930s). In 1908 USA curbed immigration and Lithuanians opted for Argentina and Uruguay instead. Around 50% of all 1926–1940 Lithuanian emigrants emigrated to these two countries. Lithuanian newspapers were published and institutions created by the newly born community of Lithuanians in Latin America.

Finally, the historical indicators analysis resulted in two groups of countries: historical relationship group (Belarus, Latvia, Poland, Ukraine and Georgia), with which Lithuania has long standing relationship and a history of past unions, and historical emigrations group (USA, Uruguay, Argentina).

The next step is narrowing down by listing the countries with little psychic distance to Lithuania. According to Vahlne and Nordstrom (1992) the following factors are associated with country-based diversities:

- Linguistic differences and translation difficulty.
- Cultural factors – level of individualism or collectivism, values and customs.
- Economic situation – trading links, local condition.
- Political and legal system – government stability and risk of instability, import tariffs, legal protection and taxation.

Linguistically, Lithuanian is a Baltic language, which is closely related to the neighbouring Latvian and more distantly related to the Slavic languages: Polish, Belarusian and Russian. There is no close relationship between Lithuanian language and English or Spanish.

Talking about the cultural factors, the Hofstede's dimensions of the national cultures have been used (Fig. 3.3).

Accorging to the Hofstede's model, Lithuania is rather similar culturally with these countrys:

- Power distance dimension: Latvia, USA and Argentina.
- Individualism: Latvia and Poland.
- Masculinity: Belarus, Latvia and Ukraine.
- Uncertainty avoidance: Latvia.

- Long term orientation: Belarus, Latvia and Ukraine.
- Indulgence: Belarus, Latvia, Poland, Ukraine and Georgia.

The country comparison according to the six cultural dimensions allows for the conclusion, that Lithuania is closest culturally with Latvia and Ukraine from the researched group of the countries.

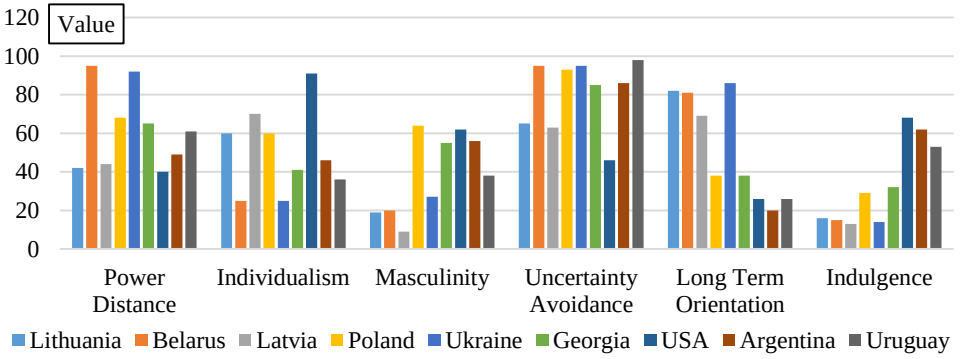

Fig. 3.3. Country comparison according to the Hofstede cultural dimensions (source: Hofstede, 2009)

The economic situation is not analysed at this step, since it is part of step 4 in this model. Political environment is in the limitations of this thesis and is not enclosed in this analysis.

The third step of the first stage of the model is geopolitical environment analysis: checking the host government attitude towards the import of international education services and overall geopolitical environment, and identifying active (or soon to be active) education hubs in the preselected markets.

As for the selected countries, there is no public recollection of active government support towards the branch campus establishment or active education hubs. The good news is, that there is also no active negative policy towards IBCs. Although, talking about the geopolitical environment and government attitude at large, Georgia and Ukraine would provide quite favourable conditions geopolitically, due to the strong relationship between the countries.

As for the experience of other foreign HEIs in these markets, Latvia so far has one IBC[12] by Moscow State University of Economics, Statistics and Information Technology in Riga. Belarus have two IBCs established (Moscow State Social University in Minsk and Minsk Branch of Moscow State University of Economics, Statistics and Informatics). There is one IBC in Poland (by University

[12] According to the international IBC database of C-BERT.

of Social Sciences). Ukraine has one IBC – a branch of Moscow State University in the City of Sevastopol. Georgia has no IBCs documented by the C-BERT.

USA is one of the largest TNE exporting country in the world, having established 77 IBCs. Also, 6 IBCs have been established in the USA by foreign countries (France, India, Spain, Taiwan, Turkey and United Kingdom). In Argentina the is one IBC established by Italian HEI (University of Bologna) and in Uruguay there are no documented cases.

After the full analysis of historical context, the long list of countries has been narrowed to four countries: Latvia, Belarus, Poland and Ukraine. Research results showed, that Latvia and Ukraine are strong leaders among the four, due to the linguistic similarities, little psychic distance, and similar culture.

The fourth step of the first stage of the model is economic environment analysis. The main trading partners of Lithuania have been listed and the economic growth trends have been analysed in the chosen markets.

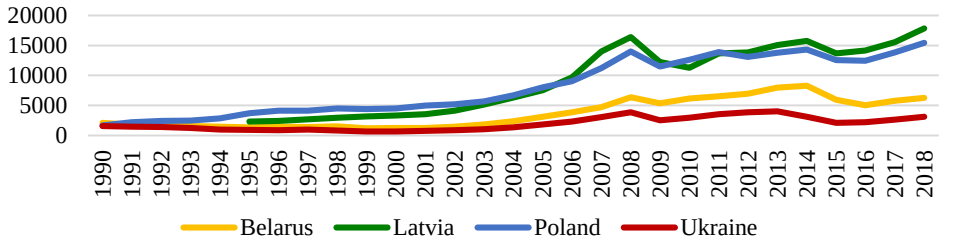

Fig. 3.4. GDP per capita (USD) in Belarus, Latvia, Poland and Ukraine (1990–2018) (source: WorldBank)

All four preselected countries from the export markets long list are among the top ten foreign trade partners of Lithuania in 2019. In order to identify the purchasing power for the education export in these markets, economic growth trends have been analysed (Fig. 3.4). Research results show the positive trend in all the four countries, Latvia being the highest. Lithuania is also the top trading partner for Latvia (15.8% of all export and 17.6% of all import). Latvia has the highest purchasing power, meaning that it would be easier to sell the product, but Ukraine might provide lower labour costs when hiring local staff.

Also, the gross enrolment to higher education in Belarus, Latvia, Poland and Ukraine in 1990–2018 has been analysed (Fig. 3.5). Research analysis shows rather stable trend during the past few years in Belarus and Poland. On the other hand, in Latvia the enrolment to HE is on the rise in 2014 and above all other countries in 2018. Unfortunatelly, there were no available data for Ukraine in the World Bank databases for the latest period.

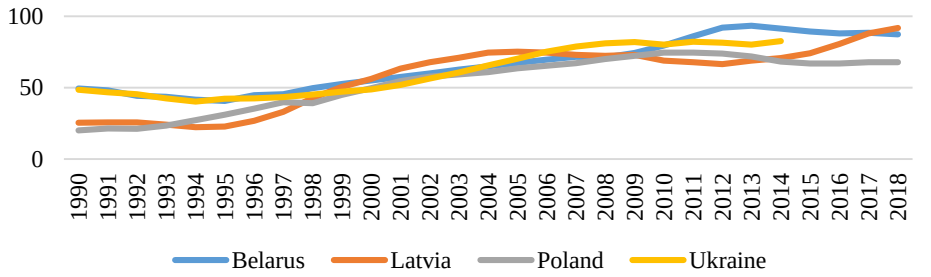

Fig. 3.5. Enrollment to higher education (gross, %) in Belarus, Latvia, Poland and Russia (1990–2018) (source: WorldBank)

All in all, the first stage of the model has resulted in a long list of markets for IBC establishment (Latvia, Belarus, Poland, Ukraine, Georgia), and two shortlisted markets – Latvia and Ukraine.

The second stage of the model deals with the product identification. 4 steps in this stage lead to the final decision on the product for export.

As illustrated in Table 3.2, the second part of the model consists of 4 steps in total. The first step is executing the current product portfolio analysis and listing the potential services of VGTU for the export to the selected markets. 38 study programmes in English have been listed after this analysis.

Table 3.2. Outputs and results of the second stage of the model (product identification) (source: compiled by author)

Steps of the model	Process	Output	Results
Product portfolio analysis	Executing the current product portfolio analysis. Listing the potential services of VGTU for the export to the selected markets.	X number of countries. Generating "Product longlist"	38 study programmes in English
Economic environment analysis	Analysing economic relationships between the countries from "Export markets shortlist" and Lithuania. Identifying the education services matching the economic growth projections of these countries.	Generating the list of fields (sectors)	Fields for Latvia: renewable energy, civil engineering. Fields for Ukraine: civil engineering, transport engineering, business management.

End of Table 3.2

Steps of the model	Process	Output	Results
Identifying the service for the export	Finally deciding on the export services.	Identified service to be exported to the selected markets	Latvia: Environmental Protection Technology and Management (DDP with Riga Technical University) (MA), Electrical Energetics Systems Engineering (MA). Ukraine: Business Management (MA), Civil Engineering (BA), Transport Logistics (MA).
Testing the services	Testing the services in the bilateral or networking relationship.	Alternative 1: selecting the successfully tested service for IBC export. Alternative 2: deciding on the creation of a new service.	Alternative 1: selecting the successfully tested service for IBC export.

The next step is analysing the economic relationships between the countries from the "export markets shortlist" (in this case, Latvia) and Lithuania in order to identify the education services matching the economic growth projections of these countries.

Main industries of Latvian economy have been identified as processed foods, processed wood products, textiles, processed metals, pharmaceuticals, railroad cars, synthetic fibers, and electronics. It's also important to note, that almost all of Latvian electricity is produced with Hydroelectricity (fossil fuel: 29.1%, hydro: 70.9%).

Finally, the following sectors have been identified as potentially having a demand for education export from Lithuania to Latvia: renewable energy, civil engineering, medicine, agriculture. Matching these sectors (fields) with the potential export services of VGTU, it is narrowed to the following: renewable energy, civil engineering.

Main industries of Ukraine economy are coal, electric power, ferrous and nonferrous metals, machinery and transport equipment, chemicals, and food processing. In the last few years there has been a large labor flows from Ukraine to Lithuania in the fields of transport and civil engineering. Finally, the following sectors have been identified as potentially having a demand for education export from Lithuania to Latvia: civil engineering, transport engineering and business management.

