Chapter 8

The emerging business of science in Vietnam

Manh-Tung Ho, Khanh-Linh Hoang, Minh-Hoang Nguyen, Manh-Toan Ho

This chapter discusses the emerging business of science in Vietnam and how implementing a well-functioning market mechanism in academia can boost scientific productivity and in turn, generate higher quality research in the transition economy. To have a business of science, a well-functioning market for research or research-related activities as products is necessary. Here, one can define a well-functioning market mechanism is a system emerging from the accumulations of individual choices, and entities within the system are subject to competition from one another. In this system, overall economic efficiency is enhanced.

With these concepts in mind, we will first explore several dimensions of how a market-based mechanism has been

introduced into the higher education system Vietnam. Then, we will explore several challenges of for a business of science to capitalize on the gradual wave internationalization and liberalization of Vietnam's higher education. Examples of successful business of science will be introduced next, and the chapter close with some suggestions moving forward.

Toward a market-based mechanism

In Vietnamese higher education system, the

"In my opinion, sustainable scientific practices need to be built upon the demand universities, of governments, and businesses. In the country where I am currently working, universities are very strong at conducting research. In Vietnam, I feel that universities concentrate more on teaching. A part of this is probably due to financial issues: funding or business revenue from conducting research is not enough to maintain sustainable research activities. In my opinion, NAFOSTED should experiment with supporting university-based research centers. I think it can be done under co-financing format: the funding partly comes from the foundation, partly from the school to make sure all parties are responsible. Likewise, it is feasible to follow the project-based funding mechanism or even set a prize for teams that meet a specific set of goals." Dr. Pham Van Ha, Au Australian | National 12 laceasity m AustraliaDownload Date | 11/5/19 3:23 AM phase." In this phase, the business can take on products and services that are derived from their research: speaking engagement, science communication, consultancy services, etc.

Vietnamese researchers, many of whom have experience international environment, can look outward and learn from their colleagues overseas how they could commercialize scientific knowledge. However, in the end, for that commercialization to succeed in Vietnam, the researchers must do more than mere copy-paste: they must look inward and design their products according to cultural expectations and local demands, all of which are critical for their success.

References

- Bodie, M. T. (2017). Lessons from the dramatists guild for the platform economy. *University of Chicago Legal Forum*. Retrieved from https://chicagounbound.uchicago.edu/uclf/vol2017/iss1/2/
- Conroy, G. (2018). Scientists go to great lengths in reviewing highquality research. *Nature Index*. Retrieved from https://www.natureindex.com/news-blog/scientists-goto-great-lengths-in-reviewing-high-quality-research
- Droby, S., Wisniewski, M., Teixidó, N., Spadaro, D., & Jijakli, M. H. (2016). The science, development, and commercialization of postharvest biocontrol products. *Postharvest Biology and Technology*, 122, 22-29. doi:https://doi.org/10.1016/j.postharvbio.2016.04.006
- Editorial. (2006). The business of science. *Nature Materials*, 5(12), 921-921. doi:10.1038/nmat1796
- Glassman, A. M., Moore, R. W., Rossy, G. L., Neupert, K., Napier, N. K., Jones, D. E., & Harvey, M. (2003). Academic entrepreneurship: Views on balancing the Acropolis and the Agora. *Journal of Management Inquiry*, 12(4), 353-374. doi:10.1177/1056492603258979
- Hao-Linh. (2019). Tư nhân đầu tư vào giáo dục đại học và nghiên cứu: Bây giờ chính là thời cơ [Private investment into university education and research: now is the time]. *Khoa học va Phạt triện*. Retrieved from

- http://khoahocphattrien.vn/chinh-sach/tu-nhan-dau-tu-vao-giao-duc-dai-hoc-va-nghien-cuu-bay-gio-chinh-la-thoi-co/20180809100832649p1c785.htm
- Hayden, M., & Thiep, L. Q. (2007). Institutional autonomy for higher education in Vietnam. *Higher Education Research & Development*, 26(1), 73-85. doi:10.1080/07294360601166828
- Hoang, L. (2018). Twin privatization in Vietnam higher education: The emergence of private higher education and partial privatization of public universities. *Higher Education Policy*, 1-22. doi:10.1057/s41307-018-0086-8
- Khuat, H. T., Do, T. T., Nguyen, A. V., Vu, T. X., Nguyen, T. P., Tran, K., . . . Vuong, Q.-H. (2018). The Dark Side of Female HIV Patient Care: Sexual and Reproductive Health Risks in Pre- and Post-Clinical Treatments. *Journal of Clinical Medicine*, 7(11), 402. doi:10.3390/jcm7110402
- London, J. D. (2011). Education in Vietnam: Historical roots, recent trends. In J. D. London (Ed.), *Education in Vietnam*. Singapore: Institute of South East Asian Studies.
- NAFOSTED. (2018). Ký kết thỏa thuận tài trợ kinh phí trao giải thưởng Tạ Quang Bửu [Signing a sponsorship agreement for Ta Quang Buu Prize]. *NAFOSTED*. Retrieved from https://nafosted.gov.vn/ky-ket-thoa-thuan-tai-tro-kinh-phi-trao-giai-thuong-ta-quang-buu/
- Napier, N. K., & Vuong, Q.-H. (2013). Serendipity as a strategic advantage? In Wilkinson (Ed.), *Strategic management in the 21st century (Vol. 1: The operational environment)* (Vol. 1, pp. 175-199). Westport, CT: Praeger/ABC-Clio.
- Nature Index. (2018). Vietnam. *Nature Index*. Retrieved from https://www.natureindex.com/country-outputs/vietnam
- Nelson, B. (2012). Business and science: In the market. *Nature*, 261–263. doi:10.1038/nj7406-261a
- Nguyen, H. T. L., & Meek, V. L. (2016). Key problems in organizing and structuring university research in Vietnam: The lack of an effective research "behaviour formalization" system. *Minerva*, 54(1), 45-73.
- Nguyen, H. T. L., & Van Gramberg, B. (2018). University strategic research planning: a key to reforming university research in Vietnam? *Studies in Higher Education*, 43(12), 2130-2147.

