Academic institutional merger: an emerging UAE experience

Ghaleb A. El-Refae, Abdelhafid Belarbi

Academic institutional merger: an emerging UAE experience

Ghaleb A. El-Refae* and Abdelhafid Belarbi

College of Business,
Al Ain University,
P.O. Box 64141, Al Ain, UAE
Email: ghalebelrefae@aau.ac.ae
Email: abdelhafid.belarbi@aau.ac.ae
*Corresponding author

Abstract: The mounting pressures of internationalising higher education, the quest for recognition from international accreditation bodies, the drive for higher global academic rankings, and the rising prevalence of distance learning and remote work collectively appear to foster a new wave of university mergers. In response to these dynamics, the United Arab Emirates initiated a significant merger in 2017, consolidating three prominent academic institutions to form Khalifa University: the Masdar Institute of Science and Technology, the Petroleum Institute, and the Khalifa University of Science, Technology, and Research. This strategic merger seeks to integrate multidisciplinary research and education in engineering, energy, and renewable resources. This paper aims to critically evaluate this strategic merger, as each constituent institution possesses distinct missions, goals, and challenges, thereby marking a notable institutional transition.

Keywords: internationalisation; higher education; university merger; change management; quality education.

Biographical notes: Ghaleb A. El-Refae is a Professor of Financial Economics and Accounting in the College of Business at Al Ain University, UAE. He has published in various journals and books. He served as a guest editor, and he is recently the Editor-in-Chief and editorial member of many economics, business and information technology journals. His research interest includes university corporate governance, risk management, contract theory, theory of the firm, industrial organisation, and business analytics.

Abdelhafid Belarbi is a Professor of Business Economics in the College of Business at the Al Ain University, UAE. He has accumulated long years of academic and administrative jobs. He served as a guest editor and is an editorial member of some economics and business journals. He is pursuing an active research program in areas of university governance, business economics, internationalisation of education, and industrial organisation.

1   Introduction

The surmounting pressures of internationalisation of higher education along with the longing goal of obtaining recognition from an international accreditation body, the throttling efforts for positioning an advanced world university ranking, and the strengthening mode of distance learning and working seem to pave the way of a new wave of university merger.

In response to such a situation, UAE which has opened its doors to transnational education under different forms, has embarked on a university merger operation between three strong academic institutions: three of the leading Abu Dhabi higher education institutions opted in 2017 for the foundation of 'Khalifa University of Science and Technology'. The merger of Masdar Institute of Science and Technology, the Petroleum Institute (PI), and the Khalifa University of Science, Technology, and Research (KU) is an integration of multi-disciplinary research and learning purposes across the fields of engineering, energy, and renewables.

Fierce competition reforms in higher education systems between the Arab Gulf countries as well as some Asian countries are opening room for seeking higher education quality enhancement in global trends and pushing for addressing deeper scientific research tracks and surmounting challenges of reforms within the sector of higher education. One leeway for reaching these goals is embarking on a merger operation between higher academic institutions.

This paper is organised as follows: along with an introduction, Section 3 exposes reasons and international experiences of mergers in higher education. Section 3 analyses the education sector within the UAE business and cultural environment. Section 4 presents the emerging merger of the three academic institutions in the UAE. Section 5 discusses the possible outcomes of the merger operation. Finally, a conclusion and further research issues are advanced in Section 6.

2   Reasons and international experiences of mergers in higher education

Academic institutional mergers emerged in the 1970s. The Chronicle of Higher Education (2011) pointed out a 'merger mania' occurring in the sector of higher education in countries of Europe. Different reasons stand behind mergers of higher education academic institutions. The financial crisis and the objective of cost reduction and reforms of higher education systems advanced by governments, the supremacy of internationalisation of higher education in terms of quality assurance of higher education and advanced research, and the struggle for positioning a world university class ranking to survive the competition and gain a market share.

For higher education reform, the government plays a primordial role in merger operations to control the higher education system, enhance the quality of education and scientific research, and boost competition among local higher education institutions.