The third step is identifying the service for the export. In this case the following study programmes have been identified for an IBC in Latvia: Environmental Protection Technology and Management (DDP with Riga Technical University) (Masters programme), Innovative Road and Bridge Engineering (JDP with Riga Technical University) (Masters programme) and Electrical Energetics Sys-tems Engineering (Masters programme). The double degree programme and joint degree programme have been already tested in partnership with Riga Technical University. For Ukraine Business Management (Masters programme), Civil Engineering (Bachelors programme), Transport Logistics (Masters programme) have been selected.

After having identified the potential market and services for the export, the third part of the model is applied in order to identify the market entry mode strategy, choosing a risk reduction strategy and drafting the preliminary export goals.

In this model the risk reduction strategy is determined according to the institutional difference and institutional uncertainty suggested by Phillips (2009). In this case, actually, Latvia can be identified as a market with rather low institutional difference and low institutional uncertainty. Following the risk reduction matrix by Phillips (2009), it is the least risky environment and it is suggested in such case to establish international branch campus using the same structures and processes used at the home campus.

However, it is important to note, that Lithuanian HEIs have no previous experience with IBCs, and Lithuanian education brand is not as established as of the usual education exporting countries, the joint venture could be considered as a risk reduction tool. Not only can a local partnership be used as a source of knowledge, but it can also help navigating the local bureaucracy, creating relationships and recruiting both staff and students.

Following the Uppsala theory, less risky modes should be chosen before more aggressive ones in higher education internationalisation. For instance, following this logic in our case, joint venture could be a step before an independent branch campus. However, if an institutional presence in a form of joint venture is established with another HEI, it is hardly likely it will be able to turn into independent branch eventually, since the agreement is usually long term. University-business partnerships on the other hand are less likely to be long term, and therefore might be a choice to consider if aiming at the full ownership in the future.

Finally, the financial stakes must be considered, when deciding on the final market entry mode. Since there is no government support financially from neither the exporting or importing country, the financial burden of undergoing the initiative independently may be too high. Especially in case of Lithuanian HEI with no prior IBC experience and no internationally recognised education brand. Such

conditions strengthen the recommendation of choosing a joint venture as a MEM for IBC establishment. However, all the abovementioned factors should be considered before approaching a final decision. Finally, in case of VGTU and the discussed markets, the following recommendations on the market entry mode have been made (see Table 3.3).

Table 3.3. Model approbation results: decision alternatives (A1, A2, A3)

Export market and it's benefits (alternatives)	Study programmes	Market Entry Mode
Latvia (A1) Little psychic distance, low institutional uncertainty and differences, pre-existing relationships and experience with complicated partnership models (JDP), relatively low identity transfer costs	Pre-existing joint programmes: Environmental Protection Technology and Management (DDP with Riga Technical University) (MA), Innovative Road and Bridge Engineering (JDP with Riga Technical University) (MA), Electrical Energetics Systems Engineering (MA)	Joint venture with a local educational partner. Market: local and international. Benefits: tested relationship in complicated partnership modes, reduced risk and tensions, reduced potential market resistance, higher chances for government support, joined embassy networks, increased supply and demand for both, reputational benefits. Limitations: cobranding needed and less identity transferred.
Ukraine (A2) Large market, high demand, low labour costs, favourable geopolitical environment, recruitment potential (wider embassy network)	Transport Logistics (MA)	Independent BC (micro campus). Market: local. Benefits: full branding and recognition, lower product adaptation costs. Limitations: higher financial risks.
Ukraine (A3) Large market, high demand, low labour costs, favourable geopolitical environment, recruitment potential (wider embassy network)	Business Management (MA), Civil Engineering (BA), Transport Logistics (MA)	Joint venture with a foreign HEI. Market: local and international. Benefits: less financial risk than an independent micro campus, stronger selling point, shared different strengths Limitations: cobranding needed and less identity transferred, different HE systems.

In case of Latvia, it is evident, that Latvia and Lithuania are very similar in terms of culture, language, and bureaucracy. Also, VGTU having joint degree programmes and double degree programmes with Latvian HEIs running successfully proves a strong institutional relationship and the ability of both institutions to operate in a complicated partnership. Such relationship provides a strong basis for a potential joint venture. However, a joint venture should be considered with an educational institution, because choosing a business partner and targeting the local market in such a close market would raise unnecessary tensions with long standing partners and potentially harm the existing relationships. Entering a market as a joint venture with a local player not only would decrease potential tensions, but also would raise the chances of government support.

Due to the small market and potential tensions the recommended strategy would be targeting other countries jointly, rather than targeting solely Latvian market. The existing double degree and joint degree programmes would be a very good starting package for the newly established venture. For the newly recruited students the selling point would be a strengthened promise of quality – the best of the two HEIs. While for the ones that already have chosen the existing JJP, it would provide a choise of easier logistics and less unnecessary traveling. Joined partnership portfolios of the embassy networks would provide broader opportunities for international recruitment. Finally, a joint venture of VGTU and RTU (Riga Technical University) is suggested with pre-existing study programme package. Both HEIs should be cobranded as equal partners and equal campuses (no mother campus relationship) in this scenario. Value for the partner in this scenario would be potential new study modules in the future (increased supply), more students (increased demand) paying fees and using the infrastructure (local consuming), reputational benefits demonstrating the ability to operate new and risky business models that are not widely explored in the region (improved reputation).

In case of Ukraine, it is evident that it is a large market with little psychic distance to Lithuania with past unions and close historical relationship. The research showed, that Ukraine would provide quite favourable conditions geopolitically for a branch campus development, due to the strong relationship between the countries. It's important to note, that Ukraine having a wider and different embassy network would enhance the recruitment potential to other countries. Also, Ukraine might provide lower labour costs when hiring local staff and lower identity transfer costs.

When considering the market entry modes, it seems that choosing a joint venture such as recommended in the case of Latvia, would be rather difficult. It might be more difficult to find a local player for a successful partnership. The trust in the local HEIs (especially private ones) is not exactly stellar in Ukraine and it might be risky to choose one. Also, aiming for the top HEIs in the country is not

very promising, since the classic public HEIs do not demonstrate very entrepreneurial and risk oriented attitude, which is needed in IBC establishment with a foreign partner. This might be proved by the fact that Ukraine being a large market doesn't have foreign IBCs (at least not listed in the international C-BERT list) other than one established by a Russian HEI. A strong limitation for the joint venture with a local player would also be rather different HE systems.

A strong reputation of Lithuania in Ukraine and high government support makes an independent IBC seem logical. It would be a more financially risky decision, but also allowing the full branding and full recognition in case of success. With lower labour costs in Ukraine it is more feasible to maintain an independent campus, however a micro campus would be recommended with as little investment as possible. Another benefit of an independent venture in this case would be that there would be less product adaptation needed.

As a safer alternative with less financial risks, a joint venture might be considered. A foreign higher education institution would be recommended in this case as the most feasible. Preferably with a strong Western higher education brand. In this case, two foreign HEIs would have a rather strong selling point in the local market, and also could be targeting other markets nearby. Also, different strengths could be brought to the venture from two HEIs: Lithuania with little psychic distance to Ukraine and strong historical relationships and a strong education brand from a foreign partner. Also, previous IBC experience could be a factor in choosing a partner (i.e. UK). All in all, financial risks would be lower in such venture, however this would come with a cost of identity loss due to cobranding with a foreign partner and bigger product adaptation.

The final step in the process is predefining the export goals, according to the following KPIs: number of study programmes taught at an IBC (KPI1), student number in IBC (KPI2), number of social partners in a host country of IBC (KPI3), number of international staff (not local) in IBC (KPI4), yearly income of IBC (KPI5), having partners in IBC establishment in a form of joint venture (number of partners) (KPI6).

Evidently from the IBC research executed in this thesis, it is possible to start running an IBC with 4–10 permanent academic staff and 20–50 students. However, the IBC establishment and pre-establishment phase is likely to lead to additional workload and/or unusual tasks for the faculty and administration. It is important, therefore, to develop the recruitment strategy of local staff members as well as proper remuneration policy introducing new forms and rules of work organization.

In the case of IBC in Latvia, 3 possible study programmes have been identified for the export: JDP and DDP that are already tested with another Latvian HEI and one English study programme of VGTU. If we presume that we need at least 20 students in one study programme, and at least one local international staff

member in each study programme, then the overall plan would be 40–60 students with 2–3 study programmes and 4–6 international staff members for the first year.

In the case of IBC in Ukraine, 3 possible study programmes have been identified for the export. Two alternative modes have been chosen for Ukraine: independent micro campus and a joint venture with a foreign HEI. It is recommended to choose one study programme for a micro campus and two programmes for the joint venture as a start. Master programme (Transport logistics) would be recommended in this case over the bachelors, because it might be easier to attract master students to a foreign campus. If we presume that we need at least 20 students in one study programme, and at least one local international staff member in each study programme, then the overall plan would be 20–40 students with 1 study programme and 4 international staff members for the first year in a micro campus. Following the same logic, it would be 40–60 students with 2–3 study programmes and 4–6 international staff members for the first year in a joint venture. However, lower labour prices have been ideintified as an advantage in Ukraine, and the distance for the staff to travel from "mother campus" to an IBC is much higher than in case of Latvian IBC. Therefore, it might be strategically more logic to hire more local staff in Ukraine. All the values suggested for the IBC KPIs have been listed in Table 3.4.

Table 3.4. Export goals and market entry modes in the different alternatives of IBCs (source: compiled by author)

Alternatives	Latvia (A1):	Ukraine (A2):	Ukraine (A3)
Market entry modes	Joint venture with local HEI	Independent micro campus	Joint venture with foreign HEI
Export goals	KPI1: 2–3 KPI2: 40–60 KPI3: N/A KPI4: 2–3 KPI5: N/A KPI6: 1	KPI1: 1 KPI2: 20–40 KPI3: N/A KPI4: 4 KPI5: N/A KPI6: 0	KPI1: 2–3 KPI2: 40–60 KPI3: N/A KPI4: 4–6 KPI5: N/A KPI6: 1

Finally, the approbation of the decision support model in the case of VGTU has resulted in the following alternative decisions (see Table 3.4). Alternative 1: market for IBC establishment – Latvia, products (study programmes): Environmental Protection Technology, Management (DDP with Riga Technical University) (MA), Innovative Road and Bridge Engineering (JDP with Riga Technical University) (MA), and Electrical Energetics Systems Engineering (MA), market entry mode – joint venture with a local or foreign partner. Alternative 2: market for IBC establishment – Ukraine, products (study programmes): Transport Logistics (MA), market entry mode – independent micro

campus. Alternative 3: market for IBC establishment – Ukraine, products (study programmes): Business Management (MA), Civil Engineering (BA), Transport Logistics (MA), market entry mode – joint venture with a foreign HEI. Other countries, such as Argentina, Uruguay or USA might be reconsidered for the second iteration of IBC establishment.

