

## Exploring the relationship between university internationalization and university autonomy

*Toward a theoretical understanding*

Turcan, Romeo V.; Gullieva, Valeria

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## **Exploring the relationship between university internationalization and university autonomy: Toward a theoretical understanding**

### **Abstract.**

In this paper we explore a gap in international business research that is found at the intersection of university internationalization and university autonomy. We argue that the process of university internationalization and its sustainability is dependent on domestic and international university autonomy settings. We put forward a process model of university internationalization whereby the process of university internationalization is mediated by university internationalization capacity and moderated by target country institutional autonomy and globalization; and university's internationalization pattern is defined by entry modes, timing and pace, and product mix. To further understand the emergent gap, we conducted a systematic review aimed at identifying empirical studies that theorize and conceptualize the intersection. As a result, thirty-five papers were reviewed, of which sixteen on university internationalization and nineteen on university autonomy.

Drawing on international business theories, namely OLI paradigm and institutional theory, we further theorized the intersection limiting the scope to the internationalization of universities from developed countries to emerging countries. We conjecture that universities with higher degree of internationalization capacity and those perceiving high institutional voids will tend to prefer equity modes of entry. In the context of university internationalization, we define institutional voids as incompatibility between internationalization capacity of a university and respective institutional autonomy in a target country.

Being exploratory in nature, this paper identified a number of future research directions in order to advance our understanding of the intersection. A complete systematic review is required, widening the scope of search beyond the journals used in this paper. Future, theory building research is needed to understand how and why of the intersection, including descriptive, cross sectional and longitudinal cases of successes and failures. Future research shall blend the two research streams – university internationalization and university autonomy – by borrowing more actively from each and other disciplines in order to advance our theoretical understanding of the intersection. Among other things, this blending will help identify and operationalize intersection theoretical constructs, and develop respective measurement instruments.

**Keywords:** university internationalization; university autonomy; international business; systematic review; theory building

# **Exploring the relationship between university internationalization and university autonomy: Toward a theoretical understanding**

## **INTRODUCTION**

This paper aims to advance our theoretical understanding of internationalization of universities by exploring the relationship between university internationalization and university autonomy. Nowadays universities incorporate internationalization into their mission statements and strategic plans (Bartell, 2003; Altbach, 2004; Stromquist, 2007; Dewey & Duff, 2009; Horta, 2009; Maringe, 2009; Delgado-Marquez et al., 2011; de Wit, 2012; Gallagher & Garrett, 2012; CIGE<sup>i</sup>, 2012; Maringe & Foskett, 2010). By 2012, there were approximately two hundred international branch campuses worldwide that were awarding degrees – a trend fueled for example by internationalization to the Far East, intra-regional cooperation, and national governments' agenda to establish education hubs for national economic growth (Lawton & Katsomitros, 2012).

Such aspirations towards university internationalization are not without pitfalls however; there are discrepancies between university internationalization and reality of significant constraints and challenges on the ground (Altbach & Peterson, 1998; Altbach, 2004; Altbach & Knight, 2007; Foskett, 2010; de Wit, 2012; CIGE, 2012; Gallagher & Garrett, 2012; Knight, 2004). One of such constraints pertains to university autonomy. University autonomy defines the relationship between a university and its main stakeholders and consists of financial, organizational, staffing and academic autonomy (Estermann & Nokkala, 2009).

In target countries, universities have to deal with new, different and quite often incompatible university autonomy settings. Conventional 'internationalization' wisdom suggests that universities shall adapt to their strategies, resources, structures and organizations to international environments (Edwards & Edwards, 2001). In the context of this research, this would mean that universities shall adapt to and comply with target country university autonomy (e.g., Bartell, 2003; Knight, 2012). The challenge in pursuing this wisdom however is to what degree universities embrace new, dissimilar and sometimes conflicting elements of financial, organizational, staffing and academic autonomy of the target country. The other issue, following from the previous concern, is whether universities compromise their home bounded university autonomy to get access to foreign market's higher education. Both issues raise concerns about "the corrosion of individual and university-wide autonomy" (Welch,

2002, p. 470) as well as about the sustainability of university internationalization efforts. Examples of internationalization failures due to incompatibility between university autonomy settings are the cases of New York University, Michigan State University, Yale University and a number of Australian universities (Sidhu, 2009; Ng & Tan, 2010; Altbach, 2011).

In this paper we argue that the process of university internationalization and its sustainability is dependent on domestic and international university autonomy settings. To date however, our knowledge at this intersection of university internationalization and university autonomy is scarce, virtually non-existent. Given this gap in the body of knowledge, we conducted a systematic review of empirical papers grounded separately in the areas of university internationalization and university autonomy. Following the methodology of conducting a systematic review (Tranfield et al., 2003; Petticrew & Roberts, 2006), we have reviewed 35 empirical papers. We continue with intersection theoretical background, followed by methodology; findings are discussed next and future research directions conclude the paper.