- Nguyen, N., & Tran, L. T. (2018). Looking inward or outward? Vietnam higher education at the superhighway of globalization: culture, values and changes. *Journal of Asian Public Policy*, 11(1), 28-45. doi:10.1080/17516234.2017.1332457
- Pham, L. T., & Hayden, M. (2019). Research In Vietnam: The Experience Of The Humanities And Social Sciences. *Journal of International and Comparative Education (JICE)*, S.1, 27-40. doi:10.14425/jice.2019.8.1.27
- Pisano, G. P. (2010). The evolution of science-based business: innovating how we innovate. *Industrial and corporate change*, 19(2), 465-482.
- Publons. (2018). Global state of peer view. *Clarivate Analytics*. Retrieved from https://publons.com/static/Publons-Global-State-Of-Peer-Review-2018.pdf
- On pilot renovation of the operation mechanism of public tertiary education institutions during 2014-2017, (2014).
- Stevenson, H., Roberts, M., & Grousbeck, H. (1989). *Business ventures and the entrepreneur*. Homewood, IL: Irwin.
- Tran, C.-D. T. T., & Villano, R. A. (2017). An empirical analysis of the performance of Vietnamese higher education institutions. *Journal of Further and Higher Education*, 41(4), 530-544. doi:10.1080/0309877X.2015.1135886
- Tran, D.-N. (2018a). Impacts of international organizations on Vietnam's higher education policy: The good, the abad and the ugly. In L. T. Tran & S. Marginson (Eds.), *Internationalisation in Vietnamese Higher Education* (pp. 99-117). Cham: Springer International Publishing.
- Tran, D. L., & Thanh-Tam. (2014). Kể về ngôi trường Đại học dân lập đầu tiên [Talk about the first people-founded university]. *Nhan Dan.* Retrieved from http://www.nhandan.com.vn/giaoduc/item/24780102-ke-ve-ngoi-truong-dai-hoc-dan-lap-dau-tien.html
- Tran, T. T. (2014). Governance in higher education in Vietnam a move towards decentralization and its practical problems. *Journal of Asian Public Policy*, 7(1), 71-82. doi:10.1080/17516234.2013.873341
- Tran, V. N. (2018b). Khat vong Duy Tan [Duy Tan's ambition]. *Tia Sang.* Retrieved from http://tiasang.com.vn/-giao-duc/Khat-vong-Duy-Tan-11165

- Van Noorden, R. (2017). Web of Science owner buys up booming peer-review platform. *Nature News*. Retrieved from https://www.nature.com/news/web-of-science-owner-buys-up-booming-peer-review-platform-1.22094
- Vuong, Q.-H. (2019). Computational entrepreneurship: from economic complexities to interdisciplinary research. *Problems and Perspectives in Management, 17*(1), 117-129.
- Vuong, Q.-H., Bui, Q.-K., La, V.-P., Vuong, T.-T., Nguyen, V.-H. T., Ho, M.-T., . . . Ho, M.-T. (2018). Cultural additivity: behavioural insights from the interaction of Confucianism, Buddhism and Taoism in folktales. *Palgrave Communications*, 4(1), 143. doi:10.1057/s41599-018-0189-2
- Vuong, Q.-H., Napier, N. K., Ho, M.-T., Nguyen, V.-H. T., Vuong, T.-T., Pham, H. H., & Nguyen, H.-K. T. (2018). Effects of work environment and collaboration on research productivity in Vietnamese social sciences: evidence from 2008 to 2017 scopus data. *Studies in Higher Education*, 1-16. doi:10.1080/03075079.2018.1479845.
- Vuong, Q.-H., La, V.-P., Vuong, T.-T., Ho, M.-T., Nguyen, T. H.-K., Nguyen, T.V.-H., Pham, H.-H., Ho, M.-T. (2018). An open database of productivity in Vietnam's social sciences and humanities for public use. *Scientific Data* 5,180188. Doi: https://doi.org/10.1038/sdata.2018.188;
- Weiss, B. (2018). Meet the renegades of the Intellectual Dark Web.

 The New York Times. Retrieved from https://www.nytimes.com/2018/05/08/opinion/intellectual-dark-web.html