3.5. Conclusions of Chapter 3

1. The decision support model is based on the incremental approach to internationalization and business approach to university management and is suggested as a strategic map for higher education institutions entering foreign markets in a form of a branch campus. The three stage model has been validated as a theoretical tool by the literature analysis of internationalization theories and international market entry.
2. Theoretical and empirical research executed in previous chapters as well as the approbation of the model confirms practical applicability of the decision support model for international branch campus establishment in the following stages: choosing the export market, forming the export product portfolio, and designing the market entry mode.
3. The approbation of the decision support model in the case of VGTU has resulted in the following alternative decisions. Alternative 1: market for IBC establishment – Latvia, products (study programmes): Environmental Protection Technology and Management (DDP with Riga Technical University) (MA), Innovative Road and Bridge Engineering (JDP with Riga Technical University) (MA), and Electrical Energetics Systems Engineering (MA), market entry mode – joint venture with a local HEI. Alternative 2: market for IBC establishment – Ukraine, product (study programme): Transport Logistics (MA), market entry mode – independent micro campus. Alternative 3: market for IBC establishment – Ukraine, products (study programmes): Business Management (MA), Civil Engineering (BA), Transport Logistics (MA), market entry mode – joint venture with a foreign HEI.

General Conclusions

1. In HE just as in business world, competitiveness is largely dependent on internationalisation. With the globally increasing consuming of educational services, growing market, emerging educational and for profit competitors, increasingly proactive measures are taken to attract the customers. Business principles are increasingly used in higher education practices, especially in the field of internationalization. One of such measures is establishing an IBC in the customers' market.
2. Establishing a branch campus might be a way to overgrow oneself, significantly strengthen the international presence. If the management of HEI succeeds to forecast the emerging educational market in its early stage – where the competition is modest, decision to enter the market coincides with the growing potential of this particular market, demand coincides with the market growth – it might serve as a powerful kick-off for university international expansion. A system of indicators has been developed in this thesis to assess the impact of HEI international development on the university's competitiveness and a relationship between the key performance indicators of the IBCs and the university's.
3. Research results from expert survey and theory analysis showed that networking could be used as a measure to test and enhance the institutional capabilities before entering a new foreign market

independently. The use of networking principles enables HEIs to position themselves through positioning in the networks of local players and using them as gatekeepers and agents.

4. The following research findings have been instrumental in designing the decision support model for the international branch campus development. HEIs tend to expand internationally in a form of IBC to those markets with shared historical context and favourable geopolitical circumstances. Business export serves as an accelerator for the export of educational services: the established pattern indicates that universities are expanding to those markets where there are large flows of business exports. It has also been found that increasing purchasing power in countries that are the main importer of education increases the flow of education export to those countries. Income generation is not the main goal when establishing an international branch campus. The process of image formation of the institution in local and foreign markets has a greater influence in this process.
5. After systematizing all the discovered regularities and patterns, the solution support model was proposed that allows universities to adopt international development solutions using an IBC as a tool for foreign market entry. From a practical point of view, higher education institutions could employ this tool and develop better internationalisation strategies that could lead to better allocation of resources and improvement the competitiveness of a HEI. This adds relevancy to the dissertation and makes it usable for practical purposes.
6. The following limitations of the decision support model have been distinguished: (1) the model is constructed for the establishment phase of international branch campus; (2) the indicators of political environment, population growth, natural conditions and disasters are neglected. The doctoral dissertation is basis for the continuation of research on the modelling of international branch campus strategic management according to different types of IBCs. Also the research could be continued to develop and test the effectiveness of the higher education institutions educational services export portfolio.

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Summary in Lithuanian

Įvadas

Problemos formulavimas

Besikeičiantys santykiai tarp universitetų, valstybės ir verslo, auganti tarptautinio švietimo rinka lemia naujų aukštojo mokslo institucijų vaidmenų ir funkcijų atsiradimą. Keičiasi aukštojo mokslo veiklos organizavimo ir bendradarbiavimo modeliai. Dėl augančios tarptautinio aukštojo mokslo konkurencijos išryškėja naujų įėjimo į užsienio rinkas aukštajame moksle verslo modelių ir įrankių poreikis. Trūksta žinių, reikalingų strategiškam ir sistemiškam tarptautinio filialo naudojimui kaip radikaliausio įėjimo į rinką būdo. Stokojama susistemintų žinių, apimančių išorinės aplinkos veiksnius, darančius įtaką sėkmingam tarptautinio filialo steigimui. Dabartiniai aukštojo mokslo paslaugų eksporto pavyzdžiai iliustruoja strateginio ir sisteminio požiūrio trūkumą šioje srityje. Pasigendama teorinių įrankių, leidžiančių panaudoti makroaplinkos veiksnius ir strateginius parametrus sprendimams priimti, steigiant universitetų filialus užsienyje. Mokslinėje literatūroje trūksta tyrimų ir žinių, reikalingų norint įvertinti tarptautinio filialo įtaką universiteto konkurencingumui.

Darbo aktualumas

Didėjant konkurencijai aukštajame moksle, aukštojo mokslo institucijų (AMI) veikloje pradedami taikyti verslo principai. Mokslininkai sutaria, kad universitetų valdymas panašėja į tarptautinių korporacijų (Etzkowitz, 2017; Rhoades, Stensaker, 2017). Taip pat pla-

čiai diskutuojama apie tai, kad ėjimas į tarptautines rinkas universitetams yra konkurencingumo šaltinis (Delgado-Márquez, Escudero-Torres, Hurtado-Torres, 2013; De Haan, 2014; De Wit, 2020). Pati radikaliausia įėjimo į užsienio rinką forma aukštajame moksle yra tarptautinių filialų steigimas. Tačiau tai gana naujas reiškinys ir šioje srityje dar trūksta teorinių žinių bei modelių. Universitetų įėjimo į užsienio rinkas praktikoje pasigendama verslumo. Taip pat stokojama strateginio ir sisteminio požiūrio, vertinant tarptautinius universitetų filialus kaip radikaliausią įėjimo į užsienio rinką būdą. Trūksta žinių siekiant įvertinti tarptautinio filialo poveikį universiteto konkurencingumui. Pasaulyje tarptautinių universitetų filialų yra santykinai nedaug (vos 1 % visų pasaulio AMI yra įsteigę filialą užsienyje) ir visi jie vystosi unikaliomis vidinėmis ir išorinėmis sąlygomis, todėl yra labai skirtingi. Dėl šios priežasties sunku rasti geros praktikos pavyzdžių, pritaikomų konkrečiam atvejui. Norint naudotis tarptautiniais filialais kaip universiteto konkurencingumo didinimo priemone, turi būti sukurtas išsamus sprendimų priėmimo modelis tarptautiniams universitetų filialams steigti, sutelkiant dėmesį į universiteto konkurencingumą.

Tyrimo objektas

Tarptautinė aukštojo mokslo institucijų plėtra, naudojant tarptautinius filialus kaip įėjimo į užsienio rinką būdą.

Darbo tikslas

Sukurti sprendimų priėmimo modelį tarptautinių universitetų filialų steigimui plėtojant universiteto tarptautiškumą.

Darbo uždaviniai

Darbo tikslui pasiekti iškelti tokie uždaviniai:

1. Nustatyti aukštojo mokslo (AM) tarptautinės plėtros ir paslaugų eksporto šiuolaikines tendencijas ir dėsningumus, prioritetą teikiant universitetų filialų užsienyje problematikai.
2. Siekiant apibrėžti disertacijos teorinį pagrindą, apibendrinti verslo tarptautinimo teorijas, identifikuojant jų pritaikymą aukštojo mokslo vadyboje.
3. Apibendrinti įėjimo į užsienio rinką būdus versle, pabrėžiant jų pritaikymą aukštojo mokslo tarptautinės plėtros valdymo srityje, steigiant universitetų filialus užsienyje.
4. Apibendrinti švietimo eksporto mikro- ir makroaplinkos veiksnius, lemiančius sėkmingą tarptautinių filialų (TF) steigimą ir vystymą, bei universitetų filialų užsienyje gerosios praktikos pavyzdžius.
5. Nustatyti universitetų filialų užsienyje pagrindinių veiklos rodiklių poveikį universiteto konkurencingumui.
6. Pasiūlyti ir aprobuoti sprendimų paramos modelį, skirtą universitetų filialams užsienyje steigti, taikant verslo teorijas ir principus.

Tyrimų metodika

Siekiant atskleisti filialų steigimo užsienyje problematiką, buvo atlikta kritinė literatūros apžvalga, taikant interpretavimo ir konceptualizavimo metodus. Atlikus statistinių duomenų analizę, buvo nustatyti dėsningumai tarp verslo ir švietimo paslaugų eksporto. Tarptautinė universitetų filialų užsienyje vadovų apklausa (JAV, Australija, Malaizija, JK, Švedija, Estija) bei išanalizuoti TF pavyzdžiai padėjo atpažinti geruosius universitetų filialų užsienyje steigimo pavyzdžius. Siekiant nustatyti pagrindinius TF veiklos rodiklius, buvo atliktas suinteresuotųjų grupių tyrimas sisteminės analizės metodu (angl. *Framework method*). Buvo atlikti pusiau standartizuoti interviu su TF ekspertais, surinkta medžiaga išanalizuota ir sukoduota naudojant kompiuterinę kokybinių duomenų analizę (angl. *Computer Assisted Qualitative Data Analysis, CAQDAS*). Atlikus ekspertų apklausą *Delphi* metodu bei daugiakriterį vertinimą FARE metodu, buvo nustatytas poveikis ir ryšys tarp pagrindinių universitetų filialų užsienyje veiklos rodiklių dydžių ir universiteto konkurencingumo. *Delphi* metodas buvo taikytas siekiant surinkti duomenis, reikalingus daugiakriteriam vertinimui, ir padidinti tyrimo rezultatų patikimumą. FARE metodas pritaikytas, siekiant nustatyti ryšius tarp TF veiklos rodiklių ir universiteto konkurencingumo. Siekiant nustatyti tinklaveikos išnaudojimą rizikai mažinti ir žinioms kaupti TF steigimo procese, buvo atlikta tarptautinė aukštojo mokslo tarptautinių ekspertų apklausa. Iš viso tyrimuose dalyvavo keturios skirtingos tarptautinių ekspertų grupės. Dviejose grupėse dalyvavo dalis tų pačių ekspertų.

