CHAPTER ONE

1 INTRODUCTION AND BACKGROUND OF THE RESEARCH

Today, more than ever before in human history, the wealth – or poverty – of nations depends on the quality of higher education. Those with a larger repertoire of skills and a greater capacity for learning can look forward to lifetimes of unprecedented economic fulfilment. But in the coming decades the poorly educated face little better than the dreary prospects of lives of quiet desperation. (Malcolm Gillis, President of Rice University, 12 February 1999)

1.1 Introduction

When in 1997 the first fee-paying private university (Norton) was opened by the Prime Minister Hun Sen, it marked the radical change in higher education financing policy in Cambodia. Private universities would not receive any public financial support. The Foreign Languages Centre (currently known as Institute of Foreign Languages) at the Royal University of Phnom Penh (RUPP) was permitted to charge fees, thereby enabling it to retain its qualified professors at an adequate salary level. Meanwhile, public university staff, who had been moonlighting on much better remuneration at Norton and other private universities, brought back to the public institutions the case for institutional improvement by introducing fee income. Given the incentive of fee income, the staff of universities, both private and public, soon established much more flexible programs to suit the needs of those who could afford to pay the fees. Only in 2000 did the charging of fees in a few public HEIs come to require the formal authorization by the Prime Minister. Such a policy shift in the sector is seen to pose more challenges than hope for quality education in Cambodia.

The proliferation of private providers and fee-paying programs in public HEIs has marked a clear transition toward the market model, reducing the reliance on government control and funding. In addition, one significant reform in the sector is known as the transformation of some public HEIs into autonomous institutions under the Public Administrative Status (PAI) status¹ to lessen the government’s financial burden and improve

¹ With the status, HEIs are granted greater autonomy in financial and academic issues and are operated under the direction of their governing boards instead of the direct supervision of a parent ministry (Chet 2006).
the quality of education (Touch, Mok, & You, 2014). The transition has, on the one hand, resulted in a rapid expansion of the sector in terms of the number of HEIs and student enrolments but, on the other hand, it carries implications for efficiency and teaching quality within the sector (Ford, 2003, 2006). Chet (2009) has found some challenges including poor quality programs, inadequate quality assurance, weak governance and management, lack of strategic leadership and planning, and lack of transparency in the selection of management and academic staff in public HEIs. Notably, private HEIs depend almost entirely on tuition fees (Un, Chuon, & Ngin, 2013), a situation shared by public HEIs, which are now up to 80 percent privately funded (Ahrens & McNamara, 2013). Research is almost non-existent in the HE sector in Cambodia (Chet, 2009). These challenges have caused a growing concern over the governance of HEIs in providing quality education services that aim to produce qualified human resources for the country’s economy.

In order to address the quality issues in the sector, the Cambodian government has recognized that HEIs cannot work in isolation to improve the quality of their educational services nor can the government ensure the quality education in the absence of stakeholder involvement. The Ministry of Education, Youth and Sport (MoEYS), therefore, created the Higher Education Technical Working Group (HETWG) in 2013 to involve different stakeholders including government officials, rectors from public HEIs, representatives from private HEIs, donor agencies, non-governmental organizations (NGOs) and the private sector to address issues in higher education. Moreover, over the last few years, some workshops, policy-roundtable discussions, and seminars have been conducted to involve stakeholders from relevant institutions to share ideas and to discuss how to boost the sector. Despite this, the stakeholder collaboration in the sector has remained very limited. Nith (2013) has noted that there is a disconnection between HEIs and the private sector and only few HEIs have program linkages with the industries.

As regional integration deepens with the ASEAN Economic Community2 (AEC), Cambodia risks being left behind unless it improves its higher education sector, a crucial instrument of the country’s economic growth. Welch (2011) notes that the governments of the Association of Southeast Asian Nations (ASEAN) are no exception in stressing higher

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2 The AEC envisions the four key characteristics: (1) a single market and production base, (2) a highly competitive economic region, (3) a region of equitable economic development, and (4) a region fully integrated into the global economy (ASEAN, 2008, p. 6).
education for their socio-economic development in the knowledge-based economy. Meanwhile, the higher education sector in the region is facing challenges due to the increasing demands for higher education, limited public funding, global competitiveness and ever-changing need of the knowledge-based economy. Notably, some developed economies in the region have appeared to fully embrace the concept of entrepreneurial university, a global trend toward industry engagement in the knowledge-based economy (C. Sam & van der Sijde, 2014), to promote the stakeholder collaboration and improve educational quality to develop qualified human resources for the labour market in the ASEAN common market. However, this concept has become an emerging or even a new phenomenon in less-developed economies like Cambodia.

Although a number of studies have been conducted on higher education issues in Cambodia (e.g. Chet, 2009; Duggan, 1997; Dy, 2013a, 2015; Kwok et al., 2010; Sen, 2013; Sen & Ros, 2013, etc.), they tend to overlook the issue of stakeholder collaboration, which is considered the key source of innovation and economic development. Moreover, although crucial to secure future of HEIs and improve the educational quality during the limited public funding for higher education, the concept of entrepreneurial university, a driver of the stakeholder collaboration, has yet to be examined for the Cambodian case. In other words, while the concept has been widely adopted and discussed in developed countries, there is only scant literature addressing this concept for developing countries, Cambodia in particular. In addition, there is very little empirical research on Cambodian HEI governance, which constitutes a critical issue to be examined as it has remained unclear as to how HEIs are governed to improve their educational quality while the higher education sector in Cambodia is in transition toward the market model. Therefore, this dissertation raises the following research question: “How does stakeholder involvement in the Cambodian higher education sector affect the governance of HEIs, upon the transition toward privatization, in shaping educational quality for the labour market in Cambodia?”

This dissertation aims to answer the above research question based on an empirical study. The dissertation comprises a compilation of four core articles. As this PhD takes up a publication approach, each of the four articles consists of its own characteristics shaped for publication in different peer-reviewed journals. Chapter Two is a review article providing the

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3 “… trends in advanced economies toward greater dependence on knowledge, information and high skill levels, and the increasing need for ready access to all of these by the business and public sectors” (Organisation for Economic Cooperation and Development - OECD, 2005, p. 28).
state-of-art concept of entrepreneurial university from the perspectives of higher education models in the developed world to build a theoretical foundation for the empirical study in Cambodia as a donor-dependent country. The empirical study has yielded three empirical articles as provided in the following chapters: Three, Four and Five. Each of these chapters is comprised of research background, literature review, research methodology, research findings, discussion and conclusion. The current introductory chapter aims to pull the different chapters together and establish the overall argument and relevance for the dissertation as a whole. Chapter One is structured in the following manners. The next section provides the significance and relevance of the study, followed by research questions and the background of study. It then discusses the theoretical and conceptual assumptions underpinning this research. It proceeds with the overall methodology employed under this research project. The chapter then presents research ethics, research setting within the Cambodia Research Program, and the scientific outputs of the research project. It concludes with an outline of the remaining chapters of the dissertation.

1.2 Significance and relevance of the study

1.2.1 Societal relevance

This PhD research project is conducted at the right time in that the development of higher education in Cambodia is urgently needed as Cambodia’s economy is moving toward a knowledge-based future. In other words, the Cambodian government has placed a great emphasis on higher education to develop human capital in order to realize Cambodia development vision to become an upper-middle income country and a developed country by 2030 and 2050 respectively (MoEYS, 2014b). The research project also responds to the priority four of the education action plan on reforming higher education under the new MoEYS leadership for quality education (Hang, 2015) and the Cambodia’s higher education vision 2030, aiming to build a quality higher education system to develop human resources for the global knowledge-based society (MoEYS, 2014c). Moreover, the upcoming AEC has made the study become even more crucial to contribute to the sector development, with an expectation to help prepare graduates well for their competitive participation in the ASEAN common market.

Therefore, it is expected that the findings of the study will inform the policymakers and institutional leaders of appropriate policy supports to enable HEIs to collaborate with
external stakeholders and to perform entrepreneurially in order to ensure quality education. In other words, the findings can be of an insightful input for HEIs to respond flexibly and quickly to the market demands by considering new roles in interacting with external stakeholders for quality education and for income diversification to secure their future in the marketplace. It is also anticipated that this project will be of a significant contribution to the recent national higher education reforms and the national policy to develop human resources with the right knowledge and relevant skills for economic development in the knowledge-based society.

1.2.2 Scientific relevance

As earlier established, scant literature exists on higher education in Cambodia and even other developing countries, particularly concerning stakeholder involvement in the higher education sector, higher education development from the entrepreneurial university perspective, and university governance. The research project has thus been conducted to contribute to the scholarly work and theories on these issues. The study is expected to propose a conceptual model, which can be used to examine the stakeholder involvement in the higher education sector in Cambodia. The model can be used to extensively reflect the stakeholder involvement in higher education in other developing countries, which are largely dependent on international donors. This model can then be applied to add to the scholarly literature, contributing to the theory building on stakeholder involvement and interaction in the higher education domain in donor-dependent countries with Cambodia as a case study.

As has been indicated, the concept of entrepreneurial university has come as an emerging or even a new phenomenon in Cambodia and some other developing countries despite the fact that it is widely adopted and discussed in the Western world. The study will bring the concept into an extensive discussion, using a comparative study approach between Cambodia and other countries in the region. An examination of the university development in Cambodia in comparison with other countries in the region from the perspective of the entrepreneurial university will open a fresh perspective of looking into the development of higher education in Cambodia, building up new knowledge to be added to the scholarly work about higher education in donor-dependent Cambodia. In other words, it appears to pioneer the higher education literature in Cambodia and some other developing countries which are struggling to improve their higher education sector with their limited resources.
The research project is expected to provide deep insights into the issue of university governance in order to contribute to the academic literature by bringing different forms of higher education providers together for a comparative discussion and examining the challenges involved in the governing process while the sector is in transition toward the market model. The findings will be of importance to the researchers in the field who wish to study university governance in developing countries in particular which are either experiencing financial constraints or struggling to seek their own income for survival in the marketplace. The study will also contribute to a broad research debate on the institutional governance in Cambodia and the region while HEIs are granted an increased autonomy and are moving towards profit-seeking activities. All in all, the research project will significantly contribute to the academic literature and theories in the higher education domain.

1.3 Research questions

Central question

How does stakeholder involvement in the Cambodian higher education sector affect the governance of HEIs, upon the transition toward privatization, in shaping educational quality for the labour market in Cambodia?