Sułkowski et al. (2019) advance more explicitly the many reasons standing behind academic institutional mergers:

> "In today's reality, characterized by increased cross-border competition in both educational services and research outputs, universities are under strong pressure to both compete and collaborate. Higher education institutions (HEIs) compete for financial resources, talented students, high-quality lecturers, brilliant research, good reputation and status, as well as high scores in international rankings. The increasingly competitive global market is the important driver of institutional mergers which become an important strategy of many HEIs." For further insight, see Belarbi et al. (2016).

Goedegebuure (1992) and Yuzhuo (2007) define the merger as follows: "the combination of two or more separate institutions into a single new organizational entity, in which control rests with a single governing body and a single chief executive body, and whereby all assets, liabilities, and responsibilities of the former institutions are transferred to the single new institution."

Merger initiative could be voluntary operation between private higher education institutions in response to competitive survival at local and international levels, especially with the spread of transnational education, and to seek the advanced status of world university ranking and a share in the global education market.

Hazelkorn (2009) advanced that the rise in the eminence of world university ranking is one demonstration of this phenomenon, with clear implications for the rationale behind mergers in higher education.

There are different forms of mergers, and the most frequent ones are twin-partner or multi-partner; voluntary vs. involuntary merger; and consolidation vs. take-over. The Anglo-American writings on mergers use two synonymous concepts, mergers and amalgamations, which define the merger of two or more formerly distinct institutions into one new single institution.

In the case of HEIs, the carrying out of the mergers' operations is tied to achieving strategic goals related to the enhancement of applied research and education quality within international standards.

In the second half of the twentieth century, there was a departure from the traditional formation of the Humboldtian university vs. the entrepreneurial university (Clark, 1998).

It is better noticeable that universities, private and public HEIs, use economic models for solutions to their problems developed in the field of applied business management. University community engagement services and cooperation with the socio-economic environment are major indicators for quality improvement of education and applied research.

According to Sułkowski et al. (2019), "internationalization and globalization of universities are growing, complex cooperation networks are being formed, and universities compete for the best researchers and students through international cooperation. Universities begin to resemble business units, and therefore, they face similar competitive challenges. The university is transforming into an economic market organization."

Any reform in the education system has far-reaching impacts and long-lasting effects on human resource development, economic growth and society's well-being. For that

reason, undertaking a merger venture is a real nightmare. Top management and boards of Trustees of universities and colleges consider, often, merger operation as the failure of leadership, especially in case that such a venture is the last irrefutable resort. However, due to the fast-changing scene of education and related activities under the auspices of education internationalisation, merger ventures are seen as a strategic opportunity for survival or a lasting institution for brighter outcomes.

There is no denial of the changing market structure of academic institutions under the omens of transnational education. Sułkowski et al. (2019), notice that there are observable tendencies in the higher education institutions that dispose of them for a strategic change:

- Increasing and high diversity of universities with different founding structures, sizes, programs and quality of education and related activities.

- Mobility of students, faculty members, researchers, programs and branch opening as a result of the internationalisation of education.

- Privatisation and commercialisation of education as a result of globalisation.

- The emergence of the 'entrepreneurial university model' to manage academic institutions.

- The reduction of government financing and subsidising of universities.

There are ample examples of mergers of institutions in the education sector worldwide. According to Georgieva and Abdelazim (2020), in their investigation paper of technical college mergers with universities and university acquisitions,

> "A recent trend for higher education in the UK sees increased collaboration and partnerships between technical colleges and universities. This represents a significant step in redesigning the educational landscape that aims to synergize the industry advantages of colleges with the academic strengths of universities."

Concerning the USA, Harman and Harman (2003) noticed that individual institutions have used mergers to manage the problems of the threat of closure, student enrolment decline and bankruptcy. For a purely financial analysis of mergers, see Gibson (2013).

According to Azziz et al. (2017), merger operations in the States considered six critical elements for merger:

1   A persuasive unifying vision and costs.

2   A committed and understanding governing body.

3   The right leadership prior to the beginning of the merger process.

4   A strong project management system to engage constituencies in '20-60-20' rule: in any grand organisation transformation, 20% of stakeholders grip the opportunity, 60% watch and wait for development, and 20% usually stand against the opportunity. The concentration of efforts should be towards converting the 60% and not wasting time on converting the opposing 20%.