Darbo mokslinis naujumas

Pasiekti šie vadybos mokslui svarbūs rezultatai ir nustatyti tokie dėsningumai:

1. Nustatytas dėsningumas tarp AMI plėtros užsienyje ir istorinio šalių santykių konteksto. Nustatytas dėsningumas rodo, kad dauguma universitetų vadovaujasi klasikiniu Upsalos modeliu ir steigia tarptautinius filialus kultūriškai artimose rinkose (pvz., šalyse buvusiose kolonijose ar turinčiose tą pačią kalbą).
2. Nustatytos sąsajos tarp valstybių verslo eksporto srautų bei tarptautinio universitetų paslaugų judėjimo. Nustatytas dėsningumas rodo, kad universitetai plečiasi į tas rinkas, į kurias nukreipti dideli verslo sektorių prekių ir paslaugų eksporto srautai.
3. Suformuota rodiklių sistema, leidžianti įvertinti AMI plėtros poveikį universiteto konkurencingumui. Nustatytas ryšys tarp pagrindinių TF veiklos rodiklių ir universiteto konkurencingumo. Nustatyti šie rodikliai pagal teigiamą jų poveikį universiteto konkurencingumui: dėstomų studijų programų skaičius universiteto tarptautiniame filiale, studentų skaičius filiale, socialinių partnerių skaičius priimančiojoje šalyje, tarptautinio personalo skaičius, metinės filialo pajamos, verslo partnerių / bendrasteigėjų skaičius. Šie rodikliai buvo pripažinti svarbiais kriterijais TF steigimo sprendimų priėmimo procese ir buvo įtraukti į trečiąjį sprendimų paramos modelio dalį.
4. Pasiūlytas sprendimų paramos modelis, leidžiantis priimti universitetams tarptautinės plėtros sprendimus, naudojant TF kaip įėjimo į užsienio rinkas įrankį. Pasiūlytas modelis jungia įvairius švietimo eksporto veiksnius (istorinius, geopo-

litinius, ekonominius ir politinius), reikšmingus sprendimų priėmimui TF steigimo procese. Sukurtas modelis yra unikalus teorinių įrankių rinkinys, jungiantis žinias, kurios buvo susistemintos atlikus mokslinės literatūros analizę AMI tarptautinimo ir verslo principų pritaikymo AM tema, kitų mokslininkų tyrimus bei autorės atliktus empirinius tyrimus. Unikalus kriterijų ir žingsnių rinkinys sujungtas į originalų modelį, skirtą sprendimams priimti aukštojo mokslo institucijoms steigiant filialus užsienyje.

5. Papildytos teorinės žinios apie aukštojo mokslo institucijų tarptautinimą, užpildant aptiktas spragas (verslo principų ir verslo teorijų taikymas universitetų įėjimo į užsienio rinkas kontekste, strateginis ir sistemingas požiūris į TF kaip radikaliausią įėjimo į užsienio rinką būdą; žinios, reikalingos norint įvertinti IBC poveikį universiteto konkurencingumui). Išaiškintas pagrindinių verslo tarptautinimo teorijų ir principų pritaikomumas aukštajame moksle. Siejant šias žinias, buvo sukurtas sprendimų paramos modelis, padedantis sistemingai ir strategiškai planuoti TF kūrimą.

Darbo rezultatų praktinė reikšmė

Sprendimų paramos modelis, skirtas universiteto filialui užsienyje steigti, siekiant padidinti universiteto konkurencingumą, reikšmingas dėl šių priežasčių:

1. Gauti rezultatai ir sprendimų paramos modelis gali būti naudojami didinant aukštojo mokslo institucijų tarptautiškumą, planuojant steigti naujus tarptautinius filialus.
2. Modelis yra universalus ir gali būti taikomas visose aukštojo mokslo įstaigose – nuo pažangių didelių universitetų iki mažų kolegijų ir kitų aukštųjų mokyklų. Tai ypač naudinga vėliau į rinką įėjusioms AMI, kurios laiko TF pernelyg rizikingais ir radikaliais. Sprendimų paramos modelis yra teorinių įrankių rinkinys aukštųjų mokyklų vadovybėms, prisidedantis prie strateginio ir sistemingo požiūrio į tarptautinių filialų kūrimą.
3. Darbo rezultatai gali būti pagrindas vyriausybėms (pvz., švietimo ministerijoms) nacionalinių švietimo sistemų plėtros scenarijams vystyti bei nacionalinėms švietimo paslaugų eksporto strategijoms formuoti.

Ginamieji teiginiai

Darbe ginami šie teiginiai, pagrįsti disertacijos tyrimų rezultatais:

1. Tarp AMI plėtros užsienyje ir istorinio šalių santykių konteksto (buvusios kolonijos, psichologinis atstumas, ta pati gimtoji kalba) bei geopolitinių aplinkybių (proaktyvus priimančiųjų šalių elgesys, nacionalinių švietimo slėnių formavimasis) yra dėsningumas, parodantis, kad tarptautinė AMI plėtra dažnai būna nukreipta į šalis, kurias su TF steigiančia šalimi sieja istorinis kontekstas ir kuriose yra palankios geopolitinės aplinkybės.
2. Universitetai plečiasi į tas rinkas, į kurias yra vystomi verslo sektorių prekių ir paslaugų eksporto srautai.

3. Pelno generavimas nėra svarbiausias tikslas steigiant universitetų filialus užsienyje. Šiame procese didelę svarbą turi institucijos įvaizdžio formavimas vietinėje ir užsienio rinkose.
4. Tarptautinio universiteto filialo įsteigimas gali būti išnaudojamas kaip konkurencingumo didinimo įrankis.
5. Siūlomas sprendimų paramos modelis yra naudingas sistemingam strateginiam tarptautinio filialo steigimo planavimui ir prisideda prie aukštojo mokslo institucijos konkurencingumo.

Darbo rezultatų aprobavimas

Disertacijos rezultatai buvo paskelbti devyniuose moksliniuose straipsniuose. Trys iš jų – užsienio mokslo žurnaluose (vienas iš jų „Clarivate Analytics Web of Science“ duomenų bazėje) (Girdzijauskaitė ir kt., 2018b, 2019b, 2019c), du – „Clarivate Analytics Web of Science“ duomenų bazės Conference Proceedings leidiniuose (Girdzijauskaitė ir kt., 2016 m., Girdzijauskaitė ir Radzevičienė, 2014 m.), keturi – kituose tarptautiniuose recenzuojamuose leidiniuose (Ziurienė ir kt., 2019; Girdzijauskaitė ir kt., 2018a, 2019a; Girdzijauskaitė & Radzevičienė, 2013; Radzevičienė & Girdzijauskaitė, 2012).

Darbo rezultatai taip pat paskelbti knygoje “Aspects of internationalisation of higher education at NHL Stenden University of Applied Sciences” (redaguotos R. J. Coelen) kaip atskiras skyrius (2018).

Pranešimai disertacijos tema skaityti keturiose tarptautinėse konferencijose:

- Girdzijauskaitė, E., Radzevičienė A., Jakubavičius A., “International branch campus: strategic mapping”, “Contemporary Issues in Business, Management and Education, 2019”, Vilnius, gegužės 9–10 d., 2019 m.
- Girdzijauskaitė, E., Radzevičienė A., Jakubavičius A., „Transition of Entrepreneurial University: from Local to International“, „Business and Management, 2016“, Vilnius, gegužės 12–13 d., 2016 m.
- Girdzijauskaitė, E., Radzevičienė A., „International branch campus: framework and strategy“, „Contemporary Issues in Business, Management and Education, 2015“, Vilnius, lapkričio 13 d., 2015 m.
- Girdzijauskaitė, E. „Internationalisation processes in the development of universities activities“, „Science – Future of Lithuania, 2016“, February 9, 2016, Vilnius, vasario 11 d., 2016 m.

Keturi pranešimai disertacijos tema buvo pristatyti doktorantų seminaruose VGTU, trys pranešimai skaityti šiuose tarptautiniuose doktorantūros seminaruose užsienyje:

- Tarptautinis doktorantų seminaras apie tarptautinį aukštojo mokslo eksportą (Groningeno universitetas, Nyderlandai, 2016 m.).
- Tarptautinis doktorantų seminaras apie kokybinių tyrimo metodų taikymą aukštojo mokslo tarptautinimui (Milano katalikiškasis Šventosios Širdies universitetas, Italija, 2015 m.).
- Tarptautinis doktorantų seminaras apie kokybinių tyrimo metodų taikymą aukštojo mokslo internacionalizavimui (Milano katalikiškasis Šventosios Širdies universitetas, Italija, 2014 m.)

Disertacijos struktūra

Disertaciją sudaro įvadas, 3 skyriai, bendrosios išvados, literatūros sąrašas, autorės publikacijų sąrašas, santrauka lietuvių kalba ir 8 priedai. Iš viso disertacijos apimtis – 150 puslapiai, neįskaitant priedų. Disertacijoje yra 35 paveikslai, 25 lentelės, 6 sunumeruotos formulės ir 203 literatūros šaltiniai.

1. Aukštojo mokslo tarptautinimo teorinis kontekstas

Mokslinėje literatūroje universitetai vis dažniau lyginami su įmonėmis (Czinkota et. al., 2009; Ennew, 2012; Kim & Zhu, 2010; Naidoo, 2008, 2009). Šioje disertacijoje verslo teorija taikoma AM institucijoms, todėl būtina palyginti teorijas. AM tarptautinimui vis dažniau taikoma Pasaulio prekybos organizacijos nustatyta paslaugų įmonių terminija (Czinkota et. al., 2009; Knight, 2003; Larsen et al., 2002; Naidoo, 2009). PPO įėjimo į rinką būdai (paslaugų vartojimas užsienyje, paslaugų teikimas užsienyje, paslaugų kūrimas užsienyje, komercinė veikla užsienyje) galėtų būti atitinkamai siejami su tarptautinių studentų mobilumu, jungtinėmis programomis, tarptautinėmis programomis ir tarptautiniais filialais. TF yra pati intensyviausia, sudėtingiausia ir rizikingiausia eksporto forma, analizuojama kaip verslo principų perkėlimo į aukštojo mokslo vadybą forma.

Šiame darbe vartojama Wilkins ir Rumbley (2018) tarptautinio universiteto filialo apibrėžtis: „Tarptautinis filialas yra organizacinis vienetas, bent iš dalies priklausantis konkrečiai užsienio aukštojo mokslo institucijai, kuri bent iš dalies atsako už filialo strategiją ir kokybės užtikrinimą. Filialas veikia turėdamas užsienio institucijos pavadinimą ir siūlo studijų programas ir (arba) teikia kvalifikacijas su užsienio institucijos pavadinimu. Filialas turi visą reikalingiausią infrastruktūrą: biblioteką, atvirosios prieigos kompiuterines laboratorijas, maitinimo patalpas. Užsienio filialo studentų patirtis yra panaši į kitų filialą įsteigusio universiteto studentų patirtį.“

Siekiant išanalizuoti verslo tarptautinimo teorijų taikymą aukštojo mokslo vadyboje, atlikta penkių verslo tarptautinimo teorijų apžvalga. Atitinkamai buvo išskirti šiuos požiūrius verslo ir aukštojo mokslo kontekstuose aptariantys šaltiniai (S1.1 lentelė).