Sub-questions

1. How has the higher education sector developed, whether toward entrepreneurialism or commercialization, to respond to the labour market in Cambodia?
2. Who are the stakeholders in the Cambodian higher education sector?
3. To what extent and with what result do the stakeholders succeed in collaborating?
4. How do higher education providers in Cambodia converge and/or diverge in their governance?
5. What challenges are involved in the governing process toward quality education during the transition from state to market in Cambodia?

1.4 Background of the study

In Southeast Asia, Cambodia, a former French protectorate (from 1863 to 1953), has undergone a sequence of educational reforms in its history due to political and socio-economic changes of the country. Between 1970 and 1975, the education system was
unstable due to political controversy and civil war (Ayres, 2000). Unlike other countries in the region, during the Khmer Rouge regime from 1975 to 1979, Cambodia suffered a massive loss and damage in both human resources and infrastructure. Schools and universities were closed and left to decay or used for other purposes such as for prisons and stables or an ammunition factory, as was the case of the Royal University of Agriculture (Ayres, 2000). Prasertsri (1996) asserts that many well-educated people such as teachers, intellectuals, students and professionals were killed or fled the country during the regime. After the fall of the regime, civil war prevailed for a decade, causing more destruction to buildings and equipment. The regime and the subsequent political instability, along with the limited budget of the government for the higher education sector, imposed a tight constraint to the sector development (Duggan, 1997). Chet (2006) concludes that the prolonged civil war, conflicting political ideologies, social upheaval, and uncoordinated economic reforms after the regime has impeded the development of higher education in Cambodia. Such a serious situation brought difficulties and challenges for the Cambodian government to restore its national education system virtually from scratch after the regime due to the severe shortage of human and financial resources.

After the United Nations-led general election in 1993, attention turned to the reconstruction and restoration of all kinds of infrastructure including human resources development (Dy, 2013a). Dy (2015) asserts that although the external assistance to the education sector was quite substantive, the higher education sector remained underfunded, underdeveloped and in urgent need of reforms because of the government’s and donors’ great emphasis on basic education as a priority for the country’s development. Prior to the late 1990s, the government was the sole provider of higher education in the country under a tuition-free system (Chet, 2006; Heng, 2014). In this sense, the higher education sector was rather small in scope and scale as the student enrolment was restricted to the number of government scholarships and the number of HEIs was limited.

In order to meet the urgent need of competent human resources to develop the country and to respond to the increasing demand for higher education, the Cambodian government has reformed and expanded the higher education sector. The reforms at a tertiary level can be seen through the curriculum restructuring by the introduction of the foundation year program.

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4 It is a one-year introductory program offered by HEIs as of 2005 to equip students with knowledge in four areas of study such as the arts and humanities, mathematics and science, social science, and foreign languages before they are allowed to start their bachelor’s program.
and the implementation of the transferable credit system\(^5\) (Chet, 2006). In 1997, the government introduced the privatization policy to involve the private sector in economic development (Chet, 2006). R. Sam, Zain, and Jamil (2012b) have noted, due to this policy, two important changes have occurred in the Cambodian higher education sector. First, fee-paying programs are allowed in public HEIs in addition to the scholarship programs and, second, the private sector is permitted to be involved in higher education provision. These changes have resulted in a rapid expansion of the sector in terms of the number of HEIs and student enrolments. Noticeably, the private HEIs have increased their roles in providing education services and become the predominant providers of higher education in Cambodia (Chet, 2009). Although the rapid increase of HEIs is mainly concentrated in Phnom Penh, the capital city of Cambodia, the increasing competition and large unmet demand for higher education have extended the growth of HEIs, particularly the private ones, to provincial centres (Ford, 2006). There are 110 HEIs\(^6\) (43 public and 67 private) located in 19 provinces\(^7\) and Phnom Penh, and of the 110 HEIs (see Figure 1.1), 63 (9 public and 54 private) are under the supervision of the MoEYS (MoEYS, 2015a) (see Appendix 6).

**Figure 1.1: Map of Cambodia**

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\(^5\) It aims to facilitate student mobility among academic institutions and help part-time students in accumulating credit units (Chet, 2006).

\(^6\) HEIs in Cambodia are supervised by 14 government institutions, 57 percent of which are under the supervision of the MoEYS (You, 2012).

\(^7\) The provinces include Banteay Meanchey, Battambong, Kampong Cham, Kampong Chhang, Kampong Speu, Kampong Thom, Kampot, Kandal, Koh Kong, Kratie, Prey Veng, Pursat, Ratanakiri, Siem Reap, Sihanouk Ville, Stung Treng, Svay Rieng, and Takeo.
In order to strengthen the sector, the government has also introduced other reforms to the sector to ensure the quality. In 2003, the Accreditation Committee of Cambodia (ACC) was founded as an external quality assurance body to ensure and promote the quality of higher education in Cambodia. The government has also delegated some management power to some public universities by granting them the status of Public Administrative Institution (PAI) to provide greater autonomy in terms of academic and financial issues under a direction of a new governing board (Chet, 2006). The education law was passed in 2007 for the effective and efficient governance and development of the Cambodian education sector, including the higher education sector (You, 2012). A number of policy actions have been taken including the master plan for research development 2011–2015 (2011), a royal decree on professor ranking (2013), the policy on higher education vision 2030 (2014), and the National Qualifications Framework (2014). Recently, policy dialogue and joint decision-making between the MoEYS and its development partners are promoted through the HETWG under a Joint Technical Working Group (JTWG) (Dy, 2015). The establishment of the HETWG is considered a crucial milestone to create a discussion forum on higher education issues among different stakeholders (MoEYS, 2015b).

Over the last few years, the Cambodian government has placed a greater emphasis on the sector for the country’s socio-economic development. The government has launched “the Rectangular Strategy” for Growth, Employment, Equity and Efficiency Phase III, in which the important role of higher education services is clearly indicated for capacity building and human resources development. Its commitment to the sector development is also reflected in the first comprehensive Higher Education Quality and Capacity Improvement Project (HEQCIP) 2010–2015 (co-funded by the government and the World Bank), the National Strategic Development Plan 2014–2018, and the Education Strategic Plan 2014–2018. Such an emphasis corresponds with the Cambodia’s Development Vision 2030 to become a lower-middle income country by 2018 and an upper-middle income country by 2030 (Khieng & Chhem, 2015). Cambodia thus aims to build a quality higher education system to produce well-rounded individuals capable of living and working in the global knowledge-based society (MoEYS, 2014c).

Despite a progress in the growing number of HEIs and reforms in the sector, there have remained challenges concerning the quality and efficiency of the higher education sector in the country. The rapid expansion of the sector has posed a serious concern over the quality
of education on offer (Ford, 2013). Most public and private HEIs offer only a few programs, in which student enrolment is particularly concentrated, leaving other programs like science, health and agriculture underdeveloped (R. Sam, Zain, & Jamil, 2012a). This situation has resulted in a growing mismatch between graduate skills and actual market needs. MoEYS (2015b) has acknowledged that there is a mismatch between the skills needed by the labour market and those available on the market. Meanwhile, Ford (2006) has asserted that there is a lack of regulatory mechanisms to safeguard the quality of the sector while the sector keeps expanding with limited resources. This situation is imminent to put the country’s higher education in a vulnerable position. Moreover, the university governance under the PAI status has yet to result in any significant changes as it has remained weak and centralized (Touch et al., 2014). In addition, the HETWG stakeholder discussion forums on higher education issues have yet to yield noticeable stakeholder collaboration for the improvement of the sector.

As HEIs continue to expand with limited resources and lack of regulatory mechanisms, the stakeholders have become increasingly concerned about the quality of education on offer. Their concern about the quality has exerted a mounting pressure on HEIs as the labour market demand keeps changing rapidly in the global knowledge-based economy and especially when Cambodia is to be integrated into the AEC at the end of 2015. This situation has forced HEIs to consider new roles in the society and their relationships with external stakeholders for quality improvement as it is deemed impossible for the HEIs to work in isolation. Despite this, studies on higher education in Cambodia have yet to examine the stakeholder issues to categorize stakeholders and determine stakeholder salience for HEIs to consider for partnership and to examine stakeholder collaboration and institutional governance for quality improvement. Therefore, as Cambodia’s economy is moving toward the knowledge-based future, the research on these aspects is desperately needed to be undertaken in order to help develop the higher education sector and assist HEIs to enhance their performance and secure the place in the competitive knowledge-based economy within the globalized and regionalized contexts. Hence, the importance of this PhD research project on stakeholder involvement in the Cambodian higher education sector and university governance issue arises.

1.5 Theoretical framework and conceptualization

Theoretically, the study is informed by the triple helix model (e.g. Etzkowitz, 2003a, 2008; Etzkowitz & Dzisah, 2007; Etzkowitz & Leydesdorff, 1999; Etzkowitz, Webster, Gebhardt,
The model postulates a pathway for a university-industry-government interaction for innovation in a knowledge-based society. It is widely discussed and adopted in the Western world as a global trend for innovation and development in the global knowledge-based economy (C. Sam & van der Sijde, 2014). This model provides a theoretical grounding for the empirical study in Cambodia as a case to reflect on how stakeholders are involved in the higher education sector within the context of donor-dependent Cambodia. Furthermore, the study applies the concept of entrepreneurial university (e.g. Clark, 1998a; Etzkowitz, 2002, 2008; Fayolle & Redford, 2014; Lane, 2010; Mok, 2005; C. Sam & van der Sijde, 2014, etc.) as a theoretical foundation. The entrepreneurial university, a driver of the triple helix model, is widely discussed in developed countries as a global trend to improve education quality in the competitive knowledge-based economy during the public funding cutback. In this sense, the model serves in the empirical study to examine how the higher education sector in Cambodia has developed compared with such a global trend while its economy is moving toward a knowledge-based future. Moreover, related literature on institutional governance and scholarly work on university governance and relevant discourse (e.g. Amaral, Jones, & Karseth, 2002b; Bargh, Scott, & Smith, 1996; G. K. Davies, 2011; De Boer, 2002; Dixon & Coy, 2007; El-Khawas, 2002; Maassen, 2000; Mok, 2010; Shattock, 2002, 2012; Taylor, 2013; Trakman, 2008, etc.) is employed. The study applies the literature on institutional governance in developed countries and the region, particularly the institutional governing body, as a theoretical basis to examine how HEIs in Cambodia are governed and what challenges are involved in the governing process for institutional development to shape their education quality and services and to secure their position in the competitive knowledge-based economy. In the following the theoretical concepts are discussed underpinning the framework of the current study in this dissertation.