5   Sufficient dedicated resources.

6   A strong communication plan.

With respect to European experiences in an academic merger, the issue is more complex because of the fierce competition with American and some Asian universities to expose and maintain their mode of pedagogy and research trends. Some studies attest that universities' mergers drive to gain significant economies of scale (Lang, 2003).

Merger initiatives may carry complexities with respect to human resources management and university branding. University mergers bringing about a radical new human resources management system may lead to the split of identities among academics and administrative personnel due to the apparent stratification of faculty members and administrative staff.

In Australia, mergers were emphasised because of restructuring reforms (Harman and Harman, 2003).

With respect to China's higher education merger initiatives, it is contended that it is the perceived environmental changes by the universities rather than the actual changes themselves that are of critical bearing to the analysis of the university merger process. The merger process is taken in holistic frameworks for assessing complexities inherent to the merger in higher education (Pinheiro et al., 2015).

Concerning academic mergers involving public institutions, Pinheiro and Stensaker (2014) discuss the issue from a cross-sectional perspective to envision a strategy of internal transformation and gain an external market positioning from the central leadership point of view. For a thorough insight, see education markets, choice and incentives in Bradley (2020).

3 Education sector in UAE business and cultural environment

International experiences in academic mergers give an ample choice and different strategies and types of mergers in the UAE. However, in this case, the government plays a key role with respect to merger operation for the sake of reforming and increasing control over the higher education sector, also, in response to increasing competition, nationally and internationally for the sake of quality of education, research, and positioning in the international ranking. Economies of scale and gaining status and prominence in the global higher education market seem to be a drive for such a move of the academic merger in the UAE. According to Hazelkorn (2009), the upsurge in the eminence of world university rankings is one manifestation of the rationale behind mergers in higher education.

- The openness of the UAE has brought about significant efforts to achieve strong and rapid economic growth and development.

- The higher education sector is one of the key sectors which has been touched by such openness to cultural and educational diversity.

- The government of the UAE undertook great efforts to reform their higher education system within the dominion of internationalisation of higher education.

- Arab Gulf countries "have been the largest recipients of transnational higher education globally, whilst Australia, the UK, and the USA have been the largest providers."

- UAE hosts over 40 international branch campuses.

- The newly founded Mohammed Bin Zayed University of artificial intelligence in a joint artificial intelligence program with Weizmann Institute of Science.

- With respect to the Arab Gulf region, Qatar Foundation recruited many US-based branches: Weill-Cornell Medical School, Texas A&M University were established to offer medical and engineering programs.

- Carnegie Mellon University was set to deliver programs in business and computer sciences.

- The renowned French Business School HEC Paris was recruited by the foundation to provide MBA programs in executive and certificate tracks and engage in business-related research.

Fierce competition reforms in higher education systems between the Arab Gulf countries as well as some Asian Countries are opening room for seeking higher education quality enhancement in global trends and pushing for addressing deeper scientific research pathways and surmounting challenges of reforms within the sector of higher education. According to Hazelkorn (2009), the upsurge in the eminence of world university rankings is one manifestation of the rationale behind mergers in higher education. One leeway for reaching these goals is embarking on merger operations between higher academic institutions. For an asymmetric information approach, see Belarbi and El-Refae (2013).

4   The emerging higher educational merger in UAE

It is relevant to draft the nature of higher education institutions in the UAE. UAE universities and colleges differ in ownership, size, mission, and programs. Some are governmental, others are private; some are large urban universities, and others are two-year community colleges. Some institutions focus mainly on undergraduate education, while others offer graduate and professional programs. Each institution is distinguished with its own mission and reputation image. Besides, UAE is the recipient of transnational higher education under the auspices of education internationalisation and globalisation, as Australia, the UK, and the USA have been the main suppliers of international higher education. UAE hosts over 40 international branch campuses.

Such collective diversity among academic institutions stands as a valuable asset of the UAE higher education system. Universities and colleges leadership hold a common belief that diversity in their student bodies, faculties, and staff is vital for them to achieve their crucial mission: assuring providence of high-quality education and undertaking strong applied research inquiries.