## **THEORETICAL BACKGROUND**

### Understanding the intersection

Our starting point in this endeavor was to position our research at the intersection of university internationalization and university autonomy. The initial keyword search in the ProQuest database using the following search strings: ‘university internationalization and university autonomy’ yielded 0 hits (the search was limited to ‘scholarly journals’). We then altered the search string by replacing ‘university autonomy’ with ‘institutional autonomy’ and just ‘autonomy’. This search then yielded 3 and 12 hits respectively, of which 3 papers overlapped. After manually scanning these papers, we have identified one conceptual (Shams & Huisman, 2012) and one empirical (Yokoyama, 2011) paper.

Shams & Huisman (2012) propose a framework that captures managerial complexities of running off-shore branch campuses. They view university internationalization as a process whereby universities award degrees to students located in different countries via distance education, partner supported delivery and setting up branch campuses. Although these authors do not explicitly theorize university autonomy in the paper, they do employ a number of autonomy types and their properties to explain managerial challenges when setting up branch campuses, such as academic autonomy, professional autonomy, staffing autonomy, autonomy to alter curriculum, and regulatory distance. Shams & Huisman (2012), drawing from the OLI

paradigm (Dunning, 1980), put forward a conceptual framework that is trying to define strategic orientation of university internationalization along three dimensions: ownership, local-specific, and internalization advantages. More specifically, the framework delineates the extent to which a university has relied on its ownership advantages (e.g., strong research, teaching profile, and prestigious brand names), local-specific advantages (e.g., ability to offer cheaper educational services), or both to benefit from the internalization advantages (e.g., branch campus vs. licensing or joint venturing).

Yokoyama (2011) explores how the meaning of autonomy and accountability changes between domestic and overseas campuses using the universities in the New York State as a case. Yokoyama defines autonomy as taking control of the university's undertakings, defining its goals, and planning to achieve its needs through its own powers, maintain that the power of autonomy may reside in an institution (institutional autonomy) and/or individuals (individual autonomy or academic freedom). Yokoyama (2011) found that home campuses emphasize substantial autonomy and managerial, professional, and market accountability, which are mainly shaped by the state's regulatory mode, the market and the accreditation scheme of a regional accrediting body. As the meanings of autonomy and accountability of overseas campuses, they are far more complex and hybrid than those within home territory mainly because of shift in the state's regulatory mechanism, different implication of the accrediting body's practice for the meaning of accountability, and the involvement of new regulatory bodies – authorities in host countries.

The lack of research at this intersection as well as recentness of the identified papers led us to conclude that the research at the intersection of university internationalization and university autonomy is in an embryonic stage. Giving the scarcity of research, we need to learn more about the two research streams separately that form the intersection and subsequently apply this knowledge to and theorize about the intersection in question.

#### Understanding the components of the intersection

University internationalization is seen as being dependent on legal frameworks and governmental control (Knight, 2003; 2006), changes in the market (Altbach & Teichler, 2001; Altbach & Knight, 2007) and globalization pressures (Altbach, 2004). Knight (2003, p. 2) defines university internationalization at the national/sector/institutional levels as "...the process of integrating an international, intercultural or global dimension into the purpose,

functions or delivery of post-secondary education”. Altbach (2004) introduces to the fore the distinction between globalization and internationalization, arguing that internationalization is often confused with globalization. He defines globalization as “...the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable” (Altbach, 2004, p. 5). At the same time, Altbach views internationalization as “...specific policies and programmes undertaken by governments, academic systems and institutions, and even individual departments or institutions to cope with or exploit globalization” (Altbach, 2004, p. 6).

As to university internationalization stimuli, Altbach & Knight (2007) suggest the following: earning money, enhancing research, curricular and knowledge capacity, enhancing cultural understanding, providing access and absorbing demand, and offering international and cross-cultural perspectives to the students. As to internationalization modes, universities internationalize mainly via branch campuses, franchised academic programs or degrees, or independent institutions based on foreign academic models (Altbach & Knight, 2007).

University autonomy is seen as the main requisite for improving university competitiveness (European Commission, 2005). Definitions of university autonomy are abundant. Bleiklie (2007, p. 397) defines university (institutional) autonomy: “...the extent to which the institutions are free to make choices regarding their daily management of teaching and research as well as to formulate strategies for their future development”. Estermann and Nokkala (2009, p. 6) define it as “...constantly changing relations between the state and higher education institutions and the degree of control exerted by the state, depending on the national context and circumstances”. For the purpose of this study, we adopt the four dimensions of university autonomy as set out by the Lisbon Declaration (EUA<sup>ii</sup>, 2007), namely: organizational, financial, staffing, and academic autonomy.