### 1.5.1 Triple helix model

The emerging triple helix model of innovation suggests patterns for an advanced university-industry-government collaboration for the knowledge-based economy (Etzkowitz & Dzisah, 2007). The model postulates that collaboration between university, industry and government as relatively equal partners is the key source of innovation and development in a knowledge-based society (Etzkowitz, 2002, 2003a, 2008; Etzkowitz & Dzisah, 2007; Etzkowitz & Leydesdorff, 1999; Etzkowitz et al., 2000). Such collaboration paves the way for the three stakeholder groups to help improve each other’s performances with the university as the
leading institution (Etzkowitz, 2002, 2008). Etzkowitz and Leydesdorff (2000) emphasize that the university plays a critical and challenging role in leading innovation initiatives in the knowledge-based society due to the increasing demands on academic institutions. Basically, the university operates as “a source of new knowledge and technology, the generative principle of knowledge-based economies”; the industry as “the locus of production”; and the government as “the source of contractual relations that guarantee stable interactions and exchange” (Etzkowitz, 2003a, p. 295).

The triple helix model of innovation suggests a transformed collaboration between the three institutions, with each “taking the role of the other” in some way (Etzkowitz, 2003a, 2008). Each institution plays integrated and sometimes overlapping roles while maintaining its own core mission and distinct identity. In this model, universities generate, preserve and transmit knowledge as their core missions, perform as entrepreneurs, provide governance, and support firm formation and technology transfer. The government is responsible for establishing rules and regulations and funding new enterprises in the form of venture capital. The industries produce goods and services, provide high-level training in their area of expertise, and undertake research and development activities.

However, the model is not inherently innovative. It originates from two different institutional arrangements: a statist and a laissez-faire model (Etzkowitz, 2003a, 2008; Etzkowitz & Dzisah, 2007). The former features dominant government control over university and industry, while the latter suggests that the three actors operate separately or interact to a limited extent across institutional boundaries. The laissez-faire model projects a separate and competitive operation of each institution with rather narrowly defined interactions among the three actors (Etzkowitz, 2003a). These interactions may take place only within strict boundaries and indirectly through an intermediary. Under a laissez-faire model, the government intervenes only in the case of market failure (Etzkowitz, 2008).

Despite the common use of the triple helix model to examine stakeholder collaboration – involving government, university and industry – in the higher education sector within a knowledge-based society, the model does not adequately capture issues emerging from the increasing commercialization of scientific research findings (Tuunainen, 2002). These issues come in various forms: “(1) ownership of intellectual property rights, (2) the industrial collaboration and difficulties of transferring the research results to the market, and (3) the failed attempt of creating a hybrid community between the research group and the
spin-off company” (Tuunainen, 2002, p. 36). In addition, Eun, Lee, and Wu (2006) have asserted that the model does not bear much relevance to the context of developing countries of which industries tend to depend on developed countries for standardized products and research, and of which universities are likely to apply knowledge imported from advanced countries.

Conversely, when it comes to the analysis of the stakeholder involvement in the higher education sector in Cambodia, the first pronounced factor is the presence of donors, a stakeholder group which is not included in the triple helix model. That is, Cambodia depends on international donors – so-called development partners – in many areas (e.g. Bräutigam, 2000; Godfrey et al., 2002; Sato, Shiga, Kobayashi, & Kondoh, 2011), and education is no exception. Most recently, multilateral and bilateral donors have started to turn their attention to higher education for Cambodia’s economic development after years of neglect due to their great emphasis on basic education. Meanwhile, NGOs have emerged as development agencies to engage themselves in many sectors including the education sector, particularly basic education, albeit to a limited extent in the higher education sector. Noticeably, NGOs are also HEJWG members. Therefore, to study the stakeholder involvement in the Cambodian higher education sector, the study attempts to extend the triple helix model by accommodating four categories of stakeholders involving the government, industry, HEIs, and development partners (donor agencies and NGOs), constituting “a quadruple helix model”, which is questioned as to whether this extended model could be the case in the context of Cambodia as a donor-dependent country.

1.5.2 Role of universities in knowledge-based economies

In the knowledge-based economy, information technology and global competitiveness have expanded the roles of universities from their original task of preservation and knowledge transfer to production of new knowledge and more recently to knowledge exploitation for innovation (Etzkowitz & Dzisah, 2007; Etzkowitz & Zhou, 2007). Clark (2003) suggests that universities become more entrepreneurial, exploring new ways that can be useful to create values added to the traditional missions of teaching and research, in order to seek external funding through their knowledge exploitation. Clark’s case studies of five European universities in five different countries, namely the Netherlands, England, Sweden, Scotland, and Finland, from 1994 to 1996 have revealed that they become “entrepreneurial/innovative” in their national context. Etzkowitz (2003a) argues that the role of universities worldwide has
evolved, moving beyond their traditional functions of teaching and research to take up a role in promoting economic development and well-being. This academic revolution has taken two forms.

The first form is the change from teaching institution into one in which research is integrated into teaching (Etzkowitz, 2003a). Research conducted at a university is not aimed at the formation of new enterprises since the university is essentially perceived as a provider of trained people for other institutions (Etzkowitz, 2008).

The second form involves the interrelationship between teaching and research, the combination of which is assumed to contribute to socio-economic development (Etzkowitz, 2003a, 2008). Unlike the first academic revolution, research findings and knowledge can be applied by government and industry to develop a country rather than only by university for academic purposes. Etzkowitz (2008) concludes that the first mission, teaching, inspired the second mission, research, from which emerged a third mission – socio-economic development (Etzkowitz & Leydesdorff, 1999).

The third mission of universities is broadly defined as universities’ activities to connect directly to the external world (e.g. society, business and industry), especially to the economy. In narrow terms, this concept is described as “technology transfer” (Hackett & Dilts, 2004) or “university-business cooperation” (Adamsone-Fiskovica, Kristapsons, Tjunina, & Ulnicane-Ozolina, 2009). Whether defined in broad or narrow terms, the third mission is related to the involvement of universities in socio-economic development. This notion has been traditionally interpreted as “service to the community” and “outreach”, but now a new dimension – “innovative entrepreneurship” – has been added. However, implementing the third mission has brought universities to embrace a wide range of activities such as patenting and licensing (Henderson, Jaffe, & Trajtenberg, 1998; Mowery & Sampat, 2001; Sampat, 2006; Shane, 2004); spin-out formations based on results of research (Etzkowitz, 2008); contract research (Clark, 1998b; Etzkowitz et al., 2000; Welch, 2011); and continuous professional development (Fink et al., 1999; Zukas, 2012). In line with this thinking, Fayolle and Redford (2014, p. 2) have related the third mission to “the economic and social valorisation of knowledge produced by researchers, creating the need for strategies, structures and mechanisms within universities that facilitate and intensify knowledge transfer to the private sector…” Mok (2005) has emphasized the expanded role of the university incorporating the third mission in relation to entrepreneurial activities in the
knowledge-based economy, promoting a dynamic interaction among government, university and industry. Framed in terms of the third mission, entrepreneurial activities are increasingly becoming normalized in many universities in the United States and worldwide (Etzkowitz, Asplund, & Nordman, 2001a).

Despite many studies reporting no adverse effects of entrepreneurial activities on university teaching and research (e.g. Van Looy, Ranga, Callaert, Debackere, & Zimmermann, 2004), there is much contention about the implications of the third mission activities. Brooks (1994), for example, has cautioned that the commercialization of universities poses a threat to the research system in that it might shift the focus of research towards more marketable areas of science and technology and distort traditional academic missions. Notwithstanding the criticism and caution, the third mission has brought about a significant change in the relationships among university, government, and industry. In fact, the rise of the knowledge economy is a driving force behind the third mission of universities and their closer links with government and industry for socio-economic development (Etzkowitz et al., 2000).

Although universities in developed countries have undergone the two academic revolutions, marking a global trend of the roles of universities for economic development in the knowledge-based economy, those in developing countries are struggling to ensure the quality provision of the traditional missions. Meanwhile, throughout the development of higher education in Cambodia, many HEIs perform primarily as teaching institutions. Chet (2009) asserts that research is almost non-existent in Cambodian higher education. The scoping study mapping the current state of research in 15 universities in Cambodia has found that most of the universities perform as “teaching and degree-granting institutions” in which lecturers are not expected to conduct research as a part of their academic responsibilities (Kwok et al., 2010, p. 33). The government funding on research at public HEIs is meagre or even non-existent, resulting in limited research activities while at private HEIs, almost no research activities can be found (Chet, 2009). Most recently, research has started to emerge in many HEIs due to the research grant offered by the HEQCIP. Despite this, it has remained uncertain if a research culture in HEIs will emerge and be sustained after the project concludes. Noticeably, instead of developing and integrating research into the academic teaching as the core mission, many if not all HEIs in Cambodia have appeared to be operated like businesses in providing teaching services after the private sector was permitted to
provide higher education and fee-paying programs at public HEIs were authorized in 1997. In this regard, the current study aims to further examine to what extent the higher education sector in Cambodia has developed while the third mission concerning entrepreneurial university as a global trend is underway in the developed and emerging economies to promote their economic growth in the knowledge-based economy.

1.5.3 The concept of the entrepreneurial university

Rae, Martin, Antcliff, and Hannon (2012) observe that the concept of an entrepreneurial university is widely accepted but not always understood. Doubt may arise as to whether an entrepreneurial university is a “university [that] actively seeks to innovate in how it goes about its business” (Clark, 1998a, p. 4) or a university that undertakes “entrepreneurial activities with the objective of improving regional or national economic performance as well as the university’s financial advantage and that of its faculty” (Etzkowitz et al., 2000, p. 313), or, as J. L. Davies (1987) formulates, a university which is adaptive and innovative to the needs of the outside world. Martin and Etzkowitz (2000) point out that the third mission has been viewed as a unique opportunity for universities to be key players in research, teaching and training to respond to the emergence of the knowledge-based society and as such they are underwriting Clark’s definition of an entrepreneurial university.