S1.1 lentelė. Tarptautinės plėtros teorijos verslo ir aukštojo mokslo literatūroje (šaltinis: sudaryta autorės)

Teorija	Šaltiniai verslo srityje	Šaltiniai AM srityje
Upsalos modelis	Buckley et al., 1979; Johanson & Vahlne, 1977, 2009, 2017; Rhee & Cheng, 2002	R. Edwards & J. Edwards, 2001; Girdzijauskaitė & Radzevičienė, 2014; Healey, 2008
Eklektinė paradigma	Dunning, 1980, 1988, 1997, 2015a, 2015b; Root, 1994; Twomey, 2000	Girdzijauskaitė & Radzevičienė, 2014; Healey, 2008; Shams and Huisman, 2012
LLL modelis	Liefner, Wang, 2013; Mathews, 2002, 2006	Radzevičienė & Girdzijauskaitė, 2012
Ištekliais grįstas požiūris	Alexy et al., 2018; Barney, 1991; Barney et al., 2001, 2011; Hitt et al., 2016	Beerkens, 2004; Radzevičienė & Girdzijauskaitė, 2012

S1.1 lentelės pabaiga

Teorija	Šaltiniai verslo srityje	Šaltiniai AM srityje
Sandorio kaštų analizė	Anderson & Gatignon, 1986; Brouthers & Hennart, 2007; Cheung, 2016; Eriksson, 2015; Klein, 1989; Laufs & Schwens, 2014	NIA
Pramoninių tinklų požiūris	Axelsson & Easton, 2016; Håkansson, 2015; Håkansson & Ford, 2002; Johanson & Mattsson, 2015; Johanson & Vahlne, 2009	Beerkens, 2004; Girdzijauskaitė & Radzevičienė, 2013, 2014; Waechter, 2000

Apibendrinant S1.1 lentelėje pateiktą informaciją, galima teigti, kad tarptautinimo būdai ir požiūriai yra plačiau išanalizuoti verslo praktikoje. Tai pagrindžia poreikį papildyti AM vadybos ir tarptautinimo žinias naujomis įžvalgomis.

2. Filialų užsienyje steigimo empiriniai tyrimai

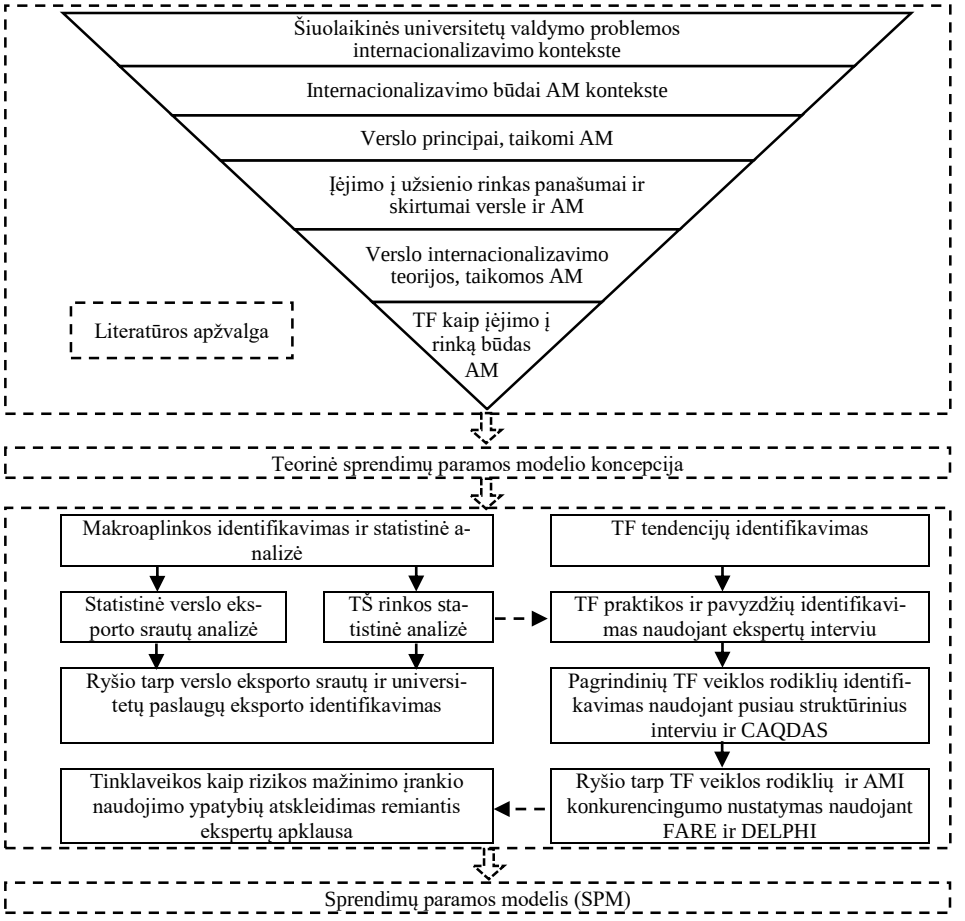
Antrojo skyriaus pradžioje apžvelgta tyrimų metodologija, skirta universitetų tarptautinių filialų steigimo sprendimų paramos modeliui sukurti, siekiant padidinti universitetų konkurencingumą. Tolesniuose skirsniuose aprašyti empiriniai tyrimai ir jų rezultatai.

Darbe buvo taikyti šie tyrimo metodai: statistinių duomenų analizė, keturios ekspertų apklausos (trys iš jų – apie tarptautinių filialų plėtrą, viena – tinklaveikos tema), pusiau struktūruotas interviu, struktūrinė analizė (angl. *framework analysis*), daugiakriteris vertinimas, naudojant FARE metodą, ir Delphi metodas. Atlikta išsami teorinė analizė ir empiriniai tyrimai aukštojo mokslo tarptautinimo tema. Teorinė analizė glaudžiai susijusi su empiriniais tyrimais. Šios disertacijos tyrimo eiga pateikta S2.1 paveiksle.

Siekiant nustatyti disertacijos problematiką ir išanalizuoti jos kontekstą, buvo atlikta kritinė literatūros apžvalga, taikant interpretavimo ir konceptualizavimo metodus. Atliekant literatūros apžvalgą, išsamiai aptarta mokslinė problematika ir akcentuotas poreikis sukurti tarptautiniam AMI filialui steigti skirtą sprendimų paramos modelį, orientuojantis į universiteto konkurencingumo didinimą. Teoriškai nustatyti eksporto rinkos pasirinkimo etapai davė pagrindą empirinio tyrimo klausimams (pvz., užsienio rinkos atrankos kriterijai), kurie buvo tiriami ekspertų apklausose tinklaveikos tema ir TF steigimo tema.

Vėliau buvo analizuojamos verslo tarptautinimo teorijos ir jų pritaikymas aukštajame moksle. Ištekliais pagrįstos teorijos analizė iliustravo išteklių suderinamumo ir papildomumo svarbą tarptautinėje partnerystėje. Eklektinės verslo tarptautinimo teorijos analizė padėjo atskleisti verslo ir aukštojo mokslo praktikos sąsajas. LLL algoritmo analizė atskleidė įdomias jaunų universitetų elgsenos tarptautinėse rinkose ypatybes. Tinklaveika buvo analizuojama kaip įėjimo į užsienio rinkas rizikos mažinimo įrankis. Galiausiai tarptautinis filialas pristatomas ir analizuojamas kaip įėjimo į užsienio rinkas būdas. Remiantis teorinės analizės rezultatais, buvo suformuluoti empirinio tyrimo uždaviniai ir apibrėžta tyrimo metodologija.

Siekiant nustatyti verslo eksporto ir švietimo paslaugų dėsningumus, buvo atlikta statistinių duomenų analizė. Mikro- ir makroaplinkos analizė parodė stipriai augančią studentų kaip tarptautinio švietimo (TŠ) vartotojų tendenciją. Tarptautinio švietimo rinkos vertės apžvalga parodė tarptautinio švietimo svarbą ir poveikį ekonomikai.



S2.1 pav. Disertacijos teorinio ir empirinio tyrimo metodologijos schema (sudaryta autorės)

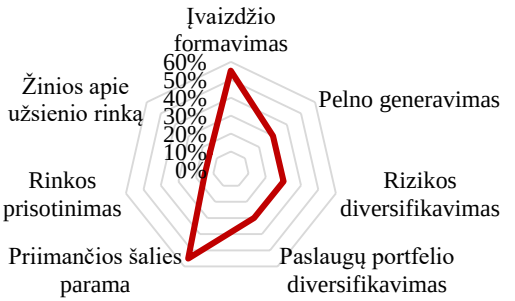
Pasaulyje iš viso yra apie 29 000 aukštojo mokslo institucijų ir tik apie 1 % jų švietimo paslaugų teikiama tarptautiniuose filialuose. Iš visų 311 TF, ištirtų šioje disertacijoje (kai kurie jų buvo uždaryti nuo šio tyrimo pradžios), 40 % jų steigėjų sudarė šalys, turinčios kolonijų, šalių sąjungų, unijų arba okupavimo istoriją (JK, Vokietija, Prancūzija, Rusija ir Nyderlandai). Iš visų šių buvusių kolonijinių valstybių steigtų tarptautinių filialų 70 % buvo įsteigti būtent ankstesnėse jų kolonijose. Beveik visi TF (96 %) atitinka bent vieną iš dviejų sąlygų: 1) oficiali steigiančiosios šalies kalba yra viena iš 10 populiariausių kalbų pasaulyje, 2) šalis, kurios AMI įsteigė TF, yra buvusi kolonijinė valstybė. 86 % visų atvejų sutampa priimančiosios ir steigiančiosios šalių kalbos (t. y. steigiančiosios šalies valstybinė kalba sutampa su viena iš priimančiojoje šalyje vartojamų kalbų arba yra mokoma mokyklose kaip privaloma). 89 % visų atvejų priimančioji ir steigiančioji šalys turi tvirtus prekybos ryšius (t. y. yra tarp dešimties didžiausių prekybos partnerių). Tokie rezultatai atskleidžia dėsningumus tarp tarptautinės AM plėtros ir šalių istorinio konteksto

(ankstesnės kolonijos, mažas psichologinis atstumas, bendra kalba) ir egzistuojantį ryšį tarp verslo eksporto srautų ir švietimo paslaugų eksporto. A priede pateiktas išsamus TF visame pasaulyje sąrašas, nurodant priimančiąsias ir steigiančiąsias šalis.