*Organizational autonomy* takes the corporate view on university autonomy and includes three major components: managerial, policy and governance (Enders et al., 2013), dealing with organizational structures and institutional governance – in particular, the ability to establish structures and governing bodies, university leadership and who is accountable to whom (Estermann & Nokkala, 2009). *Financial autonomy* reflects the extent of universities’ dependency on governmental funding and alternative sources of income (Konthamaki & Lyytinen, 2004; Enders et al., 2013). It expresses the extent to which universities can

accumulate financial resources and keep profits, acquire and allocate funding, own buildings and equipment, change tuition fees, borrow and raise money, and make financial investments (Estermann & Nokkala, 2009). *Academic autonomy* reflects the capacity of universities to define their academic profile, introduce or terminate degree programs, define structure and content of degree programs, assure quality of education, and exercise control over student admissions (Berdahl 1990; Estermann & Nokkala, 2009). *Staffing autonomy* as an intermediary position between financial and academic autonomy and indicates the capacity to recruit staff, set terms of employment and deal with issues relating to employment contracts such as civil servant status (Estermann & Nokkala, 2009; de Boer et al., 2010).

#### An attempt to theorize the intersection

To theorize the intersection, we turn to the international business literature. We borrow two dimensions of firm's internationalization, namely its internationalization *pattern* and its internationalization *capacity* (Welch & Luostarinen, 1993; Petersen & Welch, 2003). The internationalization pattern of a firm refers to diverse activities performed outside the home country and addresses the questions of what, how, where and when. The internationalization capacity of a firm refers to the resource base of the firm (technological, human and financial), internationalization strategy, organizational structure and processes, as well as the motivation of the firm's decision makers to operate internationally. For the purpose of theorizing the intersection, we associate the internationalization pattern with university internationalization and the internationalization capacity with university autonomy; the emergent model is depicted in Figure 1 and discussed below.

Figure 1 about here

We maintain that the internationalization capacity of a university is defined by its autonomy and consists of four types: organizational, financial, staffing, and academic autonomy. As to the internationalization pattern of a university, we maintain that it is defined by how, what, where and when of university internationalization. By how, we refer to the modes of internationalization, namely branch campuses, franchised academic programs or degrees, and independent institutions based on university academic models (Altbach and Knight, 2007). By what, we refer to academic and research programs (as product mix), such as student and staff exchange programs, research exchange programs, work/study abroad, joint/double-degree programs, and area and theme centers, to name a few (Knight, 2004). By when, we refer to

timing and pace of university internationalization that are affected to a large extent by globalization. By where, we refer to institutions (Scott, 2001; Peng et al., 2008) and institutional voids (Khanna et al., 2005) in a target country, defined by university or institutional autonomy in a target country.

As the model suggests (Figure 1), we conjecture that the process of university internationalization is mediated by the internationalization capacity of a university, and moderated by the institutional autonomy in the target country and globalization. Entry modes, timing and pace, as well as the product mix of internationalization depict the university's internationalization pattern. The above initial understanding of how university internationalization and university autonomy are defined and conceptualized, as well as the approach to understanding and theorizing the intersection of university internationalization and university autonomy helped us design the methodology that is presented next.

## **METHODOLOGY**

Since the extant research at the university internationalization-university autonomy intersection is scarce, the present review focused on empirical papers that integrate theory and concepts related to university internationalization and university autonomy separately. For this purpose, we employed the systematic review as the review method (Tranfield et al., 2003; Petticrew & Roberts, 2006). According to Petticrew and Roberts (2006), a systematic review is valuable “when a general overall picture of the evidence in a topic area is needed to direct future research efforts” (p.21). With the help of the systematic review we aimed at identifying the studies that could be used to theorize and conceptualize the relationship between university internationalization and university autonomy. We followed the systematic review guidelines (Tranfield et al., 2003; Petticrew & Roberts, 2006) by organizing the steps of systematic review into three phases as follows<sup>iii</sup>:

Phase 1: Planning the review (define the question; form advisory group; draft the protocol and get it reviewed)

Phase 2: Identifying and evaluating studies (carry out literature search; screen the references; assess remaining studies against inclusion/exclusion criteria)

Phase 3: Extracting and synthesizing data (extract data; appraise critically; synthesize the primary studies)



Following the above theoretical background reading, as well as several brainstorming sessions, a number of search keywords were identified.<sup>iv</sup> The keywords were grouped in such a way that general issues of internationalization and autonomy are outlined first, with more specific aspects of each phenomenon emerging next. For the purpose of this exploratory study we limited our review to five top tier journals in the field of higher education,<sup>v</sup> namely: Higher Education Policy; International Journal of Educational Management; Higher Education: The International Journal of Higher Education Research; Tertiary Education & Management; and Journal of Studies in International Education. We further limited our search to the ProQuest database. A total of 230 hits were generated (excluding the overlaps).

The empirical papers selected for the final review were screened out in two stages. In the first stage we scanned the titles and abstracts; this process allowed us excluding the most evident mismatches and inconsistencies. After this stage, 53 papers were screened out. Second stage proceeded with scanning and thorough reading of the text. The second round of screening reduced the number of papers to 29. This stage identified the papers that fulfill the research inclusion criteria: the articles are empirical papers that focus of the concepts university internationalization and institutional autonomy from the business perspective and contribute to their understanding and application. The search results showed that these inclusion criteria are rigid for articles in university internationalization domain and there were fewer studies than it had been expected at this point of time that fulfilled them. To supplement the search in the ProQuest database, we conducted the search on the identified journals' websites. Applying this search strategy resulted in additional relevant hits: 6 in total.

