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RESEARCH ARTICLE

# Transnational education for regional economic development? Understanding Malaysia's and Singapore's strategic coupling in global higher education

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## Abstract

Fostering innovation and upskilling labour pools have become key goals in national economic development plans and education and training system reforms since the mid-1990s. For their transformation into knowledge-based economies, countries in Southeast Asia have relied on importing transnational higher education providers and have envisioned themselves as *international education hubs*. As existing research from transnational education and higher education governance studies as well as economic geography and regional studies has not sufficiently addressed this nexus of transnational education and regional economic development, this paper investigates the role of foreign higher education institutions in economic development strategies in Malaysia and Singapore. It explores why and how states have strategically coupled their higher education systems with transnational education. The comparative case analysis draws on empirical evidence from 42 semi-structured interviews. It finds that despite the two states' ostensibly similar ambitions to attract foreign higher education institutions, policies and outcomes differ strongly. Whereas in Malaysia a *structural*

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*coupling* led foreign subsidiaries to provide foreign degrees to domestic students and generate revenue in the private higher education sector, in Singapore foreign subsidiaries have been deployed strategically to upgrade the talent pool and public higher education system of the city-state via *functional coupling*. Conceptualizing transnational education policies as forms of *strategic coupling* contributes to understanding their embeddedness within states' broader, historically formed economic development strategies.

## INTRODUCTION

Forming new centres of the global knowledge-based economy has become a powerful paradigm of national economic development plans with transformative effects in many spheres of states' policies (Jessop, 2016). Generating innovation and training the domestic labour force for the knowledge-based economy have thus been key goals of education and training system reforms since the 1990s. When reforming domestic higher education (HE), some countries have relied on importing foreign degree and training programmes through transnational education.<sup>1</sup> They started to couple with transnational HE providers and envision themselves as *international education hubs*, focused on students, talent creation or knowledge-innovation (Knight, 2018). In Southeast Asia, Singapore and Malaysia are at the forefront of these developments and have attracted investments by foreign higher education institutions (HEIs) that operate offshore campuses and deliver foreign degrees in situ, either independently or with a domestic partner (Kosmützky, 2018).

Yet, it remains largely unclear how transnational HE provision and economic development strategies are related. Existing academic literature provides only limited answers. Economic-geographic and regional studies literature on the role of universities and HEIs has largely focused on the economic effects of full-scale universities or research activities. Transnational HE providers' offshore campuses, however, are usually small and often teach only a limited number of undergraduate programmes. They engage almost exclusively in teaching and hardly in basic or applied research that could drive innovative capacities of regions. The broad literature on international HE, and transnational education more specifically, has investigated the experiences of students enrolled in these programmes or has explored the regulation of transnational HE providers (e.g. Zигурас & McBurnie, 2015). Though transnational education studies literature provides helpful typologies and categories of *education hubs*, it remains vague on why and how states have turned to different types of *hubs*.

This paper addresses these gaps, exploring the role of transnational HE providers in economic development strategies in Malaysia and Singapore. The focus is on the states' perspective and the two countries' aspirations to become *international education hubs*. The paper explores governments' transnational education policies and rationales through the lens of *strategic coupling*, which is an economic-geographic concept that explains regional development outcomes based on regions' integration into transnational economic processes. The central research questions

are why and how states have strategically coupled with transnational HE providers. Based on 42 qualitative interviews with transnational HE providers and (governmental) stakeholders in Malaysia and Singapore, the comparative analysis shows that the two countries' coupling strategies differ substantially, which translates into transnational providers' different roles in domestic HE and training systems. Moreover, states' previous and contemporary engagements with transnational universities, respectively their offshore campuses, are shaped by historically formed economic structures, past regional economic development policies and states' positioning in the context of economic globalization. These findings cast new light on the role of transnational education, envisioned as both an economic sector on its own and a source of skilled human resources for the broader regional development in the global knowledge economy.

The remainder of the paper is structured as follows. First, it conceptualizes transnational education in economic development strategies, synthesizing literature on universities in regional development and state strategies in the global knowledge economy. Secondly, case design and methods are presented. Then the two empirical cases of transnational education policies in Malaysia and Singapore are analysed. The paper concludes by discussing key findings and outlining further policy-making and research implications.

## **THEORIZING TRANSNATIONAL HIGHER EDUCATION AND REGIONAL DEVELOPMENT STRATEGIES**

### **Universities in regional development**

HE systems and governmental strategies for transformation into knowledge-based economies are intrinsically linked. A comprehensive and growing body of literature from regional studies and economic geography has investigated universities' role in the local, regional and national economy. It has widely acknowledged multiple positive effects of HE resources on innovation and the development of—in particular local—economic organization (Goldstein & Renault, 2004; Kuijpers et al., 2003). Econometric models, multiplier analyses or human capital approaches have shown multiple direct and stimulative economic impact of HEIs on their immediate regions (e.g. Boucher et al., 2003; Drucker & Goldstein, 2007; Strauf & Scherer, 2008): HEIs, students and employees create quantifiable demand for goods and services, increasing enterprises' revenues from local provision. University students and graduates can positively affect the regional labour market, i.e. as highly skilled parts of the workforce. Taking account of universities' inter-scalar embeddedness, geographers (Hoyler & Jöns, 2008) have conceptualized HEIs as localized nodes in global networks, in which knowledge is exchanged, generated and concentrated between globally mobile academics, students and trainees as well as in partnerships of universities with transnational companies. However, this links back to methodological discussions on how to estimate HEI's effects, e.g. on demand and labour, and to greater controversies on how far universities' benefits can really be captured in the region (e.g. Glückler et al., 2018). It has been pointed out (e.g. by De Meulemeester & Rochat, 1995) that increases in public education expenditures and graduates do not automatically result in upgrading human capital and economic growth. Higher numbers of local university graduates may also lead to brain drain for the region and increasing spatial inequalities between regions (e.g. Jahnke, 2001).