Siekiant ištirti dėsningumus tarp verslo ir švietimo sektorių, buvo panagrinėtas ryšys tarp vienos didžiausių švietimo paslaugų eksportuotojos (JK) ir vienos pagrindinių JK aukštojo mokslo paslaugų importuotojos (Indijos). Taip pat buvo ištirtas ryšys tarp JAV švietimo eksporto ir Kinijos BVP vienam gyventojui (S2.3 pav.). Kinija yra didžiausia JAV aukštojo mokslo paslaugų importuotoja ir didžiausią pasaulyje švietimo sistemą turinti šalis. Koreliacijos koeficientas (R = 0,9363) rodo stiprų ryšį tarp JAV švietimo eksporto ir Kinijos BVP vienam gyventojui. Rezultatai rodo, kad auganti perkamoji galia Indijoje (vienoje iš svarbiausių JK tarptautines mokslo paslaugas importuojančių šalių) didina JK švietimo paslaugų eksportą. Atitinkamai auganti perkamoji galia Kinijoje didina JAV švietimo paslaugų eksportą. Tai leidžia daryti išvadą, kad vietinės AMI yra nepajėgios patenkinti augančios paklausos, todėl atveria galimybes užsienio švietimo paslaugų teikėjams. Pažymėtina, kad, analizuojant koreliacinius ryšius, buvo ignoruota politinė aplinka ir uždelsto poveikio veiksniai.

Vykdydamos tarptautinio švietimo plėtrą AMI vis dažniau atsigręžia į besivystančias šalis: Indiją, Kiniją, Indoneziją, Vietnamą, Vidurinės Azijos šalis (Bostono konsultacinė grupė, 2018). Buvo ištirtas ryšys tarp ekonominės šių šalių galios ir įsitraukimo į aukštąjį mokslą (BVP vienam gyventojui ir priėmimo į aukštąsias mokyklas (proc.) Indijoje, Kinijoje, Indonezijoje ir Vietname). Koreliacijos koeficientas rodo stiprų stochastinį ryšį. Tai rodo, kad didėjanti perkamoji galia šiose besivystančiose šalyse daro poveikį augančiam priėmimo į aukštąsias mokyklas mastui. Tokiu būdu auga klientų segmentas, kuris patraukia ir užsienio švietimo paslaugų teikėjus. Galima daryti prielaidą, kad BVP vienam gyventojui yra svarbus rodiklis segmentuojant užsienio rinkas tarptautinei AMI plėtrai.

Siekiant atpažinti gerąsias universitetų filialų užsienyje steigimo praktikas, buvo atlikta ekspertų apklausa su universitetų filialų užsienyje vadovais bei išanalizuoti TF pavyzdžiai. Iš visų 250 tuo metu pasaulyje veikusių tarptautinių filialų atvejų tyrimui buvo išrinkti 70. Darant prielaidą, kad bendros populiacijos dydis šiame kontekste yra 250, imties dydis buvo apskaičiuotas su 90 % pasikliautinumo intervalu ir su 10 % paklaidos riba pagal formulę (2.1). Ekspertų įžvalgos patvirtino teiginį, kad TF steigiančiam universitetui yra ypač svarbi priimančiosios šalies vyriausybės parama ir prekės ženklo plėtros galimybės užsienio rinkose (S2.2 pav.).



S2.2 pav. Tarptautinių filialų skatinimo ir traukos veiksniai. Pagal svarbių atvejų skaičių (šaltinis: sudaryta autorės)

Siekiant nustatyti pagrindinius TF veiklos rodiklius, buvo atliktas pusiau struktūruotas interviu su TF ekspertais ir sisteminė analizė, naudojant kompiuterinę kokybinių duomenų analizę (CAQDAS) su „Nvivo“ programine įranga. Tyrime dalyvavo ekspertai (administracijos darbuotojai, tiesiogiai dirbantys su internacionalizavimu ir tarptautinių filialų vadovai) iš AMI, įsteigusios tarptautinius filialus penkiose šalyse (Nyderlanduose, Indonezijoje, Tailande, Pietų Afrikoje ir Katare). Ši institucija yra tarp 1 % aukštojo mokslo institucijų, turinčių TF užsienyje ir viena iš keleto turinčių daugiau nei 3 TF. Tai buvo svarbi priežastis renkantis ekspertų profilį.

Siekiant nustatyti TF poveikį universitetų konkurencingumui ir atpažinti ryšius tarp pagrindinių TF veiklos rodiklių ir universitetų konkurencingumo, buvo taikyti du metodai: ekspertų apklausa Delphi metodu ir vienas iš daugiakriterių vertinimo metodų – FARE. Delphi metodas buvo taikomas siekiant užtikrinti ekspertų apklausos rezultatų patikimumą. Kriterijų svorius FARE tyrimui nustatė ekspertai, kurie buvo pasirinkti remiantis jų tarptautinių filialų valdymo patirtimi, jų universitetų tarptautine patirtimi bei atstovaujamų šalių įvairove. Todėl ekspertais buvo išrinkti vadovai iš įvairių šalių universitetų ir TF.

Atlikus sisteminę interviu medžiagos analizę duomenų kodavimo būdu, bei atlikus Delphi ir FARE tyrimus, buvo nustatyti šie, respondentų nuomone, pagrindiniai TF veiklos rodikliai, turintys įtaką AMI konkurencingumui, su atitinkamai priskirtais svoriais: TF dėstomų studijų programų skaičius (0,25), TF studentų skaičius (0,19), socialinių partnerių skaičius priimančiojoje šalyje (0,16), tarptautinio (ne vietinio) personalo skaičius TF (0,15), TF metinės pajamos (0,13), partnerių skaičius steigiant TF jungtinės veiklos pavidalu (0,12).

Siekiant nustatyti tinklaveikos panaudojimo kaip rizikos sumažinimo įrankio tarptautinių filialų steigimo procese ypatybes, buvo atlikta ES aukštojo mokslo institucijų tarptautinių ryšių profesionalų apklausa. Apibendrinus tinklaveikos tyrimo rezultatus, galima daryti išvadą, kad šis internacionalizavimo būdas galėtų būti tinkamas rinkti patirtį apie užsienio rinkas, megzti ryšius ir testuoti atskiras paslaugas tarptautinėje aplinkoje. Tarptautiniai tinklai yra puikus įrankis institucijoms su ribotais ištekliais, siekiančioms intensyvios tarptautinės plėtros. Tinklaveika gali būti išnaudojama kaip partnerių paieškos ir patirties kaupimo platforma ateities tarptautinėms veikloms.

Atlikti tyrimai suteikė vertingų duomenų apie pagrindinius tarptautinių filialų veiklos rodiklius, atskleidė pasaulines tendencijas ir padėjo suformuoti sprendimų paramos modelio pagrindus. Atskleista tinklaveikos nauda eksporto portfelio testavimui užsienio rinkose prieš steigiant TF, ryšys tarp istorinio konteksto ir tarptautinės AM plėtros bei verslo ir švietimo eksporto srautų dėsningumai (AM plečiasi į tas rinkas, į kurias egzistuoja dideli verslo sektorių prekių ir paslaugų srautai). Atliekant teorijų analizę, suformuotas teorinis modelio pagrindas, kuris buvo pagrįstas ir detalizuotas atliekant empirinius tyrimus, dalyvaujant keturioms tarptautinėms ekspertų grupėms. Trečiajame skyriuje pateikiamas modelis, aprašomas jo empirinis pagrindimas bei aprobavimas ir atskleidžiamos taikymo perspektyvos bei ribotumai.

3. Tarptautinių filialų steigimo sprendimų paramos modelis

Trečiajame skyriuje detalizuojamas trijų etapų sprendimų paramos modelis, taikomas steigiant tarptautinius filialus. Modelis pagrįstas teorinių ir empirinių tyrimų rezultatų sinergija.

Modelyje siūloma versliu požiūriu grįsta į užsienio rinkas einančių AMI organizacinė elgsena, kuri vis dažniau taikoma patyrusiose AMI. Šią prielaidą paremia Clark (1998) verslaus universiteto koncepcija. Kirby (2005) nuomone, kad būtų sėkmingos, AMI turės taikyti verslo principus. Etzkowitz (2017) pabrėžia didėjančio bendradarbiavimo su pramone svarbą. Czinkota et al. (2009), Ennew (2012) ir Naidoo (2008, 2009) savo tyrimuose lygina universitetus su verslo įmonėmis ir remia verslo teorijos taikymą aukštojo mokslo kontekste. Wilkins & Huisman (2012) palaiko idėją, kad kai kurios AMI siekia konkurencinio pranašumo, didžiausią dėmesį skirdamos vietinės veiklos kokybei ir reputacijai, o kitos AMI šiuo tikslu išnaudoja tarptautinius filialus. Internacionalizavimo ir tarptautinės veiklos poveikį universiteto konkurencingumui taip pat patvirtina ir kiti mokslininkai (Altbach & Knight 2007; De Haan, 2014; De Wit, 2010; Graf, 2009).