As a result of this process, 35 papers were identified for the final review, of which 16 on university internationalization and 19 on university autonomy (Appendix 1 and Appendix 2). A data extraction form was generated to facilitate the process of data synthesis and analysis, and was structured under the following headings: authors, year of publication, research question, theory and key concepts, methodology, and findings (for the purpose of this paper, and given the space constraint, we have not included the methodology part).

Three purposes of qualitative meta-analysis could be identified: theory building, theory explication and theoretical development (Schreiber et.al., 1997). Giving the extant gap in the body of knowledge at the intersection in question, we pursuit theory building aim in this paper. Following Paterson and Canam (2001), we presented and discussed the data employing

the method of meta-theory synthesis that helped us explore the theoretical frameworks and the major concepts in the reviewed papers and the method of meta-data synthesis which helped us summarize and interpret the key findings identified in the reviewed studies.

## DISCUSSION

Drawing on the research findings (see Appendixes 1 and 2) we reflect on how these findings may inform the international business research at the intersection of university internationalization and university autonomy. Earlier we argued that the process of university internationalization and its sustainability is dependent on domestic and international university autonomy settings and put forward a model that theorizes that intersection (Figure 1). In the model we suggested to define internationalization capacity of a university as its autonomy, consisting of four types: organizational, financial, staffing, and academic autonomy. We further suggested in the model that *how*, *what*, *where* and *when* of university internationalization define internationalization pattern of a university, with *where* being defined as institutional autonomy in a target country.

### An overview of the findings

Before we start the discussion, we put it into context first. According to our findings, as one may expect, the research on university internationalization focuses mainly on internationalization from developed countries to emerging or developing countries; 81% of the reviewed papers have that focus. On the other hand, the research on university autonomy focuses more on studying university autonomy in developed countries, which represents approximately 52% of the papers. The remaining 32% and 16% of the papers focus on studying university autonomy in emerging or developing countries and comparative studies respectively. As to international business theories, our data reveal that international business theories are not explicitly referred to and employed in the reviewed papers on university internationalization.

Our findings point to an overall agreement on concepts and definitions related to *what* and *how* of internationalization. People defined as staff and student mobility are associated chiefly with exporting (Thune & Welle-Strand, 2005; Knight & Morshidi, 2011; Sihdu et al., 2011). Strategic resources (Beerkens & Derwende, 2007) – strong research/teaching profiles, reputable credentials, knowledge transfer, educational and research facilities such as libraries and laboratories – are associated with joint ventures and strategic alliances (Saffu &

Mamman, 1999; Heffernan & Poole, 2005; Beerkens & Dervende, 2007; Sidhu, 2009; Sidhu et al. 2011; Ayoubi & Massoud, 2012). A university internationalizes its home business model via greenfield investment or branch campus (Coleman, 2003, Wilkins & Balakrishnan, 2011) – an entry conditioned by the availability of quality of lecturers, quality and availability of resources and effective use of technology (Wilkins & Balakrishnan, 2011). However, it was interesting to learn from the data that despite being widely discussed and theorized (e.g., Van Damme, 2001; Altbach and Knight, 2007; Healey, 2008), franchising, and respectively, internationalization of studying programs are not the focus of university internationalization research as one may expect; only one reviewed paper has franchising is part of its research focus: Bennet & Kane (2011).

To the above, our research findings revealed a number of gaps and challenges that await international business researchers at this intersection. For example, none of the reviewed papers on university internationalization address the issue of *where* of internationalization, i.e., of institutional or university autonomy in a target country. On the other hand, the research findings on university autonomy highlighted a number of what we call sensitive or ethical issues of university autonomy. For example, university autonomy is contextually bound, influenced by regulatory frameworks in particular countries and respective market mechanisms (Chiang, 2004; Ramirez & Christensen, 2013), as well as by cultural norms that assign different meaning to and understanding of university autonomy – a difference that may lead to is cultural conflicts (Rytmeister, 2009). The level of university or institutional autonomy in emerging or developing countries – usual internationalization targets of universities from developed countries – is generally low, quite often compromising the quality of teaching and research, and affecting enrollment procedures (Tammi, 2009; Frølich et al., 2010). Institutional autonomy is difficult to measure and there is always an opposition between real and formal autonomy (Yang et al., 2007; Enders et al., 2013).

To the above, incompatibility between internationalization capacity of a university and institutional autonomy in a target country may lead to de-internationalization (Turcan, 2011) of university (see e.g., Sidhu, 2009). Among key factors that lead to university de-internationalization as identified by Sidhu (2009) were lack of mutual commitment, incompatibility between the partners, lack of synergy between main home and foreign campuses, failure to higher senior staff to reside in the target country, and difficulties in balancing responsibilities to its international and domestic stakeholders. Sidhu (2009, p. 137)

concludes that one way to deal with such incompatibility is for an internationalizing university to “...hold two sets of ethical standards – one for its domestic stakeholders and the other for the rest”. This clearly raises the question whether maintaining such double ethical standards *is* ethical.