In the modern era, the third mission has transformed the traditional university into an entrepreneurial university (Fayolle & Redford, 2014). Etzkowitz (2008) asserts that universities need to develop an entrepreneurial orientation and culture, transforming them into a crucial source of technology, human resources and knowledge to provide new ideas for existing enterprises and to create new firms based on their research and capabilities. The entrepreneurial culture also encourages faculty to make use of their research results for their commercial and intellectual potential, and to seek external funds to conduct research (Etzkowitz, 2008).

A related development is the inclusion of entrepreneurship education in university programs. Universities aim to educate individuals and shape organizations through entrepreneurship education and incubation programs (Etzkowitz, 2008). In this model, entrepreneurship is taught to students in fields such as science, engineering, technology, business and the humanities (Levenburg, Lane, & Schwarz, 2006). Notably, the emergence of the entrepreneurial university has resulted in changes to curricula. One example is the
introduction of entrepreneurship education to equip students and graduates with entrepreneurial spirit. This new university model places greater importance on the interactions among university, government and industry (Fayolle & Redford, 2014). The collaboration respects the entrepreneurial university as having a strong degree of autonomy, rather than being under the control of either government or industry. This allows universities to formulate their own strategic directions and collaborate with government and industry on an equal basis (Etzkowitz, 2008). Moreover, this model puts more emphasis on universities as leading institutions in promoting innovation and economic growth (Etzkowitz, 2008; Mueller, 2006). The connection between “ivory tower” and the “real world” is the core concept of the entrepreneurial university. Despite various definitions of “entrepreneurial university”, Etzkowitz (2003b, pp. 111-112) writes: “[J]ust as the university trains individual students and sends them out into the world, it is now doing the same for organizations … the university is a natural incubator, providing support structures for teachers and students to initiate new ventures: intellectual, commercial and conjoint.”

There are important differences between an entrepreneurial university and the entrepreneurial activities of a university. Most universities perform entrepreneurial activities (C. Sam & van der Sijde, 2014). Yokoyama (2006) asserts that entrepreneurial activities have engaged universities in organizational changes to respond to changing internal and external demands and in commercial activities like corporation formation and partnership with the private sector. In order to create an entrepreneurial university, commercial activities need to create added value for the core functions of teaching and research and vice versa.

Furthermore, entrepreneurial universities are expected to assume multiple roles in society and fill gaps in an innovation system (C. Sam & van der Sijde, 2014). That is, they are expected to interact closely with government and industry to produce new knowledge and technology to enhance their role in the knowledge society and to diversify their income sources. Moreover, the university supplies qualified graduates and knowledge and provides incubation space for new enterprises (Marques, Caraça, & Diz, 2006). Laine (2008) asserts that entrepreneurial universities provide conducive environments to encourage students to explore risk-taking and opportunities (both protected and real world) and identify business opportunities. The changing roles of universities in emerging knowledge economies appear to move beyond teaching and research as they incorporate the new economic role of the third mission to produce and apply knowledge for society and industry. C. Sam and van der Sijde (2014, p. 901) conclude:
An entrepreneurial university actively identifies and exploits opportunities to improve itself (with regard to education [teaching] and research) and its surroundings (third task: knowledge transfer) and is capable of managing (governing) the mutual dependency and impact of the three university tasks.

While the entrepreneurial university model is widely adopted in the Western world, it could be problematic to be fully integrated in the emerging or developing economies as it requires rich resources and dynamic stakeholder collaboration. In this sense, Cambodia, which is largely dependent on foreign aid for development, is deemed unlikely to successfully adopt the model for the sector development. However, the advent of the entrepreneurial university provides an opportunity for a reflection on the development of HEIs in Cambodia in comparison with the global movement. It is proposed that HEIs in Cambodia mainly attach themselves to the traditional missions of teaching and research. They have yet to shift towards an entrepreneurial orientation to secure their place by creating and retaining competitive advantages and to provide quality education and occupational preparation for the knowledge-based economy.

The fact that most if not all HEIs in Cambodia depend almost entirely on tuition fees means that the response to the changing needs of the labour market has remained limited. In this regard, in order to equip graduates with both generic competencies\(^8\) and functional skills for the current labour market and to enable HEIs to become entrepreneurial, HEIs cannot work in isolation. Therefore, the study uses Cambodia as the lens through which to view how HEIs might implement and secure quality teaching and learning and collaborate with external stakeholders. This insight will provide useful input for Cambodian HEIs to help move forward to promote their education quality and perform entrepreneurially for economic development as Cambodia’s economy is moving toward a knowledge-based future.

1.5.4 Stakeholder concept

The stakeholder concept originates from the management literature in the internal memo of the Stanford Research Institute in 1963 (Freeman, 1984). Freeman (1984, p. 46) broadly defines stakeholders as “any group or individual who can affect or is affected by the achievement of the firm’s objectives.” This definition is applicable in the academic setting

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\(^8\) Generic competences include the twenty-first century or so-called 7C skills: critical thinking and problem solving; creativity and innovation; collaboration, teamwork and leadership; cross-cultural understanding; communication and media literacy; computing and ICT literacy; and career and learning self-reliance (Trilling & Fadel, 2009).
and broad enough to take into account the outside individuals or groups who may regard themselves as stakeholders affected by the accomplishment of the organization objectives although the organizations may not consider them stakeholders who notice the effects (Friedman & Miles, 2006).

The literature has shown many attempts (Damak-Ayadi & Pesqueux, 2005; Phillips, 2003; Winn, 2001) to classify stakeholders: primary and subsequent, legitimate and derivative, direct and indirect, strategic and moral. Mitchell, Agle, and Wood (1997, p. 859) have categorized stakeholders into two different groups, namely claimants and influencers in which the former are “groups that have a legal, moral, or presumed claim on the firm,” whereas the latter are “groups that have an ability to influence the firm’s behaviour, direction, process, or outcomes.” Adapting the concept of stakeholders with reference to corporate governance, Burrows (1999, p. 5) views stakeholders as “those individuals or groups who believe that a college [HEI] is accountable to them and behave as if it were.” Redford and Fayolle (2014) classify stakeholders based on specific groups/roles and functions and distinguish between interests pertinent to stakeholder identification.

From this perspective, HEI stakeholders do not refer only to students and government, which was widely known as the major funder of higher education. Other external institutions or the general public can also be the stakeholders influencing the higher education sector. In other words, stakeholder groups may range from government and civil society to employees and shareholders. In this sense, the quality, utility and relevance of knowledge provided by universities are defined by their stakeholders (Benneworth & Jongbloed, 2010). HEI stakeholders tend to have varying influence over what is done at HEIs.

Although the mainstream literature of higher education applies the triple helix model to analyse the stakeholder interaction in higher education in developed countries, the model is deemed rather inapplicable for the higher education context of donor-dependent Cambodia. Therefore, a model which accommodates the fourth stakeholder is needed. It is proposed that the triple helix model be transformed into a quadruple helix model, embracing the government, HEI, development partners (donor agencies and NGOs) and industry, in order to examine its applicability and ascertain how stakeholders are involved in the higher education sector in Cambodia.
1.5.5 Institutional governance

Mass education, limited (and decreasing) public funding, global competitiveness and the ever-changing demands of the knowledge-based economy have more or less driven HEIs to become more sensitive towards economic development and deploy (more) entrepreneurial activities. Benner and Sandström (2000) assert that these developments are significant opportunities for change and development in higher education. As a recent European study (Davey, Baaken, Muros, & Meerman, 2011) shows, a majority of academics consider themselves involved in some entrepreneurial activity. Most universities nowadays have an “expanded developmental periphery” (Clark, 1998a) such as a technology transfer office that initiates, coordinates and manages the entrepreneurial activities. The extended periphery has led to the adoption of the triple helix model to promote stakeholder collaboration, carrying implications for the institutional governance of HEIs, which has become a critical issue in the higher education sector in the twenty-first century. Based on the case studies in the five European universities to determine how they had gone about changing the way they are operated, Clark (2001, pp. 14-15) has related the university governance issue to “the strengthened steering core”, an important element of transformation to encompass “central managerial groups and academic departments” expanding from “highly personal leadership to highly collective or group-based leadership”.

Edwards (2001, p. 3) defines the concept of “governance” as “how an organization steers itself and the processes and structures used to achieve its goals”, while Gallagher (2001, p. 1) defines it as “the structure of relationships that brings about organizational coherence, authorized policies, plans, and decisions, and accounts for their probity, responsiveness and cost effectiveness”. Marginson and Considine (2000, p. 7) have related this concept to university governance as “the determination of values inside universities, their systems of decision making and resources allocation, their missions and purposes, the patterns of authority and hierarchy…”. Shatlock (2002, p. 235) notes that university governance simply refers to “university governing bodies, how they function, the relationship between governance and management … and their responsibility for determining university strategies”. Thus, when it comes to the study of university governance, a large body of literature on university governance (e.g. Bargh et al., 1996; G. K. Davies, 2011; De Boer, 2002; Dixon & Coy, 2007; El-Khawas, 2002; Maassen, 2000; Shatlock, 2002, 2012; Taylor, 2013; Trakman, 2008, etc.) places a great emphasis on examining university governing bodies, the supreme institutional authorities, since they are particularly involved in the
governing process of making overall decisions about policies and setting long-term directions and strategies to be taken by universities.

Shattock (2002) examines “the corporate-dominated and the academic-dominated forms of university governance”. The former, a “corporate model”, is usually one where the governing body represents the dominant decision-making power on “both a de facto and a de jure basis” over the university, and its membership is usually predominantly non-academic lay governors. By contrast, the latter, a “consensual model”, represents the dominance of academics in the governing process. Moodie and Eustace (2012, p. 233) assert that the governing bodies must rely on academics to govern universities as “no one else seems sufficiently qualified to regulate the public affairs of scholars”. Despite this, in the nineteenth century, the corporate model was considered desirable as lay governors were needed to generate funding for teaching and research due to the limited regular funding received from the government (Moodie & Eustace, 2012). Notably, as professional service organizations within the changing market-steering environment, universities have moved towards the concept of “shared governance” to secure their future (Shattock, 2002; Taylor, 2013). Taylor (2013) describes shared governance as a model in which university governance is shared between the academic community and the governing body associated with lay dominance, and is coordinated by the university executive. However, the shared governance model is rejected by the corporate model because the institutional decision-making process is considered rather slow under the shared model (Rhoades, 2005).