UAE and Gulf region universities and colleges hire faculty members and administrative staff from well-diversified educational, cultural and national backgrounds with strong academic and professional credentials from distinguished international universities and institutions. Most faculty members hold doctoral degrees in their fields of specialisation and are vigorously involved in teaching, research, and consultancy. Within this framework, UAE has embarked on its first academic merger between three renowned educational institutions in the Abu Dhabi Emirate.

The 2017 newly born Khalifa University of Science and Technology was created by the merger of Masdar Institute of Science and Technology, the PI, and Khalifa University of Science, Technology, and Research.

A board of trustees for the Khalifa University of Science and Technology was setup in February 2017. The consolidation of the university with the joint entity has already begun the process of unifying academic programs, admissions and the research agenda since early 2017, while an integration plan was in development for the interim period. According to Tod Laursen, President at KU: "we will deliver research-led teaching to all our students, whether they are undergraduate or graduate, and we remain committed to providing scientific and technological solutions of national, regional, and international importance. We will do so by building on the international reputations of each of these institutions and aggressively pursuing the goal of transforming Abu Dhabi and the UAE into a knowledge destination in science and technology" (Oxford Business Group, 2017).

Table 1 gives some 2017 statistics pertaining to student enrolment and faculty members of the three academic institutions prior to the merger operation.

Table 1 Total number of students with foundation year

University name	Year of foundation	Undergraduate students	Postgraduate students	Total	Faculty members
Khalifa University of Science, Technology and Research	2007	1,142	218	1,875*	182
Petroleum Institute	2000	1,498	337	2,271*	200
Masdar Institute of Science and Technology	2007	-	456	456	85
Total		2,640	1,011	4,600	465

Note: *Total number of students includes students of foundation year.
        Source: Compelled from Oxford Business Group (2017)

According to their year of foundation, all three academic institutions are relatively young in terms of old academic presence.

Khalifa University of Science, Technology and Research is a science-focused university located in Abu Dhabi, the UAE, with a branch campus in Sharjah. In 2017 it reached a QS ranking of 401.

Khalifa University of Science, Technology and Research was founded for the sake of providing qualified workers for a knowledge-based economy envisioned for 2030.

According to Times Higher Education Asia University 2020 Ranking, Khalifa University of Science and Technology positioned itself among the top universities in Asia following the successful merger between three notorious Abu Dhabi higher education institutions. It ranked 31 out of just under 500 universities from 30 territories.

Most undergraduate programs are ABET engineering accredited, offering also postgraduate programs in electrical and computer engineering, nuclear engineering, information security, and systems and engineering management. With its research centres and institutes dedicated to research in fields of aerospace, robotics and telecommunication, biotechnology, nuclear energy, and security. The newly integrated university is in a good position to reach international academic recognition.

The PI is an engineering university that offers a variety of engineering degrees and is funded by a consortium of national and international oil companies. The institution's goal is to provide the local oil and gas industry with engineers.

PI was established in 2000. It is financed and governed by a consortium of five major oil companies: ADNOC (UAE), Royal Dutch Shell, BP, Total SA and Japan Oil Development Company. The institute is partnered with the following universities: Colorado School of Mines, Johannes Kepler Universitat Linz, University of Maryland, University of Minnesota, The University of Texas at Austin, Rice University, and the China University of Petroleum.

The PI offers the following five engineering disciplines: mechanical engineering, petroleum engineering, electrical engineering, chemical engineering, petroleum geosciences, polymer science, and material science. The PI also offers graduate-level programs.

The Masdar Institute of Science and Technology (Masdar Institute) was founded in 2007 and is a graduate-level, research-oriented university focused on alternative energies, sustainability, and environmental research. Masdar Institute hosts the research backbone of the merging university.

Masdar Institute was an integral part of the non-profit side of the Masdar Initiative and was the first institution to occupy Masdar City. The technology and development program at the Massachusetts Institute of Technology provided scholarly assessment and advice to Masdar Institute. As of April 2018, the collaborative agreement between the two institutions is still in place and currently hosts several exchange students.

5   Possible outcomes of the academic merger

Though the decision of undertaking the process of an academic merger is broad and complex that cover a range of physical amalgamation to deep socio-cultural relationships, for this case, the merger is a governmental strategic initiative to reform the higher education system for the sake of advancing productivity, enhancing the quality of education and applied research and increasing efficiency, effectiveness among institutions, and positioning an academic international standing and reputation.