According to our findings, both streams of research are not process oriented. With the exception of one paper (Bennet & Kane, 2011), none of the reviewed papers on university internationalization addressed the issue of *when* of internationalization, i.e., of timing and pace of university internationalization. Bennet & Kane (2011) found that gradual, step-by-step internationalization was the most common approach adopted, being driven by the desire to learn from own experience and avoid risk. In the same vein – with the exception of Sporn (2001) and Arnaboldi & Azzone (2005) – the extant research on university autonomy is cross-sectional and does not study the effects of changes in university autonomy on university performance.

#### Further theorizing the intersection

Drawing on the above findings, as well as on the methods of meta-data synthesis and meta-theory synthesis that we employed in our analysis, we further theorize the intersection between university internationalization and university autonomy. For this purpose, we focus our theory building on internationalization to emerging countries that usually are targets of universities from developed countries. In our theory building we draw on institutional theory following Peng et al. (2008) who argue that being grounded in the context of emerging countries, institutional theory adds to our understanding of international business strategy. We also apply OLI paradigm (Dunning, 1980) to further theorize the intersection.

OLI paradigm suggests that organizations choose the most appropriate mode of entry into a new international marketing by weighing ownership, locational and internalization advantages (Dunning, 1980). Ownership advantages are firm-specific assets, either tangible or intangible. Locational advantages are country-specific advantages of the target country, mainly being concerned with commitment, availability and cost of resources in that country. Internalization advantages are chiefly concerned with reducing transaction and coordination costs, choosing between non-equity (exporting and franchising) and equity (joint ventures and wholly owned subsidiaries) entry modes.

Our data point to a number of generic ownership advantages that universities possess: unique educational programs/know-how; research/teaching capacities and experience; being western; teaching in English (lingua franca of transnational education); having “world class” status; financial resources; high position in the world university rankings; well-reputed members of academic staff; and international experience. In addition, our data further identified a number of ownership advantages at autonomy levels (except staffing autonomy that was not the focus in any of the reviewed papers).

For example, at the level of organizational autonomy the following advantages emerged: professional leadership and management, shared governance and multiple board functions, efficient goal setting and strategy planning, entrepreneurial organizational culture, adaptive capacity and market orientation, sensitivity and response to local demand, openness to enter partnerships, high level of commitment, and effective communication. We argue that the central thrust of organizational autonomy is increased strategy building capacities and proactive leadership that make internationalization a feasible task. Being autonomous in its decision making process, such universities are more willing to enter partnership and strategic alliances.

At the level of financial autonomy, the following ownership advantages emerged: advanced funding models (e.g., incentive-based funding, external funding, and multiple stakeholders), accountability mechanisms, performance indicators, and quality assurance. These advantages contribute to global standards and quality of educational services and thus are regarded as critical for successful internationalization. The following advantages emerged at the academic autonomy level: support for creativity and innovation, performance, flexibility of educational content, cultural embeddedness, sensitive areas of research and research ethics. These advantages reflect university freedom to define its academic profile. Flexibility of an institution to define the content of its academic programs will enhance its adaptability and responsiveness to the local environment. Creativity and innovation may contribute to university differentiation as having unique teaching and academic environments. Active participation of academic staff in decision-making and strategy development may help setting up realistic internationalization goals. Following from the above, we posit that *universities with higher degree of internationalization capacity will tend to prefer equity modes of entry.*

Drawing on intuitional theory, we further discuss locational advantages. Institutional theory conceptualizes institutions as the rules of the game in a society that shape organizational and social behavior (Scott, 2001). It also emphasizes fundamental and comprehensive changes introduced to formal and informal rules of the game that affect organizations as players (Peng, 2003). Emerging or developing economies are characterized by weak institutions or so called institutional voids that hamper the implementation of companies' strategies (Khanna et al., 2005). We suggest defining institutional voids as incompatibility between internationalization capacity of a university and respective institutional autonomy in a target country at four levels: organizational, financial, staffing, and academic.

For example, at the level organizational autonomy, our data point to the following potential effects of such incompatibility: hampered productivity and adaptability, barriers to local integration, misconceptions about real state of autonomy, inability to plan, excessive control from the target country government, and reduced decision-making power. At the level of financial autonomy, data suggest for example that weak regulations may harm quality of services; that profit incentives in the open market settings may cause opportunistic behavior by changed admission policy to intake more paying students, thus favoring quantity over quality; and that dependency on multiple external stakeholders makes accountability mechanisms cumbersome. Effects at the staffing autonomy such as different recruitment procedures, inability to independently recruit personnel, and negotiate employment contracts, and lack of commitment of university staff to reside long-term in a target country may lead to shortage of staff and quality decrease. At the level of academic autonomy, any attempts by the target country government or the partner institution to alter academic content or any form of censorship practiced in the target country are viewed as interfering with and violating academic freedom, causing serious conflicts. Following from the above, we posit that *universities perceiving high institutional voids will tend to prefer equity modes of entry.*

In dealing with institutional voids (incompatibility), internationalizing universities find themselves in a Catch-22 situation, or what we call – ethical dilemma. Will they develop two sets of ethical standards – one for domestic stakeholders and the other for target country stakeholders (see e.g., Sidhu, 2009)? Or, will they keep and insist on adopting own ethical standards in target countries? The answers to these questions will further inform universities' choices of *how, what, when and where* to internationalize.