Examining university governance through governing boards across the British Commonwealth and the United States, Trakman (2008, pp. 66-74) has identified five models of university governance: (1) faculty, (2) corporate, (3) trustee, (4) stakeholder, and (5) amalgam. First, faculty governance is the most traditional model whereby universities are governed by academic staff, as they are assumed to be highly equipped to achieve academic goals. Nonetheless, it is argued if academics have sufficient skills in financial management and accountability. Second, corporate governance, common in today’s universities, is based on a business model whereby a governing board directs institutional governance, and a chief executive officer, chief operating officer, and chief financial officer serve on the board as senior management. Third, trustee governance operates through a trust relationship between university governors who act for and on behalf of the university. Fourth, stakeholder governance is a model that encompasses a wide range of both internal and external
stakeholders who make decisions as part of the governing board. Finally, an amalgam model of governance is an inclusive model that consists of features of all the above models.

Besides diverse models of university governance, there are variations in university governance arrangements in different countries. For instance, in the United States, most HEIs are under the supervision of governing boards or boards of trustees as supreme institutional governing bodies, composed of elected or appointed external members such as respected business people or other professionals in the community, with some selected at a national level (El-Khawas, 2002). Although the institutional presidents are not board members, they work closely with the boards and support them in setting final directions of actions for universities (El-Khawas, 2002). Amaral, Jones, and Karseth (2002a) conclude that such a governance structure involves “a strong, centralized approach to decision-making” exercised by the institutional president, along with his or her cabinet, under the direction of a governing board. Conversely, in France, universities are composed of three deliberative bodies: an academic council (elected representatives of university staff, graduate students, and external members); a board of studies (academics, students, administrative staff representatives, and external personalities); and a governing board (academics, external or lay members, students and administrative staff) (Musselin & Mignot-Gérard, 2002, pp. 65-66). The first two bodies present proposals for policy decisions to the governing board. This structure is dominated by state control and academic bodies. Amaral et al. (2002a) argue that such university governance arrangements are considered “weak”, with “indecisive and ineffectual” institutional participatory councils.

Notably, the advent of the concepts of the entrepreneurial university (Bercovitz & Feldman, 2006; Clark, 1998a, 2001; Etzkowitz, 2002, 2003a, 2008; Etzkowitz et al., 2000; Guerrero & Urbano, 2012; Redford & Fayolle, 2014; C. Sam & van der Sijde, 2014), academic capitalism (Rhoades & Slaughter, 1997, 2004; Slaughter & Leslie, 1997, 2001; Slaughter & Rhoades, 2004), and commercialization (Bok, 2003) carry important implications for university governance. Universities are encouraged to respond swiftly and appropriately to the ever-changing demands of the knowledge-based economy and to diversify their income sources in the face of limited public funding. Etzkowitz et al. (2000) have found that university governance structures have changed as universities have expanded their roles in innovation, from the generation and dissemination of knowledge to the commercialization of it. With the concept of the entrepreneurial university, faculty staff and
technical personnel in academic departments are expected to commercialize research findings and seek collaborations with external partners. Similarly, Torres and Schugurensky (2002) note an increasing presence of market values and forces in academia by which professors, departments, and faculties of both public and private universities are progressively involved in competitive behaviours for funding, grants, contracts, and student selection. Academics are encouraged to develop an entrepreneurial approach to research and teaching. Rhoades and Slaughter (1997) describe this situation as “academic capitalism”, whereby universities are not only service suppliers to the marketplace but also active players in the marketplace as profit-making organizations that are moving “beyond the ivory tower”. Meanwhile, in terms of commercialization, university officials and faculty members at private universities in the United States are forced to seek external funding sources and professors are urged to market their specialized knowledge and scientific discoveries (Bok, 2003). Moreover, Gumport (2000) assert that public HEIs in the United States have shifted from being a social institution to an industry. Similarly, universities in Hong Kong have adopted a business-like model of governance to promote university–industry linkages, commercialize their research outputs and expand their business activities (D. Chan & Lo, 2007). Mok (2007) illustrates the governance structure of a corporatized university with an example of the Universiti Sains Malaysia, which is operated like a business company whereby the board of directors and the vice-chancellor possess strong decision-making powers.

At the turn of the twenty-first century, the private higher education has become prominent as one of the fastest segments in the higher education sector worldwide (Altbach, 2005). The cutbacks in the public funding and ever-increasing demand for higher education have contributed to the rapid growth of the private higher education providers. Meanwhile, many of the private HEIs are seen to be operating like for-profit organizations (Ruch, 2003), a situation which is much prevalent and quality-threatening in developing countries in particular (World Bank, 2000). A close examination into some of the private HEIs has revealed that they are small in size and provides mainly market-friendly programs such as management studies, computer science, medical and engineering subjects (Varghese, 2004). In other words, private HEIs involved themselves in commercial activities, particularly out of teaching services, to sustain their business albeit with limited resources. Nizam (2006) points to Indonesia in which the private universities are managed by the founding organization whose primary concern is about profitability instead of quality.
Similarly, in Cambodia, HEIs, private HEIs in particular, are moving toward commercialization, posing an implied threat to the education quality. Most HEIs are competing with each other to offer limited study areas such as business, social sciences and law due to the less costly operation and concentrated student enrolments. Since 1997, the participation of the private sector in the higher education sector has opened up an increasingly commercialized environment coupled with competition from a fast-growing number of HEIs. Dy (2015) asserts that the private providers have neglected science and technology education, leaving a large gap between the curricula and skills needed in the market. Ford (2006) notes that competition among HEIs has resulted in a decrease in tuition fees and at least one bankruptcy. Noticeably, the competition among HEIs is aimed at tuition fees and profit, badly affecting the education quality (Dy, 2015). Ford (2006) asserts that after public HEIs are authorized to run fee-pay programs, they have enrolled increasing numbers of students for tuition fees to supplement teachers’ salaries and provide necessary funds for capital works (e.g. constructing buildings, installing facilities, etc.), which makes public and private HEIs become increasingly similar. A major institutional reform, known as the grant of Public Administrative Institution (PAI) status to some public HEIs to become autonomous institutions to lessen the government’s financial burden, has not yet shown to result in any significant changes in the university governance and management (Touch et al., 2014). In addition, while the private sector keeps growing rapidly, the public HEIs are hampered by the government control and politicization (Ford, 2006). Considering different providers of higher education and the market forces, along with the politicization in the sector, the insight into the university governance in Cambodia is considered necessary to enable HEIs to shape the educational quality and services to produce qualified graduates for the competitive knowledge-based economy.

All in all, most of the literature cited has been framed for the higher education sector in the Western world or developed societies. Derived from the theoretical concepts, the conceptual framework of the current study has been formed to explore how applicable it is in the context of the emerging economy like Cambodia, which is still largely dependent on foreign assistance. The study also aims to ascertain how these western concepts can actually contribute to the understanding of the issues and challenges in the Cambodian higher education sector and to further seek practical solutions to the current issues to strengthen the sector as Cambodia’s economy is moving toward a knowledge-based future. Figure 1.2 illustrates “a quadruple helix model” as a conceptual framework, which proposes who
constitutes stakeholders in the higher education sector in Cambodia and how their involvement is hypothesized to impact upon the governance of HEIs in Cambodia.

Figure 1.2: A conceptual framework of the research

1.6 Research methodology

1.6.1 Methodological approach

From an ontological position, the study views reality as constructed in the social world. The social construction of meanings is a continuous process since the meanings are created when people embed themselves in their world to make sense of their environment. The study views as multiple realities the stakeholder involvement in the Cambodian higher education sector and university governance, which bear some relations to the idealism, which, on the other hand claims, “[R]eality is fundamentally mind-dependent: it is only knowable through the human mind and through socially constructed meanings, and no reality exists independently of these” (Ormston, Spencer, Barnard, & Snape, 2014, p. 5). Therefore, in order to capture the realities about stakeholder involvement and institutional governance issues, the researcher has conducted interviews with research participants from relevant institutions to find out how they perceive the higher education sector in Cambodia based on their active engagement and extensive experience in the sector. The interviews also enable the researcher to observe their
behaviours, forming further realities for the study. Meanwhile, the research participants’ statuses in politics, academics, development and business enable the researcher to develop further insight into the issues of inquiry as they tend to view higher education from different perspectives. In addition, the researcher has participated in discussion forums pertinent to higher education in Cambodia in order to absorb more knowledge about the stakeholders’ behaviours and actual engagement in the sector. Multiple realities socially constructed through the research participants’ perceptions, behaviours, and actual involvement from different sources in the sector help complement one another to form a clear picture about stakeholder involvement, higher education development, and university governance in Cambodia. In this sense, the realities constitute crucial qualitative data as the empirical evidence to provide to the research findings in order to develop deep insight into the issues of inquiry.

From an epistemological position, the researcher, together with his long experience as a faculty member in a Cambodian HEI, constitutes a research tool negotiating with the research participants as to how the data are constructed and interpreted. Social constructivism thus serves to seek insights into the issues under study in Cambodia. In this sense, reality tends to vary according to place and time. This study has employed an interpretivist approach to inquiry in order to map the higher education sector in Cambodia and to explore the actual phenomena concerning the stakeholder involvement and collaboration in the sector and HEIs’ governance by using both the researcher’s and research participants’ understandings based qualitative research methods.