The internationalisation and globalisation of higher education have brought about fierce competition between universities and academic institutions at national and international levels. The upsurge and strengthening of university world rankings have pressed academic institutions to seek strategic alliances, partnerships, close collaborations and full mergers.

It is well noticed that the academic merger is a complex process at different stages and challenges within its evolutionary nature. The socio-cultural defies remain the main challenges to surmount. One of these challenges is the fear of losing the pre-merger identity and reputed personality. Besides, it is a long-time perspective for a merger to build an integrated and unified working entity even in the event of a successful operation.

According to Ahmadvand et al. (2012) "socio-cultural integration acts as an important stage in the post-merger process, particularly in the institutional setting and academic staff integration. Successful mergers need to identify and adjust the cultures of the pre-merger organisations in an attempt for integration of the cultures with the goal of reaching a common culture in terms of its values, beliefs and norms over a short or long

duration and at different levels within the organization." For strategic purposes, see Dranove et al. (2017).

Therefore, building the new image and human resources management system of the new institution is a key integrative mechanism in the merger process without neglecting the coherence and synergy between various interest groups and external stakeholders. Subcultures, especially in a diversified cultural environment such as UAE, should not be ignored. Incorporating the engagement of all academic and administrative staff at all levels of the organisation. The process is more challenging in an academic setting than in other organisations. For a cultural standpoint and study case, see El-Refae and Belarbi (2017).

Most studies emphasise factors associated with the relative success of academic mergers lie in continuous and modest communication among the leadership and staff, flexibility in assuming and developing the merger leadership model, patience and lack of complaint, and developing trust between senior leaders and superior managers.

With respect to this UAE merger, all signs of a successful initiative are in the making. Khalifa University of Science and Technology is having a highly international outlook by positioning itself in the international ranking, more students, national and international are competing to join the newly merged university. Tod Laursen, President of the university, declared that: "this is precisely the reason that I think the merger was done in the long run", he added: "we are obviously more comprehensive now than we were before. We were all science and technology focused, but we have a broader range of fields that we had before" (The National, 6 February 2018).

The strong motivation behind this merger is not pecuniary but mainly resides in restructuring and controlling the higher education system with the existence of a large number of public and private universities and colleges. The aim is to boost the efficiency and effectiveness of the academic institutions and to be part of and to contribute to the development of international educational standards under the omens of internationalisation and globalisation of education. The merger has succeeded in assuring a very good academic standing position in world university rankings, and it is gaining a great reputation in the Gulf region.

The emerging merger organisation is strongly contributing to the edifice of the knowledge economy envisioned by UAE by creating an environment with suitable incentives for foreign knowledge workers to stay and contribute to the economy by their efforts of innovation in developing a sound higher education system with international standing with respect to high-quality assurance in learning and teaching, applied research, innovations and fostering an ethos of motivation aspiration, and entrepreneurship in their multi-diversified culture bodies of students, faculty members, and administrative staff.

6 Conclusions

Given the great efforts of reform and restructuring of the educational system undertaken by the UAE Government to build a well rigorous higher education system to appeal to the fourth industrial revolution national aspirations and to fit the requirements of international standards and the fast-changing environment of learning, teaching, research, and entrepreneurial innovation, the merger of the three academic institutions emerges at the proper time, due to internationalisation of education and the accompanying fierce

competition among universities and academic institutions at local and international spheres. The three academic entities were science and technology-focused with diversified encompassing fields. The proper location is also an advantage for the success of the merger for the fact that the three institutions are located in Abu Dhabi, the capital city of UAE. With respect to financial pressures, there are no obstacles to surmount for the success of the merger.

It has been a short time to evaluate such an academic merger operation. Socio-cultural issues, management, and leadership manifestations remain to be discussed and evaluated.

Given the fast-changing environment of the international academic heartland, the UAE reform of higher education system with its numerous, various, and diverse institutions, the ambitious spirit for acquiring fast knowledge economy of the fourth industrial revolution anticipated in the region, and the strive for world-class academic status; it seems that academic institutional mergers are here to sojourn in the future and to witness other mergers in the region as a demonstration of the preponderance of a managerial or corporatist approach of management in present-day higher education systems.