## CONCLUSION

In this paper we have explored a gap in international business research that is found at the intersection of university internationalization and university autonomy. We argue that the process of university internationalization and its sustainability is dependent on domestic and international university autonomy settings. We put forward a process model of university internationalization whereby the process of university internationalization is mediated by university internationalization capacity and moderated by target country institutional autonomy and globalization; and university's internationalization pattern is defined by entry modes, timing and pace, and product mix. To further understand the emergent gap, we conducted a systematic review aimed at identifying empirical studies that theorize and conceptualize the intersection. As a result, thirty-five papers were reviewed, of which sixteen on university internationalization and nineteen on university autonomy.

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Being exploratory in nature, this paper identified a number of future research directions in order to advance our understanding of the intersection. A complete systematic review is required, widening the scope of search beyond the journals used in this paper. Future, theory building research is needed to understand how and why of the intersection, including descriptive, cross sectional and longitudinal cases of successes and failures. Future research shall blend the two research streams – university internationalization and university autonomy – by borrowing more actively from each and other disciplines in order to advance our theoretical understanding of the intersection. Among other things, this blending will help identify and operationalize intersection theoretical constructs, and develop respective measurement instruments.

## NOTES

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<sup>i</sup> Center for Internationalization and Global Engagement

<sup>ii</sup> European University Association

<sup>iii</sup> Due to space limitation, detailed description of the methodology is available upon request.

<sup>iv</sup> Due to space limitations, the list of keywords and strings formula are available upon request

<sup>v</sup> To select the journals for the review, we consulted sources such as Combined Journal Guide ABS, Education Journal Esteem ranking by AREA, Scientific Journal Ranking by SCImago, Social Sciences Citation Index, as well as a study by Bray and Major (2011) which employs mixed methods of journal evaluation.

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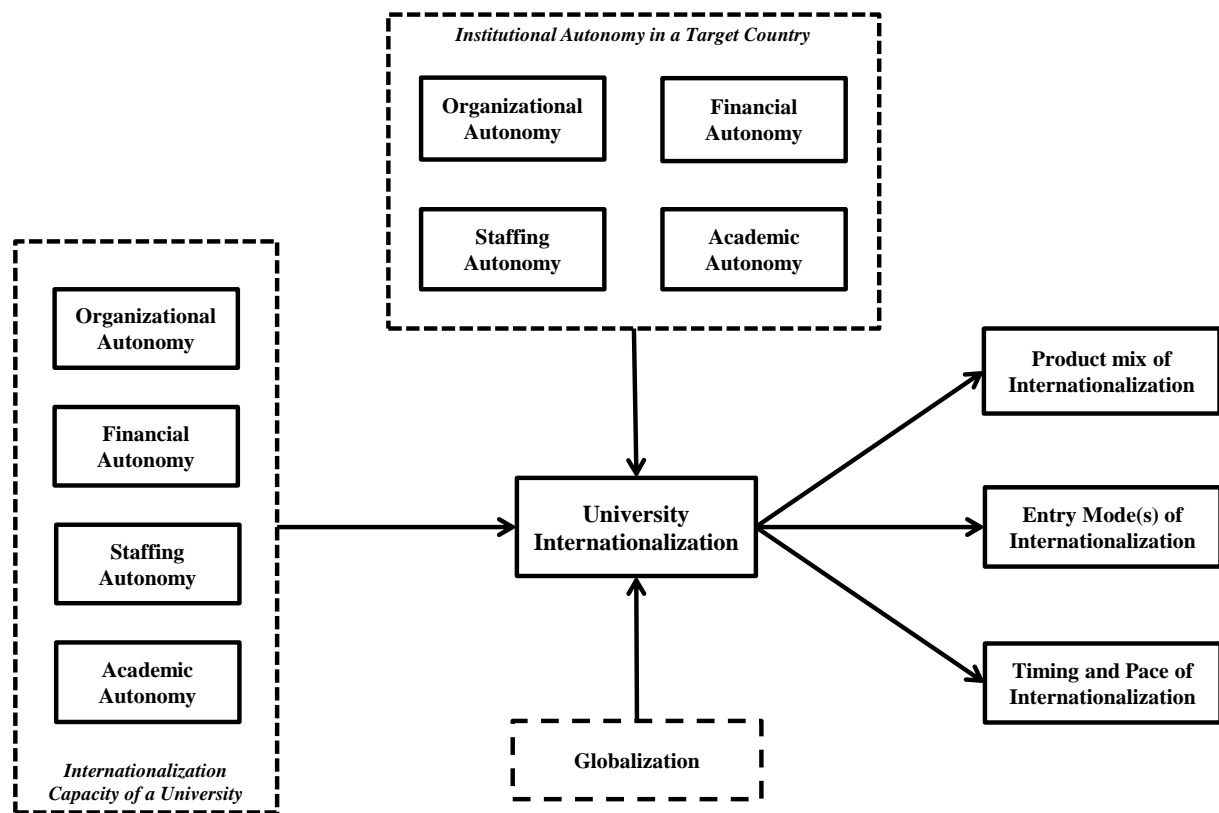
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Figure 1. Process model of university internationalization