From an axiological perspective, as a qualitative research study, the data collected during the fieldwork involve biases, a value-laden nature of information, reactions and behaviours of different stakeholders through their engagement in the sector. These data have shaped the descriptions of the findings in the empirical sections of the dissertation to be used for the data interpretation. Creswell (2013) asserts that interpretation could either concur or contrast with the existing body of knowledge in academic literature. The findings are, therefore, followed by discussions, linking the researcher’s interpretations with the larger research literature developed by other scholars in the field.
1.6.2 Research setting and design

HEIs in Cambodia are located in different provinces nationwide. The study has selected eight HEIs (1 PAI, 3 public and 4 private), ranging from the long-established to the newly-established HEIs in different regions in order to obtain a clear picture of HEIs in Cambodia. Five of the selected HEIs are located in Phnom Penh, the capital city of Cambodia, where most HEIs and student enrolments are concentrated. In other words, Phnom Penh is the focal point of HEIs in Cambodia, thereby providing a good reflection about HEIs in Cambodia. The other three HEIs are located in three different provinces, namely Kampong Cham, Kratie and Svay Rieng. Of all the three provinces in Cambodia, Kampong Cham appears prominent in the growth of HEIs including the branch campuses extended from the main campuses of HEIs in Phnom Penh and it is also known as the second most populated province in Cambodia. Thus, the selection of this province in the study enables the researcher to develop more understanding about the situation of HEIs outside the capital city. Moreover, Kratie and Svay Rieng are known as relatively poor provinces with few HEIs in Cambodia. This characteristic of the provinces offers another perspective on the situation of HEIs from the rural areas in Cambodia as to how they perform to provide education for students. In this sense, the study has covered a variety of regions – ranging from high to low level of development – in which HEIs are located in order to capture an overall picture of HEIs and to develop a deep understanding about the development of the higher education sector in Cambodia. In other words, the selection of different types of higher education providers in different regions aims to seek a better understanding of how different HEIs are engaged with their stakeholders and how they are governed to shape their educational services and products for quality education. It should be noted that all the selected HEIs are under the supervision of the MoEYS, which supervises the majority of HEIs (both public and private) in the country and takes the lead in making educational policies for the sector.
The relevant institutions such as the government institutions, specifically the MoEYS and the ACC, donor agencies, HEIs, and private sector have been selected in order to obtain data from different stakeholder perspectives to seek insights into how stakeholders are involved in the sector and how HEIs are governed. The data sorts from different stakeholder perspectives form a crucial type of “triangulation of perspectives” (Flick, 2004, 2009), which is considered a viable strategy to improve the quality of qualitative inquiry on the phenomenon under study and that of data analysis. In addition, different stakeholder behaviours shown during the interviews have provided useful input for the data interpretation in the study. The fieldwork was mainly conducted from December 2012 to December 2013. The follow-up interviews were conducted in 2014 to deepen the researcher’s understanding about the qualitative issues of inquiry. In other words, the subsequent fieldwork aims to obtain further concrete details of the interviewees’ experiences pertaining to the issues of inquiry and to clarify some issues, which have emerged from the researcher’s query after and the examination of additional content stimulated by the first interviews. The follow-up interviews have allowed both the researcher and interviewees to explore additional ideas about and reactions toward the first interviews. In addition, the interviews have created a stronger relationship between the researcher and interviewees, which has created a better environment conducive for one-on-one interviews to help enrich the data for the study.
The data collection is divided into three phases. Phase I involves mainly a collection of secondary data such as government publications, education congress reports, research publications, and education archives from the MoEYS, the library at the Cambodian Development Research Institute (CDRI), and the Hun Sen library at the Royal University of Phnom Penh (RUPP). A thorough thematic literature review has also been conducted based on journal articles, research publications, etc. through online Google scholar search and Vrije Universiteit Amsterdam’s library electronic resources and by browsing through the bibliography of research publications. Phase II involves mainly qualitative data collection using interviews with research participants from concerned institutions such as the government, donors, HEIs, and private sector. Interviews with leadership and management at both public and private HEIs have also been conducted during the phase to ascertain what challenges HEIs are encountering in collaborating with external stakeholders and how they are governed. Phase III includes the subsequent qualitative data collection with the research participants as a follow-up process to update and gather more data for the study as needed (Table 1.1).

As can be seen in Table 1.1, there is a time lapse between Phase II and Phase III of the fieldwork. The gap is due to the fact that I spent this time period on data organization and management to digest the data collected from the fieldwork and on my dissertation writing before resuming the fieldwork. It should be noted that during the period (January-April, 2014), I was invited to come to Australia as an international research fellow at Griffith University in Brisbane, Queensland, to work on my dissertation. This has opened up a good opportunity for me to work thoroughly on my empirical data before resuming the fieldwork and to start working on my dissertation.
Table 1.1: The three-phase fieldwork

<table>
<thead>
<tr>
<th>Description</th>
<th>Phase I (Dec 2012-Feb 2013)</th>
<th>Phase II (Mar-Dec 2013)</th>
<th>Phase III (May-Aug 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method</strong></td>
<td>Desk review Secondary and primary data collection and analysis</td>
<td>Qualitative data collection and analysis</td>
<td>Qualitative data collection and analysis Secondary data collection</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>To map the overall higher education sector in Cambodia.</td>
<td>To find out how stakeholders are involved in the higher education sector.</td>
<td>To further examine how HEIs are governed.</td>
</tr>
<tr>
<td></td>
<td>To identify the stakeholders in the higher education sector in Cambodia.</td>
<td>To ascertain what challenges impede the stakeholder collaboration in Cambodia.</td>
<td>To find out how the current institutional governance influence the quality of the educational services and products in HEIs.</td>
</tr>
<tr>
<td></td>
<td>To find out how Cambodian HEIs’ governance is arranged.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sampling</strong></td>
<td>Thematic literature review and analysis</td>
<td>Purposive sampling Snowball sampling</td>
<td>Purposive sampling Snowball sampling</td>
</tr>
<tr>
<td><strong>technique</strong></td>
<td></td>
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<tr>
<td><strong>Data collection</strong></td>
<td>Literature review using local publications, archives, e-library and Google Scholar</td>
<td>Semi-structured interviews Observation</td>
<td>Semi-structured interviews Follow-up interviews</td>
</tr>
<tr>
<td><strong>technique</strong></td>
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<tr>
<td><strong>Data entry and analysis</strong></td>
<td>Document analysis Content analysis Theme-based analysis</td>
<td>Interview transcription and translation Document analysis Content analysis Thematic coding approach for qualitative data analysis, using NVivo 10</td>
<td>Content analysis Theme-based analysis for qualitative data analysis, using NVivo 10</td>
</tr>
</tbody>
</table>

1.6.3 Research methods

This study starts with “a systematic literature review” (Chapter Two) to build a theoretical foundation for the empirical study. This systematic approach for the chapter entails extensive searches of relevant higher education literature through Google Scholar and Vrije Universiteit Amsterdam’s library electronic resources and the bibliography of the recent research publications. The references of the retrieved studies are stored in EndNote link repository to be further analysed. The approach is intended to ensure that all literature in the field is identified while keeping the focus on literature of most pertinence to higher education models and the concept of entrepreneurial university in order to ascertain the best evidence for the review. Tranfield, Denyer, and Smart (2003) assert that a systematic review helps build a reliable knowledge base through knowledge advancement based on a wide range of studies.
Both online and hand searches have been carried out and tracked during the search process. Relevant alternative terms have been used to combine with “higher education” or “universities” for search purposes, for example: historical development, academic revolution, entrepreneurialism paradigm, commercialization, academic capitalism, entrepreneurship, research, university-industry linkage, entrepreneurial orientation, knowledge-based economy/society, third mission, globalization, innovation, commercial technology, and technology transfer. Published scholarly journal articles are prioritized in the selection of literature for the review article. Several criteria have been applied to determine the priority of the research papers for the review. They include the relevance of the research to the review, quality of research in terms of its design, conduct and reporting, and the reviewer’s judgement of the reliability and validity of the research findings.

The searches have resulted in 160 papers (empirical and theoretical) being selected for further scrutiny. All the searches are documented using reference manager software “EndNote X5” with links to original sources. Each publication is scrutinized for its relevance to the remit of the review and is subjected to a careful review to extract key information about the purpose, design, findings, and implications of the study. Issues and conclusions drawn from both theoretical and empirical papers are used as supporting evidence for the review article. In addition, the summaries of each study are then analysed to build up an evidence base with reference to the review objective. For analysis and reporting, thematic and content analysis has been employed through an aggregative and interpretive approach to find out what has been known in the field in order to identify what contributions the review article can bring to the scholarly work. The thorough examination over the publications in the field has detected a missing gap in the academic literature on the discussion about the concept of entrepreneurial university in relation to the higher education models.

The analysis has then started with the scrutiny over the content of the relevant papers for the key features of the European higher education models: Humboldtian, Napoleonic, and Anglo-Saxon. The analysis has gone further to explore the dominant higher education model worldwide – Anglo-American model – to ascertain its distinct features although derived from the European models. The content analysis under each model has been conducted to find out its important elements of most pertinence to the latest development of higher education in the knowledge-based economy – entrepreneurial university. The analysis has resulted in three emerging developments which can be discussed in relation to the four higher education
models. The developments include education for lifelong learning and entrepreneurship education, research from mode 1 to mode 2, and role of the university in the knowledge society. The three developments are used as the three central themes to shape the discussion of the paper. Moreover, the analysis has looked into some developed countries as crucial cases for an illustration and discussion about the latest development of higher education toward the entrepreneurial university from the perspective of higher education models.

The empirical study, which is informed by the theoretical framework in Chapter Two, is based on qualitative research, employing a phenomenological approach to inquiry in order to deepen an understanding about the stakeholder involvement in the higher education sector and the governance of HEIs in Cambodia. The phenomenological approach is used to examine different reactions and perceptions of the well-experienced individuals toward a particular phenomenon (e.g. the stakeholder involvement and university governance) usually through in-depth interviewing (Creswell, 2013; Fraenkel & Wallen, 2009). In this sense, the qualitative research applies a series of interviews as the main method of data collection. The interviews involving knowledgeable individuals are considered crucial sources of information for the researcher by providing the detailed information about both the past and contemporary issues about the phenomenon under study (Fraenkel & Wallen, 2009). Patton (2002) has claimed that this approach enables researchers to examine key issues in depth through detailed information provided by a number of people. Moreover, Schostak (2006, p. 10) asserts that interviews provide opportunities for individuals to interact with each other in order to seek insights into “the experiences, concerns, interests, beliefs, values, knowledge and ways of seeing, thinking and acting of the other”.

The study is based on 55 interviews with 46 interviewees from different relevant institutions such as the government institutions (specifically the MoEYS and the ACC), the donor agencies, both private and public HEIs, and the private sector. It should be noted that 3 of the 46 research participants become the key persons for the researcher in this study as they have offered the researcher advice and comments on this study during the fieldwork in addition to being the research participants. Meanwhile, they have helped the researcher with document sharing and network building with key actors involved in the sector in order to gather much information relevant to this study. The research participants in the study include education policy makers, senior education officials, researchers, higher education professionals, donor representatives, university leadership, and senior managers from the
private sector. Purposive sampling method is employed to select the research participants so as to gain rich data about the area from different stakeholder perspectives. Patton (2002) indicates that this sampling method is powerful in qualitative study to obtain rich information about issues of inquiry. Most research participants in the study are therefore purposively selected based on their vast and long-standing experience in higher education and their academic and professional background in the field. Some other interviewees are selected based on the recommendations of the well-situated people much experienced in the field. Patton (2002) regards such a snowball sampling method as an approach for finding information-rich research participants, which helps gather rich data for the study. In this regard, all the research participants are knowledgeable on the topics of interest and inquiry.