References

Ahmadvand, A., Heidari, K., Hosseini, H. and Majdzadeh, R. (2012) 'Challenges and success factors in university mergers and academic integrations', *Archives of Iranian Medicine*, Vol. 15, No. 12, pp.736–740.

Azziz, R., Hentschke, G.C., Jacobs, L.A., Jacobs, B.C. and Ladd, H. (2017) *Mergers in Higher Education: A Proactive Strategy for a Better Future*, TIAA Institute, New York, NY.

Belarbi, A. and El-Refae, G.A. (2013) 'Risk management in private higher education: an asymmetric information approach', *International Journal of Economics and Business Research*, Vol. 5, No. 2, pp.226–238.

Belarbi, A.K., El-Refae, G.A., Ballard, J.A. and Abu-Rashed, J. (2016) 'Transnational education in the Gulf Cooperation Council countries: the challenges of internationalisation and quality in higher education', *International Journal of Economics and Business Research*, Vol. 11, No. 2, pp.120–131.

Bradley, S. (2020) 'Quasi-markets in education: the case of England', in *The Economics of Education*, pp.455–469, Academic Press, London, UK.

Chronicle of Higher Education (2011) *University Mergers Sweep across Europe Leaders Hope Larger, More-diverse Institutions Will Improve Research*, 2 January.

Clark, B. (1998) *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*, Issues in Higher Education, Bingley.

Dranove, D., Besanko, D., Shanley, M. and Schaefer, S. (2017) *Economics of Strategy*, John Wiley & Sons, New York, USA.

El-Refae, G.A. and Belarbi, A.K. (2017) 'University governance and educational AAU model: an organizational culture approach', *Global Business and Economic Review*, Vol. 19, No. 2, pp.239–249.

Georgieva, M. and Abdelazim, A. (2020) 'Strategic mergers and acquisitions in higher education: a case study from the UK', *European Journal of Business and Management*, Vol. 12, No. 33, pp.1–15.

Gibson, C.H. (2013) *Financial Statement Analysis*, International Edition, South-Western Cengage Learning, Mason, Ohio, USA.

Goedegebuure, L. (1992) *Mergers in Higher Education: A Comparative Perspective*, Lemma, Utrecht.

Harman, G. and Harman, K. (2003) 'Institutional mergers in higher education: lessons from international experience', *Tertiary Education and Management*, Vol. 9, No. 1, pp.29–44.

Hazelkorn, H. (2009) 'Rankings and the battle for world-class excellence: institutional strategies and policy choice', *Higher Education Management and Policy*, Vol. 21, No. 1, pp.1–22.

Lang, D. (2003) 'The future of merger: what do we want mergers to do – efficiency or diversity?', *The Canadian Journal of Higher Education*, Vol. 33, No. 3, pp.19–46.

Oxford Business Group (2017) 'Merger of three universities in Abu Dhabi to create new synergies', Oxford Business Group, Abu Dhabi, UAE [online] https://oxfordbusinessgroup. com/analysis/pushing-forward-new-merger-should-unlock-potential-and-encourage-more-emiratis-consider-private#:~:text=The%20fusion%20of%20the%20Masdar,of%20energy% 2C%20renewables%20and%20engineering.

Pinheiro, R. and Stensaker, B. (2014) 'Designing the entrepreneurial university: the interpretation of a global idea', *Public Organization Review*, Vol. 14, No. 4, pp.497–516.

Pinheiro, R., Geschwind, L. and Aarrevaara, T. (2015) 'Mergers in higher education', *European Journal of Higher Education*, DOI: 10.1080/21568235.2015.1099455.

Sułkowski, Ł., Fijałkowska, J. and Dzimińska, M. (2019) 'Mergers in higher education institutions: a proposal of a novel conceptual model', *Managerial Finance*, Vol. 45, Nos. 10/11, pp.1469–1487, Emerald Publishing Limited.

Yuzhuo C. (2007) *Academic Staff Integration in Post-Merger Chinese Higher Education Institutions*, Tampere University, Finland.