# Appendix 1. Data extraction form – university internationalization

Author(s)	Year	Question	Theory and key concepts	Findings
Ayoubi & Massoud	2012	To explore obstacles encountered by UK universities in developing international partnerships	International partnership strategy; Partner selection; Obstacles and drivers	A process model of obstacles of international partnerships is developed. Two main groups of obstacles are identified: partner selection and partnership arrangements obstacles.
Fang	2012	To explore transnational HE development in China at the institutional level	Research/Teaching universities; Cross border partnerships; Strategic institutional management	Teaching universities aim to increase enrollments, generate revenue and reduce costs. Research universities internationalize to enhance academic opportunities.
Bennett & Kane	2011	To establish methods, benefits and extents of internationalization	Franchising; Curriculum internationalization; Internationalization speed/extent	A model explaining speed, extent, and intensity of a business school's internationalization is developed and tested. Gradual internationalization was widely adopted.
Knight & Morshidi	2011	To examine university motives and positioning strategies as regional education hubs	University internationalization; Cross-border education; Regional Education hub; Collaboration	A typology of three categories of hubs is suggested: student; skilled workforce training; and knowledge and innovation hubs.
Sidhu et al.	2011	To examine process of HE institutional restructuring in Singapore	Knowledge economy; Cluster based economic development; Global norms of best practice	Funding and access to state-of-the art technological equipment are not sufficient to achieve research synergies between institutions with different histories, missions and trajectories.
Wilkins & Balakrishnan	2011	To explore student satisfaction at international branch campuses in UAE	Branch campus; Transnational education; Customer (student) satisfaction; Service quality	Quality of lecturers, quality and availability of resources and effective use of technology are significant factors in determining student satisfaction at UAE branch campuses.
Wilkins & Huisman	2011	To explore student destination choice and attitudes toward international branch campuses	Higher education hubs; International branch campuses; Student recruitment and destination choice	Reputation, quality of programs, and university rankings were found to strongly influence students' choice of an international university.
Cheung et al.	2010	To screen target markets and recommend market entry strategies	Marketing HE institutions; Market entry strategies for education providers; Market segmentation	Market segmentation and 4P variables in formulating marketing strategies as well as benchmarking against key competitors are seen as internationalization success factors.
Sidhu	2009	To explore globalization of research university	University internationalization; Government intervention; Networked knowledge capitalism;	Internationalization failure is due to lack of fit in goals and commitment. Heterogeneous elements that make up international university networks are not explained by conventional narratives.
Beerkens & Derwende	2007	To identify critical facets of Higher Education Consortia	Resource-based view of the firm; Economic sociology; Neo-	Three critical facets emerged: human capital with strategic resources; resource complementarity; strategic coping

Author(s)	Year	Question	Theory and key concepts	Findings
			institutional theories	mechanisms; differences in institutional contexts. Higher consortium compatibility leads to higher performance.
Heffernan & Poole	2005	To explore critical success factors for sustaining international relationships	Entrepreneurial universities; Export strategies; Franchising; Institutional risk; Relational exchange theory	Critical success factors emerged: effective communication structures; mutual trust; commitment between partners; and compatibility in business culture (rather than similarity between national cultures).
Thune & Welle-Strand	2005	To discuss how ICT is employed in university internationalization	Globalization; Internationalization	ICT is employed indirectly and tied to routine activities in teaching, administration and research, rather than being primary internationalization driving force.
Coleman	2003	To examine operational relationship between a core campus and internationally separated branch campuses	Modes of foreign operation: branch campus; Intercampus equivalency; Quality assurance	Variations across internationally dispersed campuses, even in programs determined to be identical in two countries, can be monitored by independent quality assurance mechanisms.
Poole	2001	To explore universities' international entrepreneurial activities	Strategic management; Entrepreneurial university; Offshore activities; Typology of universities	An internationalization strategic advantage model is proposed: strategically decentralized leadership; organizational and strategic competencies; executional advantages; and international business competences.
Saffu & Mamman	1999	To scrutinize international strategic alliances	Cooperative strategy; International HE strategic alliance, partnership; International HE joint ventures; Co-operative arrangements	Top university managers initiate joint ventures with overseas institutions. Cultural differences, bureaucracy and differences in the goals of the partners are the most important challenges at the initiation of a joint-venture.
Mazzarol	1998	To identify critical success factors for international education marketing	Services marketing; competitive advantage; critical success factors	Two factors, image and resources, and coalition and forward integration emerged as significant predictors of market success.