Semi-structured interviews have been conducted face-to-face between the researcher and each of the interviewees in order to explore the phenomena under study. Cook (2008) asserts that semi-structured interviews enable a researcher to have a control over the direction and content to be discussed and probe for further information while research participants feel free to elucidate or take the interview in a new but related direction. Meanwhile, the interviews have enabled the researcher to observe the interviewees’ reactions toward the issues of inquiry in addition to their perceptions. Seidman (2013) asserts that interviewing also opens up access for a researcher to the context of the people’s behaviour and the meaning attached to it. In this sense, the interview protocols have been developed to include a list of questions to be addressed in the interviews with all the research participants in order to examine the issues of inquiry (see Appendix 2). Three sets of interview protocols have been prepared for interviews with the research participants from relevant institutions. With the interview protocols, the researcher can have flexibility in probing and determining when it is suitable to explore the issues in further detail or even to pose questions about new areas under inquiry, which are not originally expected.

In order to achieve clarity in the interview questions and obtain the responses necessary for the study, the interview protocols have been piloted with one Cambodian scholar and one education official who have been academically and professionally involved in higher education in Cambodia. From the pilot interviews, the researcher has received constructive comments to rephrase the questions to avoid the issues of double-barrelled, leading, and ambiguous questions and to improve interviewing techniques. The questions have been rephrased based on their comments (see Appendix 3). The pilot interviews have
also helped the researcher to feel more confident in both asking questions and eliciting responses prior to the actual formal interviews with the research participants. It should be noted that most of the interviews are conducted in Khmer (the researcher’s native language) so that in-depth information about the key issues can be well obtained from the interviewees through both verbal and non-verbal language as most of them are Cambodians. The interviews have been audio-recorded with the permissions from the interviewees.

In addition, the researcher has attended three group discussion settings to advance his knowledge about the current development of higher education in Cambodia as the sector has gained a considerable momentum for economic development in Cambodia. From the three settings, the researcher has obtained information from representatives of relevant institutions and expert knowledge about the current issues of the higher education sector in Cambodia. Moreover, these events open up an opportunity for the researcher to get to know more key actors involved in higher education, some of whom are later approached to seek their permission to participate in the research as the participants in the interviews. It should be noted that the researcher has been permitted by the program organizers to participate in the following workshops in the capacity of a researcher who conducts a study on higher education in Cambodia. Therefore, the researcher can take part in the following discussion settings as an unobtrusive participant in order to absorb knowledge about the relevant issues on the higher education sector in Cambodia.

The first one is a research workshop on “Understanding the ASEAN integration: How does it relate to Cambodian universities?” organized by RUPP and supported by International Development Research Centre (IDRC) in Phnom Penh, Cambodia on 12 July 2013. The workshop participants include representatives and students from both public and private HEIs and an expert on the topic to deliver a keynote address entitled “Research and innovation management in Cambodia: Challenges and way forward”. This workshop aims to discuss stakeholders’ awareness about and their reaction toward the ASEAN economic integration 2015 based on the current higher education situation in Cambodia. The group discussion has been conducted in the workshop in which each divided group has expressed their awareness and reactions toward the challenges of the economic integration based on the current situation and draw implications for Cambodian universities. The researcher has taken notes while observing the discussion in order to gather as much information as possible. All the handwritten notes and observation records have been scrutinized after the workshop to
synthesize all the key issues raised by the participants. The key issues include research situation at HEIs, challenges and opportunities for Cambodian HEIs for the upcoming AEC, capability of Cambodian HEIs to produce a competitive workforce, and preparation of Cambodian HEIs to cope with the changing labour market. The inputs from this workshop enable the researcher to expand his knowledge about the current higher education issues in Cambodia while Cambodia is to enter the ASEAN common market at the end of 2015.

The second workshop is the policy roundtable held at RUPP on 20 August 2013 on “Implications of the ASEAN integration on higher education in Cambodia”. The key participants include representatives from both private and public HEIs, MoEYS, the Ministry of Economy and Finance, the ACC, the Cambodian Higher Education Association (CHEA), and the Young Entrepreneurs Association of Cambodia (YEAC). It aims to identify the government policies concerning the AEC and higher education; to discuss prospective directions for HEIs; and to draw implications for higher education during the AEC. The workshop has shown the stakeholder representatives’ perceptions and behaviours based on their active engagement in the higher education sector. The forum is divided into two parts in which the first one mainly covers the presentations from each guest speaker who is a representative from different institutions, followed by a question-and-answer session, while the second one constitutes the whole discussion between the guest speakers and all the participants. The whole discussion has been audio-recorded in which the first and second part take 2 hours 07 minutes and 1 hour 18 minutes respectively, accounting for 3 hours and 25 minutes in total. In addition, the researcher has taken notes about the important issues discussed in the workshop and conducted observation to learn about the stakeholders’ perceptions, engagements, and interactions in the sector in order to deepen an understanding about the issues under study. The audio records have been listened to several times, and the handwritten notes and observation records have been reviewed, for a reflection and synthesis of all the key issues discussed in the workshop. The issues include the government policy and intervention on higher education development in preparation for the AEC, implications of the AEC for the Cambodian economy, implications of the AEC for the entrepreneurs in Cambodia, entrepreneurship education in Cambodian HEIs, capability of Cambodian HEIs for the AEC, and the way forward for higher education development in Cambodia. In addition, the presentation slides have been gathered to be cited as references where needed in the study. This forum has offered a useful input to the researcher to establish an overall picture of how stakeholders are engaged and interact with each other in the sector.
The third one is a thematic workshop on “Preparedness and challenges of Cambodian higher education toward ASEAN community 2015 and beyond” organized by the Australian Alumni Association of Cambodia in Phnom Penh, Cambodia on 19 June 2014. The key actors comprise the education minister as a keynote speaker, education specialist from the World Bank, director-general from the National Bank of Cambodia (NBC), and senior officials from the Emerging Market Consultant, National Employment Agency of the Ministry of Labour and Vocational Training (MoLV), and the ACC. The workshop is divided into two parts in which the first part covers a keynote speech of the education minister, followed by presentations of the other key actors as representatives from relevant institutions and the second part is a penal discussion in which the penal consists of representatives from the MoEYS, ACC, NBC and HEI, followed by a question-and-answer session involving all the participants. Detailed notes have been taken and observation has been conducted to find out how the key actors from relevant institutions perceive the higher education issues in Cambodia and how they interact for the sector development. The discussions and interactions among stakeholder representatives constitute an overall picture of the higher education landscape in Cambodia, particularly the latest update on the sector development and challenges as Cambodia is to be integrated into the AEC. All the presentation slides have been gathered to be used as references when needed for the study. The handwritten notes, observation records and presentation slides have been reviewed after the workshop to reflect and synthesize the key issues relevant to the study. The issues include current skills and talent gap in the labour market, skills for regional workforce mobility, research and development in Cambodian higher education, challenges and the way forward for the sector development in Cambodia.

All in all, the inputs from the three cases have enabled the researcher to achieve a deep analysis of the issues under study, particularly concerning stakeholder involvement and the development of the higher education sector in Cambodia during the preparation for the 2015 AEC. All the syntheses from each workshop have been put together to ascertain the divergent and convergent patterns to be prepared for analysis with data from other sources. In addition, the gatherings of the key stakeholder representatives in the three discussion forums have enabled the researcher to gain deeper understanding into what has happened in the Cambodian higher education sector in relation to the country’s economic development, stakeholder interaction in the sector, and how HEIs are currently performing to prepare their graduates for the ever-changing demands of the current labour market within the context of
globalization and regionalization. Moreover, they are of use to the researcher to identify other key actors in the sector to be further approached to seek their permissions for interviews.

1.6.4 Data analysis

All the interviews have been transcribed and the ones conducted in Khmer have been translated into English to facilitate the coding and analysing process across transcripts in NVivo 10. It should be noted that the transcription and translation are done by one research assistant (a university graduate) and they are all then verified by another research assistant (a postgraduate) to ensure accuracy and to avoid missing information. This procedure is employed to ensure the accuracy of the data and to avoid researcher bias in the study.

All the transcripts, together with audio interview files which are played as needed for clarification during the data analysis, are imported into NVivo. This qualitative data analysis software tool is employed to support the data analysis through data storage, coding, retrieval, comparing and linking in order to ensure that all the relevant data have been used exhaustively across all the transcripts. Beekhuizen, Nielsen, and von Hellens (2010) assert that the use of NVivo helps make the data analysis process “transparent”. The study starts with content analysis of each transcript to generate nodes (a collection of references about a specific theme or topic of interest). Some existing themes obtained from the semi-structured interviews and document reviews are used to guide the coding process. It should be noted that the coding process begins with a group of interview transcripts within an individual stakeholder category (e.g. the government, donor agencies, NGOs, HEIs and industry). The process also involves highlighting important statements such as sentences and quotes to provide the researcher with an understanding of how the interviewees experience the phenomenon. Moustakas (1994) describes this process as “horizontalization”. The clusters of meaning generated from the important statements and nodes are grouped under the existing relevant themes while some others are developed into emerging themes.

All the themes developed within each stakeholder category are then thoroughly checked across other categories. The overlapping themes across different categories are merged together to provide a deeper understanding about the issues of inquiry across categories. The themes which are not matched across the categories are used as separate themes for further analysis of the findings. It then proceeds with a close examination of all the nodes and statements within each merged and separate theme to clearly understand the
issues under study. The process allows the researcher to ascertain convergent and divergent opinions and reactions among different stakeholder categories about the phenomenon of inquiry. That is, a large collection of nodes and statements from all the transcripts has added details to the existing and emerging themes about the roles of each stakeholder group and the university governance in Cambodia (see Appendices 4 and 5). In addition, the themes and the important statements from across transcripts have been used to describe what the interviewees experience and the context which influences how they experience the phenomenon under study. Creswell (2013, p. 82) describes the former process as “textual description” and the latter as “structural description”. Both processes have enabled the researcher write a composite description providing an “essence” of the phenomenon.