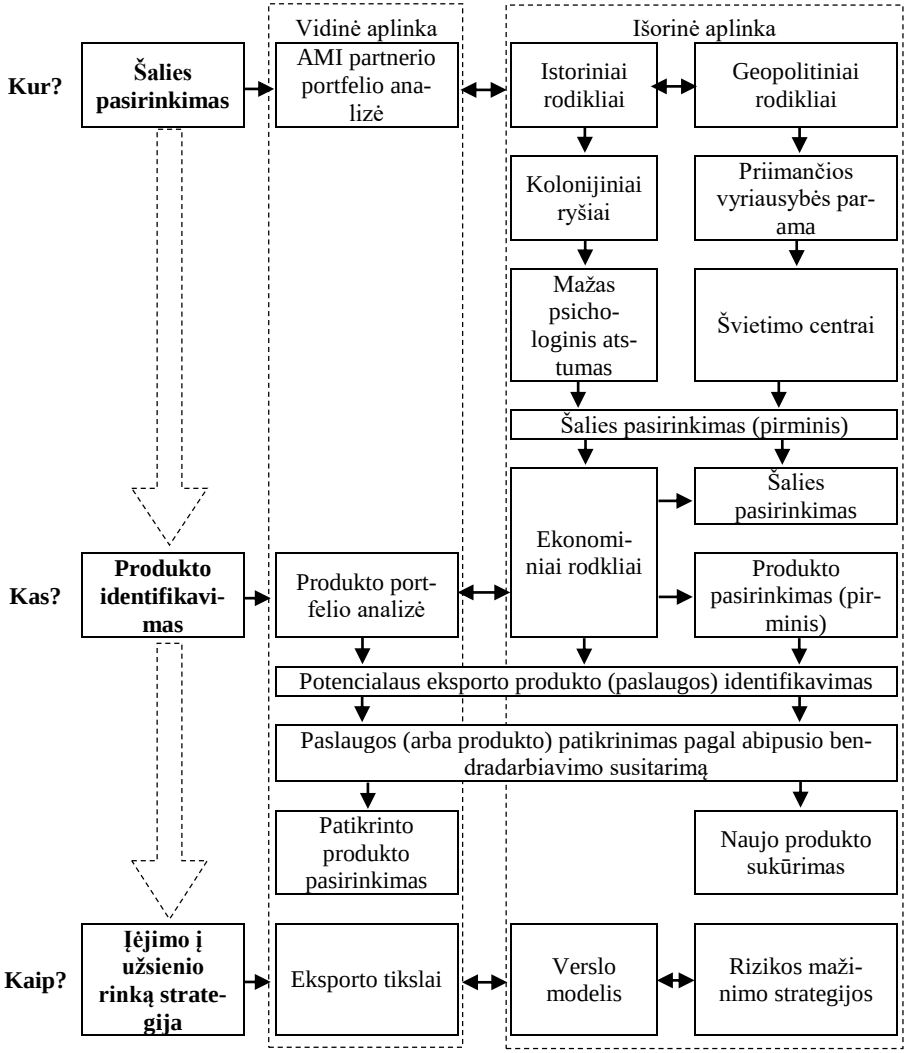
Svarbiausia modelio idėja – sukurti sistemą, padedančią konkrečiai AMI priimti šiuos sprendimus TF steigimo procese: į kokią rinką eiti, kokias paslaugas eksportuoti ir kokiu būdu. Sprendimų paramos modelis steigti TF susideda iš trijų horizontalių blokų (etapų): pirmame bloke analizuojamas šalies pasirinkimas (pirminio ir galutinio potencialių šalių sąrašo sudarymas), antrame – produkto identifikavimas, trečiame aptariamas įėjimo į rinką būdas (S3.1 pav.). Taip pat vertikaliai modelis padalijamas į vidinę ir išorinę institucijos aplinką.

Pirmoje modelio dalyje (šalies pasirinkimas – vidinės aplinkos analizė) skatinama atsižvelgti į AMI šalis partneres. Anksčiau sukurti ir sėkmingai palaikomi santykiai su partneriais tam tikrose šalyse suteikia vertingų žinių apie užsienio rinką ir rinkos patikrinimo per tinklaveiką ateities perspektyvas. Dėl ankstesnių partneryščių įgytos žinios padeda ištirti rinkos poreikius ir šių poreikių ryšį su jau turimomis paslaugomis, kurie bus nustatyti kitame etape.

Išorinės aplinkos analizės etape, vykdant potencialių eksporto rinkų atranką, identifikuojamos dvi rodiklių grupės: istoriniai ir geopolitiniai veiksniai. Istoriniais veiksniais laikomi šalių kolonijiniai santykiai ir kultūrinis bei geografinis atstumas. Patikrinti esamų TF gerosios praktikos pavyzdžiai atskleidžia istorinio konteksto svarbą tarptautinio filialo steigimui, pasirenkant rinkas, kurios galbūt yra buvusiose eksportuojančios šalies kolonijose arba yra mažai kultūriškai ir / arba geografiškai nutolusios (pvz., turinčios panašią kultūrą ir / ar tą pačią valstybinę kalbą).

Geopolitiniai rodikliai taip pat atlieka labai svarbų vaidmenį pasirenkant šalį. Tai priimančiosios vyriausybės parama ir nacionaliniai švietimo centrai. Remiantis ekspertų apklausa, politinė aplinka dėl savo didelės svarbos turėtų būti rimtai apsvarstyta. Palanki politinė aplinka ir vietos vyriausybės parama pasitarnauja kaip riziką mažinantis veiksnys. Priimančiųjų šalių vyriausybės kartais yra linkusios taikyti tam tikrą protekcionizmą užsienio AM teikėjų atžvilgiu. Švietimo slėniai taip pat yra priimančiosios vyriausybės pagalbos forma, sukurianti palankią aplinką užsienio teikėjams. Priimančiosios šalies vyriausybės požiūris į tarptautinių švietimo paslaugų importą skirtingose šalyse gali svyruoti

nuo vieno kraštutinumo prie kito: pradedant daliniu iniciatyvos finansavimu, baigiant nepalankiais įstatymais. Neigiamas vyriausybės požiūris į užsienio AM tiekėjus gali būti pagrindinis pasitraukimo iš rinkos veiksnys.



S3.1 pav. Trijų etapų tarptautinio filialo steigimo modelis kaip įėjimo į užsienio rinkas būdas (šaltinis: sudaryta autorės)

Atsižvelgus į šiuos veiksnius, sudaromas pirminis šalių, kuriose gali būti steigiami TF, sąrašas. Kitas žingsnis galutinio eksporto rinkų sąrašo link – ekonominės šalių aplinkos analizė, kuri yra dvejopa: išnagrinėti eksportuojančios šalies prekybos santykius su

šalimis iš pirminio sąrašo (pirmenybė teikiama pagrindiniams prekybos partneriams, patenkantiems į dešimt ar mažiau stipriausių prekybos partnerių) ir patikrinti ekonomikos augimą rinkose (kuo didesnė perkamoji galia, tuo didesnė paslaugų pardavimo tikimybė). Po šio žingsnio sudaromas galutinis eksporto rinkų sąrašas.

Antrame sprendimų paramos modelio bloke analizuojamas paslaugų eksportui nustatymas. Institucija atlieka turimų paslaugų portfelio analizę, siekiant atpažinti potencialias paslaugas eksportui per TF. Kalbant apie išorinės aplinkos vertinimą, analizuojant eksporto paslaugas, turi būti įvertinti ekonominiai santykiai tarp ankstesniuose etapuose išrinktų šalių ir nustatyta paklausos tose rinkose atitiktis turimoms paslaugoms. Šio žingsnio tikslas – nustatyti švietimo paslaugas, atitinkančias priimančiosios šalies ekonomikos augimo prognozes ir paklausą. Pavyzdys galėtų būti rinkos, koncentruotos į turizmo plėtrą, atrinkimas, pastebint gana menką švietimo rinkos prisotinimą šioje srityje, ir turizmo vadybos studijų programų įvedimas į šią rinką. Tokiu būdu sudaromas galutinis eksporto paslaugų sąrašas.

Nustačius kelias galimas paslaugas kaip galimai paklausias užsienio rinkoje, jas rekomenduojama patikrinti dvišalio bendradarbiavimo arba tinklaveikos sąlygomis. Žinoma, dvišalis bendradarbiavimas šiuo atveju lemia glaudesnę sąveiką ir didesnį grįžtamąjį ryšį apie paslaugos kokybę. Taip pat gali paaiškėti, kad tinkamos paslaugos AMI portfelyje nėra ir reikia sukurti bei pritaikyti paslaugas konkrečiai rinkai. Eksportui tinkamų paslaugų pavyzdžiai: pirmosios ir (arba) antrosios pakopos studijų programos, jungtinių arba dvigubų laipsnių studijų programos, nuotoliniai kursai, individualūs moduliai, profesinio mokymo kursai, laipsnio nesuteikiantys kursai ir pan.

Trečiame bloke pasirenkamas įėjimo į rinką būdas ir strategija. Vidinės aplinkos etape pagrindinis tikslas – apibrėžti eksporto tikslus. Darbe buvo suformuluoti šeši TF veiklos rodikliai, gerinantys aukštųjų mokyklų konkurencingumą užsienio rinkoje: dėstomų studijų programų skaičius TF, studentų skaičius TF, socialinių TF partnerių skaičius priimančiojoje šalyje, tarptautinio personalo (ne vietinio) skaičius, metinės TF pajamos ir partnerių skaičius steigiant TF remiantis jungtinės veiklos sutartimi. Reikėtų atsižvelgti į visus pirmiau išvardytus rodiklius ir pagal šiems rodikliams nustatytas vertes suformuoti išteklių bazę ir bendrą TF politiką. Išteklių bazės ir filialo politikos formavimui priskiriamas finansinių ir žmogiškųjų išteklių bazės sudarymas, darbuotojų priėmimo strategijos parengimas, įdarbinimo ir atlyginimų politika, studijų tvarkos aprašų parengimas ir bendras studijų programų adaptavimas.

Filialui steigti reikalinga stipri finansinių išteklių bazė. Daugelyje šalių filialų veikla finansuojama iš universiteto generuojamų pajamų. Kai kurias su filialais susijusias iniciatyvas gali paremti priimančiosios šalies vyriausybė (pvz., paremti švietimo paslaugas, kurios yra orientuotos į konkrečių šalies problemų sprendimą ir pan.). Remiantis kitų TF patirtimi, sėkmės atveju pradinės investicijos gali atsipirkti per 2–3 metus.

Žmogiškieji ištekliai – nepaprastai svarbus veiksnys. Tarptautinė TF analizė ir ekspertų apklausa įrodo, kad TF gali pradėti veikti turint vos 4–10 etatinių akademinių darbuotojų ir 20–50 studentų. Tačiau etapas, apimantis pasiruošimą filialo steigimui ir laikotarpį po jo įsteigimo, gali lemti papildomą darbo krūvį ir (arba) neįprastas užduotis AMI administracijai. Todėl svarbu parengti vietos personalo įdarbinimo strategiją ir atitinkamą atlyginimų politiką, įdiegus naujas darbo organizavimo formas ir taisykles.

Pradiniame filialo steigimo etape AMI gali nepakakti žmogiškųjų (ypač administracinio pobūdžio) išteklių, nes rinkoje tokią specifinę patirtį turinčių kandidatų yra nedaug. Siekiant išspręsti šį trūkumą ir (arba) nustatyti pavyzdį esamam personalui, rekomenduojama apsvarstyti galimybę priimti į darbą vietos profesionalus. Galėtų būti paskirtas už filialo veiklos koordinavimą TF atsakingas asmuo ir sudarytos darbo grupės. Koordinuojančio asmens rangas (prorektorius, tarptautinių ryšių direktorius ir pan.) priklauso nuo institucijos dydžio, tarptautinimo masto ir įprastos tai institucijai praktikos.