## Appendix 2. Data extraction form – university autonomy

Author(s)	Year	Question	Theory and key concepts	Findings
Enders et al.	2013	To assess the effect of political reforms on university autonomy	Institutional theory; Principal-agent theory; Regulatory autonomy	A multi-dimensional taxonomy was developed that distinguishes between formal and real organizational university autonomy.
Magalhães et al.	2013	To explore how governance reform interacts with institutional contexts	Stakeholder theory; Institutional autonomy	The main change promoted by the governance reforms can be seen in the enhancement of system and institutional governance.
Ramirez & Christensen	2013	To examine the effects of changes on university governance, finance, and resource seeking activities	Neo-institutional theory; Path-dependency	Universities explicitly function as organizational actors and become more socially embedded; there are differences in ways universities respond to autonomy reforms which are embedded in their historical roots.
Christopher	2012	To develop a conceptual model of university governance	Stakeholder theory; Management theory; Resource-dependency theory; Stewardship theory	Five influencing forces are identified: government sector; funding bodies; global competition; autonomy and academic culture; and internal management.
Nguyen	2012	To examine the roles of heads of department in university management	Middle-level academic management; Department governance; Leadership	Main areas center on program management, academic staff management and facilities management; strategic management and budget management are neglected.
Arikewuyo & Ilusanya	2010	To examine the government impact on autonomy	University autonomy; Institutional autonomy	Universities enjoy limited academic autonomy (curriculum and teaching methods, except introducing new disciplines).
Frølich et al.	2010	To explore the impact of funding systems in HE on institutional strategies	Stakeholder theory; Performance indicators	Universities are inclined to develop strategies for increasing funding that may compromise the quality of teaching and research.
Rytmeister	2009	To study the relationship between university management and governing bodies	Social identity theory; Agency theory; Institutional strategy	The actors' perceptions of management are influenced by cultural norms and the social identity that are derived from membership of these groups.
Tammi	2009	To examine the relationship between university funding and education and research	Funding models; Institutional-analytical approach	New financing models have negative unintended consequences on research and education: it leads to lower research output measured in scientific publications.
Yang et al.	2007	To study the globalization impact on university autonomy	University autonomy; Political economy; Academic capitalism; Governance; Globalization	Decentralization and marketization policies are instrumental in mobilizing educational resources. State's rhetoric about autonomy and constraints universities continue to experience diverge.



Author(s)	Year	Question	Theory and key concepts	Findings
Yokoyama	2006	To conduct cross-country analysis of entrepreneurial universities	Entrepreneurial university; Governance; Management; Leadership	Application of institutional strategies, entrepreneurial culture, and the way in which an institution relates itself to the private sector significantly differs among institutions.
Arnaboldi & Azzone	2005	To analyze strategic change in universities	Strategic change; Managerial tools; Accounting techniques	Strategic change towards autonomy and accountability is an incremental process, during which top managers changed organizational structure, identified responsibilities, and introduced a new set of managerial techniques.
Chiang	2004	To test the relationship between university autonomy and funding	University autonomy; Funding schemes and models	The effect of funding on university autonomy in a given country is conditioned by the context in which those universities exist.
Kovac et al.	2003	To explore academic staff's perception of university governance	Learning organization; Self-regulating organization	Autonomous governance is improved by interaction with external environment; academics involvement in decision-making; change in university governance structures.
Larsen	2001	To examine the role of governing boards in universities	Instrumental perspective on organizations; Neo-institutional perspective; Political perspective	Governing board combines instrumental (control and policy/strategy development), institutional (relationship with administration and faculties) and political (rector as the 'external affairs spokesman') functions.
Sporn	2001	To explore how adaptive capacity of universities can be enhanced	Organizational theory	Seven critical areas for enhancing adaptation emerged: environment; mission and goals; entrepreneurial culture; differentiated structure; professional university management; shared governance; committed leadership.
Dee et al.	2000	To examine the effect of faculty autonomy	Self-determination; Academic freedom	Universities granting high levels of autonomy to faculty members are perceived as being innovative.
Askling et al.	1999	To understand the requirements for self-regulating institutions	Self-regulation; Institutional autonomy; State governance models	Self-regulation has a hybrid character: it calls for a more pronounced institutional leadership and encourages the academic staff members to mobilize their own capacities.
Brock	1997	To study the impact of strategies, planning modes and levels of autonomy on effectiveness	Organization theory; Organizational strategy; Prospector and Defense strategy; Institutional autonomy	Pursuing a prospector strategy – by continuously seeking new client segments and/or developing new offerings – is more effective with longer term and more externally oriented planning and with more autonomy for its dean.