Secondary data obtained from government reports, regulations, local publications, strategic plans and archives, are analysed to gain insights into the overall aspects of the Cambodian higher education sector. That is, the data are complemented by document analysis, serving as a means of tracking changes and development in the higher education sector in Cambodia. In addition, key relevant quotes from the interviews have been extracted and used where applicable throughout the finding sections in the empirical chapters of the dissertation. In other words, in order to provide evidence to the findings, a number of quotes have been extracted from the interviews to serve as exemplary quotes. Moreover, the empirical data from the focus group discussion and observation at the aforementioned workshops have served as an additional input for the researcher to obtain a clearer picture of the stakeholder involvement and the current issues of the higher education sector in Cambodia. The syntheses generated from the handwritten notes, observation records, audio records, and presentation slides have also been employed for analysis in relation to the empirical data from the interviews with research participants. It should be noted that all the datasets from different sources (interviews, documents, and workshops) have been imported into NVivo 10 for analysis in order to ensure that the findings of the study are trustworthy, derived from the in-depth data analysis process.

It is important to note that the entrepreneurial university concept as a driver of the triple helix model of innovation has been applied as a guide to analyse the performance of HEIs in Cambodia in comparison with those in some Southeast Asian countries (Chapter Three). The triple helix model involving university, industry and government has been employed as a guiding tool to analyse the stakeholder involvement in the Cambodian higher
education sector (Chapter Four). The process of institutional governance, particularly in relation to the institutional governing body, has been used to examine the governance of HEIs in Cambodia and ascertain the challenges involved in the governing process for quality education in Cambodia (Chapter Five).

1.7 Ethical considerations

In any research project, a researcher needs to ensure that all the participants will not suffer any harm or discomfort which may occur due to the research procedure. Hence, all the data for the study have been collected with great attentiveness to confidentiality, privacy, and voluntariness. An informed consent form has been developed to provide the research participants with the following information:

- Research and purpose of the research;
- That participation in the research is voluntary and refusal to participate involves no penalty or loss of benefits;
- Confidentiality: personal information provided by the interview participants is protected for privacy and confidentiality (see Appendices 1 and 2).

The consent form is presented to each of them to request their permission for the interviews. Moreover, the researcher requests the permissions from each interviewee to audio-record the interview for in-depth analysis in addition to the handwritten notes taken during the interviews. Moreover, all the interviewees are assured that their given information and recorded interviews would be carefully protected from the third party and used for this research purpose only. In order to protect the identity of the interview participants, the quotes are listed under a code. Information about gender, level of education, political affiliations and others, which might be sensitive to the interview participants or their institutions, is not disclosed.

In addition, the researcher has ensured that the research findings will be shared with the interviewees either through individual research papers or through research dissemination conferences. Three of the four articles are produced in co-authorship with my academic supervisors. The other one is produced under the crucial guidance of my academic supervisor. All these measures are taken to warrant research integrity and transparency of how the data is used.
1.8 Research setting within the Cambodia research program

This PhD research project is a part of a large Cambodia Research Program, "Competing Hegemonies - Foreign-dominated processes of development in Cambodia", a collaborative research project between Dutch and Cambodian academic institutions and funded by the Netherlands Organizations for Scientific Research (NWO). Unlike other research projects in this research program, this PhD research project is funded by the Vrije Universiteit Amsterdam. Other research projects include topics pertinent to NGOs balancing between social value creation and profit-making in Cambodia, a comparison of Cambodian returnees’ contribution to transformation of Cambodia, Sino-Khmer entrepreneurship, and Chinese and Korean investments in Cambodia. One of the main objectives of the research program is to “analyse the diverging ways in which the main stakeholders in Cambodian development (government, civil society, foreign investors, and the Cambodian returnee and business community) position themselves vis-à-vis one another and the development models that emerge in their wake” (Cambodia Research Group, 2010). In addition, the program aims to address institutional change, especially the “entrepreneurial turn” in the foreign-dominated, donor dependent development industry in Cambodia.

My PhD research project contributes to the program by analysing the involvement of different stakeholders in the higher education sector in Cambodia in order to categorize stakeholders and determine their salience for HEIs to consider for partnership. As a French protectorate from 1863 to 1953, Cambodia has been left with a legacy of the traditional French model in its education system (Dy, 2004). Moreover, the influx of the international donors, particularly after the United Nations-led general election in 1993, has marked their great influence on many sectors including education in Cambodia. Donor support is considered essential for the country development after the civil war and the genocidal regime from 1975 to 1979, leaving Cambodia a severe loss of human resources and infrastructure. Despite this, the study has revealed that the foreign domination on the higher education sector in Cambodia has decreased as the Cambodian government has obtained increased power in the decision-making process and sense of ownership for the sector development. For instance, although the Education Strategic Plans (ESPs) from 2003–2006 to 2006–2010 are the policy documents written primarily by foreigners, the ESPs from 2009–2013 to 2014–2018 are shifted to national leaders in the MoEYS to determine the content and set planning priorities albeit often assisted by foreign consultants working with ministry officials. Notably, over the last few years, the Cambodian government has started to take higher education policy
initiatives, namely on governance and financing policy despite donor technical support during the process. In addition, more national technical advisors have been promoted to work on the HEQCIP than foreigners. The current study argues that the foreign domination has now become less relevant to the development of the higher education sector in Cambodia since the Cambodian government has started to take the lead in the sector development albeit with the financial and technical supports from the foreign donors.

The project also contributes to the program by examining the university governance in Cambodia in order to enhance the institutional leadership and shape their directions toward entrepreneurialism in their performance for quality higher education. The limited public funding and increasing demand for higher education in Cambodia have urged HEIs to generate their own income as the government cannot fully fund higher education. Thus, it is questioned as to whether they are operating entrepreneurially for quality education. The findings of this research project helps enable HEIs to consider taking up new roles and collaborating with external stakeholders in order to secure their future and ensure the quality provision of educational services and products for the country’s socio-economic development and competitiveness in the contemporary society.

1.9 Scientific outputs

The research endeavour throughout the whole PhD trajectory has resulted in a number of research articles for publication in different academic journals. Under the supervision of and in collaboration with my two supervisors, I have produced four interrelated research articles for the dissertation (see Table 1.2). One of the articles (Chapter Two) was published in 2014, in Higher Education, the International Journal of Higher Education Research. Another article (Chapter Three) has been submitted to Research Policy. An article in Chapter Four was published in 2015 in Studies in Higher Education. An article in Chapter Five has been revised and resubmitted to Journal of Enterprising Community: People and Places in the Global Economy in the special issue on The Entrepreneurial University: Education and Community. In addition, the research papers have been presented in different conferences (see Table 1.3).
Table 1.2: The research project outputs

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Article title</th>
<th>Journal and status</th>
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<tbody>
<tr>
<td>2</td>
<td>Understanding the concept of the entrepreneurial university from the perspective of higher education models (Sam, C., &amp; Van der Sijde, P.)</td>
<td><em>Higher Education</em> (Published, March 2014)</td>
</tr>
<tr>
<td>3</td>
<td>Higher education development in Cambodia: Implications for the ASEAN Economic Community (Sam, C., &amp; Dahles, H.)</td>
<td><em>Research Policy</em> (Submitted, February 2016)</td>
</tr>
<tr>
<td>4</td>
<td>Stakeholder involvement in the higher education sector in Cambodia (Sam, C., &amp; Dahles, H.)</td>
<td><em>Studies in Higher Education</em> (Published, December 2015)</td>
</tr>
<tr>
<td>5</td>
<td>Cambodian higher education in transition: A perspective of institutional governance (Sam, C.)</td>
<td><em>Journal of Enterprising Community: People and Places in the global economy</em> (Submitted, November 2015) – Revised and resubmitted</td>
</tr>
</tbody>
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Table 1.3: Conference Papers/Poster/Presentation

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<tr>
<th>No</th>
<th>Article</th>
<th>Conferences/events</th>
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<tbody>
<tr>
<td>1</td>
<td>Cambodian higher education in transition: A perspective of institutional governance (Presenter)</td>
<td>The 16th International Conference on Education Research on Future education design: Theory, practice and Policy, Seoul National University, Seoul, Korea (14–16 October 2015)</td>
</tr>
<tr>
<td>2</td>
<td>The missing pieces of ubuntu of higher education in the post conflict in Cambodia: Redefining higher education for regional integration (Panel member – virtual presentation from Griffith University, Australia)</td>
<td>59th Annual Conference of the Comparative and International Education Society, Cornell Higher Education Research Institute, Washington, D.C. The United States (8–13 March 2015)</td>
</tr>
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</table>
| 3  | Stakeholder involvement in the higher education sector in Cambodia (Presenter) | Conference on Competing Hegemonies – Foreign-dominated processes of Development in Cambodia, Phnom Penh, Cambodia (06–07 October 2014)  
Annual Symposium on Cambodia Tomorrow: Developing research priorities for a middle-income country, Phnom Penh, Cambodia (17–18 September 2013)  
Graduate School Conference: Fresh perspectives, Vrije Universiteit Amsterdam, the Netherlands (27 September 2012)  
Annual event 2012, the Network Institute, Vrije Universiteit Amsterdam, the Netherlands (26 June 2012) – Poster presentation |
1.10 Organization of the dissertation

The dissertation is comprised of six chapters. Chapter One “Introduction and background of the research” presents the overall research background, research objective, research questions, theoretical framework, research methodology, significance, and organization of the dissertation. Chapter Two “Understanding the concept of entrepreneurial university from the perspective of higher education models” serves as a theoretical framework to guide the entire PhD research project. The three following chapters constitute a sequence of empirical articles pertinent to higher education in Cambodia. That is, Chapter Three “Higher Education Development in Cambodia: Implications for the ASEAN Economic Community” provides a comparative study between Cambodia and some ASEAN member countries about the development of the higher education sector based on the concept of the entrepreneurial university adopted in the developed societies. Chapter Four “Stakeholder involvement in the higher education sector in Cambodia” examines how stakeholders are involved in the sector and ascertain to what extent stakeholders have collaborated in the sector. Chapter Five “Cambodian higher education in transition: An institutional governance perspective” discusses how higher education providers in Cambodia are governed and what challenges are involved in their governing process toward quality education while the sector is in a significant transition from state to market. The dissertation concludes with Chapter Six, which summarizes the key findings from the preceding chapters, gives an in-depth discussion of the significant findings, and draws main contributions and implications. The chapter serves as a conclusion chapter to the dissertation and therefore gives an overall picture of what has been achieved in answering the central research question. It also pinpoints the limitations of the study and gives directions for future research.