Galiausiai svarbu apsvarstyti mokymo politikos ir studijų programos pritaikymą vietos rinkai. TF ekspertai nepriskyrė šių veiksnių tiems, kurie keltų esmines adaptacijos problemas, nes TF atveju mokymo politika iš esmės yra lankstus veiksnys ir santykinai lengvai koreguojamas. Taip pat ir dėl to, kad originali studijų programa, užsienio dėstytojai ir užsienio institucijos mokymo metodai yra pagrindinės vertybės studentams, siekiantiems autentiškos patirties užsienio universiteto filiale.

Trečiojo bloko tikslas atsižvelgiant į išorinę aplinką – nustatyti konkrečius įėjimo į užsienio rinką būdus, pasirenkant atitinkamą rizikos mažinimo, steigiant tarptautinį filialą, strategiją. Kaip aptarta 1.4 poskyryje, instituciniai skirtumai ir institucinis neapibrėžtumas priimančiojoje šalyje yra svarbūs veiksniai šiame etape (žr. rizikos mažinimo strategijas S3.2 pav.). Jei instituciniai skirtumai tarp eksportuojančios ir priimančiosios šalies institucijų yra gana maži ir institucinis neapibrėžtumas priimančiojoje šalyje yra nedidelis, tuomet universitetas gali perkelti savo veiklą į tarptautinį filialą be esminių pakeitimų. Gali būti pritaikyti tie patys procesai ir įgyvendintos tos pačios programos su mažais pakeitimais arba beveik visai nieko nekeičiant. Šis būdas gali būti taikomas, pavyzdžiui, Amerikos AMI, kurios turi ar planuoja turėti filialus Vakarų Europoje, Australijoje ir Naujojoje Zelandijoje.

Institucinis skirtingumas priimančiojoje šalyje	Institucinis neapibrėžtumas priimančiojoje šalyje: Mažas	Institucinis neapibrėžtumas priimančiojoje šalyje: Didelis
Didelis	**Adaptuokite** Vidutinė rizika, sudėtingumas, pastangos Įsteikite tarptautinį filialą, adaptuodami struktūras ir procesus priimančiosios šalies instituciniam kontekstui.	**Venkite** Didelė rizika, sudėtingumas, pastangos Nesteikite tarptautinio filialo šioje šalyje – rizika per didelė
Mažas	**Perkelkite** Maža rizika, sudėtingumas, pastangos Įsteikite tarptautinį filialą naudodami tas pačias struktūras ir procesus kaip ir vietos filialuose	**Apsidrauskite** Vidutinė rizika, didelis sudėtingumas, pastangos Įsteikite tarptautinį filialą kartu su vietos partneriu arba gaukite finansavimą ir saugumo garantijas iš priimančiosios šalies vyriausybės

S3.2 pav. Tarptautinio universiteto filialo steigimo užsienyje rizikos mažinimo strategijų matrica, atsižvelgiant į institucinius skirtumus ir institucinį neapibrėžtumą (šaltinis: Phillips et al., 2009)

Esant dideliems instituciniams skirtumams, bet nedideliam neapibrėžtumui priimančiojoje šalyje, filialą steigti galima, tačiau rekomenduojama atlikti kruopštų patikrinimą ir pritaikyti struktūras bei procesus instituciniam priimančiosios šalies kontekstui. Tikėtina, kad maži instituciniai skirtumai, bet palyginti didelis neapibrėžtumas bus besivystančiose šalyse (pvz., priimančiosios šalies AMI gali turėti skirtingą studijų modelį ir organizacinę struktūrą). Tokioje aplinkoje riziką gali sumažinti vietos partnerystės (su kitomis AMI, neuniversitetinėmis mokslo institucijomis, įmonėmis ir pan.). Toks pavyzdys buvo efektyviai pritaikytas tarp užsienio universitetų, steigiančių TF Malaizijoje 1996–2007 m., ir vietos AMI, kurie teikė užsienio universitetams informaciją apie rinką ir skyrė fizinę infrastruktūrą jų filialams.

Tiek instituciniai skirtumai, tiek neapibrėžtumas priimančiojoje šalyse sukelia didžiulę riziką, ir galima nauda gali neatpirkti įdėtų pastangų. Pavyzdžiui, Indijoje yra didelis AMI trūkumas, tačiau sudėtinga AM reglamentavimo sistema sumažina šalies patraukluma užsienio universitetams. Rizikos mažinimo strategijų analizė rodo, kad, esant dideliam neapibrėžtumui ir mažam instituciniam skirtingumui, rekomenduojama steigti bendrą įmonę kartu su vietos institucija. Bendro TF steigimas galėtų būti vertinamas kaip mažesnės rizikos įėjimo į rinką būdas.

Disertacijoje pasiūlytas modelis yra įrankis savininkams, vadovams ir sprendimų priėmėjams tose AMI, kurios planuoja plėsti švietimo eksporto veiklą ir yra pasirengusios svarstyti tarptautinius filialus kaip priemonę tam tikslui pasiekti. Modelis taikomas kaip orientacinis sprendimų priėmimo žemėlapis. Sprendimų priėmėjai turi surinkti ir patikrinti duomenis pagal šioje disertacijoje pasiūlytus kriterijus. Taip sudaromas galutinis galimų sprendimų sąrašas dėl rinkos, eksportuojamos paslaugos ir eksporto strategijos.

Atlikus sprendimų priėmimo modelio aprobavimą vieno iš Lietuvos universitetų (VGTU) pavyzdžiu, buvo nustatytos trys sprendimų alternatyvos. 1 alternatyva: steigimo rinka – Latvija, studijų programos: Aplinkos apsaugos technologijos ir valdymas (dvigubo laipsnio magistro programa su Rygos technikos universitetu), Inovatyvi kelių ir tiltų inžinerija (jungtinė magistro studijų programa su Rygos technikos universitetu), Elektros energetikos sistemų inžinerija (magistro studijų programa), įėjimo į rinką būdas – bendras TF su vietos AMI. 2 alternatyva: steigimo rinka – Ukraina, studijų programa: Transporto logistika (magistro programa), įėjimo į rinką būdas – nepriklausomas filialas. 3 alternatyva: steigimo rinka – Ukraina, studijų programos: Verslo vadyba (magistro programa), Statybos inžinerija (bakalauro programa), Transporto logistika (magistro programa), įėjimo į rinką būdas – bendras TF su užsienio AMI.

Bendrosios išvados

1. Aukštojo mokslo, kaip ir verslo, pasaulyje, konkurencingumas stipriai priklauso nuo veiklos tarptautiškumo. Didėjant švietimo paslaugų vartojimui, augant tarptautinei švietimo rinkai ir konkurencijai, aukštojo mokslo institucijos imasi vis aktyvesnių priemonių potencialiems klientams pritraukti. Verslo principai vis dažniau taikomi aukštojo mokslo praktikoje, ypač tarptautinės plėtros srityje. Viena iš tokių iniciatyvų yra tarptautinio filialo steigimas užsienyje.

2. TF steigimas gali būti būdas reikšmingai sustiprinti tarptautinį AMI vaidmenį. Jei AMI vadovybei pavyksta anksti atpažinti potencialias eksporto rinkas, kai užsienio AM paslaugų teikėjų konkurencija jose dar nedidelė, o sprendimas įeiti

į rinką sutampa su šios konkrečios rinkos augimo potencialu, TF steigimas galėtų būti labai sėkmingas. Sukurta rodiklių sistema AMI tarptautinės plėtros įtakai universiteto konkurencingumui įvertinti ir atskleistas ryšys tarp pagrindinių TF veiklos rodiklių ir universiteto konkurencingumo.

3. Tyrimo rezultatai atskleidė, kad tinklaveika galėtų būti veiksminga priemonė, siekiant patikrinti ir sustiprinti institucinius pajėgumus, prieš savarankiškai įeinant į naują užsienio rinką. Tinklaveikos principų taikymas suteikia galimybę AMI parodyti save vietos žaidėjų tinkluose, pasitelkiant juos kaip ryšininkus ir tarpininkus.

4. Tyrimų rezultatai pasitarnavo kuriant sprendimų paramos modelį tarptautinių universitetų filialų steigimui užsienyje. AMI linkusios plėstis į tas rinkas, su kuriomis sieja istorinis kontekstas ir kuriose yra palanki geopolitinė aplinka. Verslo eksportas pagreitina švietimo paslaugų eksportą. Tyrimo rezultatai rodo universitetų plėtros tendenciją į tas rinkas, į kurias nukreipti dideli verslo eksporto srautai. Taip pat nustatyta, kad auganti perkamoji galia šalyse, kurios yra pagrindinės švietimo importuotojos, didina švietimo eksporto srautus į tas šalis. Pajamų generavimas nėra svarbiausias tikslas steigiant universitetų filialus užsienyje. Tyrimai rodo, kad šiame procese didesnę įtaką turi institucijos įvaizdžio formavimas vietinėje ir užsienio rinkose.

5. Susisteminus visus nustatytus dėsningumus, pasiūlytas sprendimų paramos modelis, leidžiantis priimti universitetams tarptautinės plėtros sprendimus, naudojant TF kaip įėjimo į užsienio rinkas įrankį. Praktiniu požiūriu aukštojo mokslo institucijos galėtų panaudoti šį įrankį kurdamos geresnes tarptautinimo strategijas, kurios galėtų padėti geriau paskirstyti išteklius ir pagerinti AMI konkurencingumą. Tai prisideda prie disertacijos aktualumo ir leidžia panaudoti ją praktiniams tikslams.

6. Išskirti šie sprendimų paramos modelio apribojimai: 1) modelis yra sukonstruotas tarptautinio filialo steigimo etapui; 2) neatsižvelgta į politinės aplinkos, gyventojų augimo, gamtos sąlygų ir nelaimių rodiklius. Ši disertacija yra pagrindas tęsti TF strateginio valdymo pagal įvairius TF tipus modeliavimo tyrimą. Taip pat tyrimai galėtų būti tęsiami, siekiant sukurti ir patikrinti AMI švietimo paslaugų eksporto portfelio efektyvumą.

Annexes[13]

Annex A. List of international branch campuses worldwide

Annex B. United Kingdom export in business and higher education

Annex C. Expert survey questionnaire on the unique international branch campus establishment frameworks

Annex D. Expert questionnaire on the criteria weight determination (FARE method)

Annex E. Expert survey questionnaire on the international networking of HEIs

Annex F. Author's Declaration of Academic Integrity

Annex G. The Co-Authors' Agreements to Provide Published Material in the Thesis

Annex H. Copies of Scientific Publications by the Author on the Topic of the Dissertation

[13] The annexes are supplied in the enclosed compact disc.

Eglė GIRDZIJAUSKAITĖ

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Doctoral Dissertation

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Management (S 003)

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