Besides their role as education and training institutions, universities are key actors for research and development processes, which drive the generation of new knowledge and technology in (national) innovation systems (Freeman, 1987; Lundvall, 1995). Recent works from

regional and innovation studies have focused on universities' indirect effects on the regional economy, in particular on how knowledge is disseminated and technology is transferred locally. In a relational perspective, they have foregrounded university-enterprise collaboration, in particular with the knowledge-intensive industries, or university spin-offs, in particular from STEM (Science, Technology, Engineering and Mathematics)-focused universities and research centres (Benneworth & Charles, 2005). HEIs have further been considered integral core components in geographical conceptualizations, such as building *regional innovation systems* (Asheim & Gertler, 2005; Asheim et al., 2011; Cooke, 1992), *learning regions* (Morgan, 1997), *creative regions* or *milieus* (Fromhold-Eisebith, 1995; Malecki, 1987) or *regional innovative ecosystems* (Thomas et al., 2021). What these concepts have in common is that they aim to understand locations' and regions' increased potential for innovative activity that cannot be explained solely by statistic indicators and goes beyond notions of knowledge and innovation being produced at and spilling over from HEIs. They all highlight the relevance of territorialized and localized inter-dependencies, (informal) personal networks and trustful relationships between key actors as well as co-construction and co-sharing of different forms of knowledge in the region.

Yet geographers have critically pointed out that HEIs' activities alone do not promote innovation and development and make territories economically successful (cf. Goddard & Vallance, 2011). HEIs' potentials will not be realized as long as economic structures and environments do not offer local interfaces of transmission for academic education and knowledge (Chatterton & Goddard, 2003). Particularly in peripheral regions, universities may face funding challenges and limited absorptive capacities of regional industries (Brundenius et al., 2009). This seems to be especially true for universities in locations with crisis-prone national economies, ethnic disparities or agro-pastoral hinterlands (Schamp & Zajontz, 2010). While this literature body covers HEIs in general and not particularly transnational HE providers, it poses difficulties to the analysis of offshore campuses in the national and regional economy: most foreign providers' subsidiaries are rather small entities and rarely generate critical mass of graduates or jobs with sizeable effects on the economy. Moreover, offshore campuses predominantly concentrate on teaching rather than research and third mission activities, thus reducing the ability to generate local innovation impulses (Kleibert et al., 2020).

## Transnational education for 'globalizing' regional development

Transnational education designates foreign providers that offer their degrees across borders. HEIs' rationales for operating subsidiaries abroad include expanding their markets to increase profits and international reputation. Yet HE providers' specific location choices are often heavily influenced by host countries' strategic policies. Policy-makers and scholars alike use the term *international education hubs* for planned development projects that involve a critical effort of the nation state to attract international actors in the field of education and research, which range from foreign students to HE and research institutions (Knight, 2011). While the term *education hub* is rather fuzzy and faces challenges as an analytical concept due to its promotional rather than criteria-based character (Kleibert et al., 2020), recent literature has distinguished different types of *education hubs* based on their designated purpose: *student hubs* for widening education access and revenue creation through foreign students, *talent hubs* for human resource development and employment purpose, and *knowledge-innovation hubs* for research-based economic development and drawing in of foreign investment (Knight, 2018). Empirical analyses have shown that, in a quest to transform into knowledge-based economies, states in Southeast Asia and the

Arab Gulf have tapped into visions of developing *education hubs* (Erfurth, 2019; Ewers, 2016; Olds, 2007; Sidhu et al., 2011; Tham, 2014). However, how to make sense of different types of *education hubs* and the role of transnational HE providers within these strategies remains largely unclear. Empirical, in particular comparative, analyses need to go beyond assigning preconfigured *education hub* typologies to countries—or other territorial entities—and to instead understand how they are embedded within historically developed HE systems and broader economic development strategies. For this, it is helpful to build a link to literature on economic development and ambitions to upgrade through foreign direct investments and transnational actors.

Industrial upgrading is seen as 'a process of improving the ability of a firm or an economy to move to more profitable and/or technologically sophisticated capital- and skill-intensive economic niches' (Gereffi, 1999, pp. 51–52). The aim to develop knowledge-based economies is thus an upgrading strategy, which can be achieved through endogenous development and support of domestic firms—historically in the strategies of import-substitution—or through strategies that rely on the attraction of foreign direct investments and export-oriented development. Since the mid-1970s, Southeast Asian economies have largely relied on attracting foreign capital and technology to boost domestic manufacturing, industrialization and economic development (Carroll, 2020). More recently, economic geographers have coined the concept of *strategic coupling* to analyse how regional development can occur under conditions of globalization and transnationally stretched production processes (Coe et al., 2004). *Strategic coupling* is defined as the intentional linking of regional assets with the demands of global production networks. It enables regional institutional actors in collaboration with translocal actors to positively shape regional economic development trajectories. Yeung (2009) shows how different types of *strategic coupling* have existed in East Asia, including *indigenous innovation* through 'national champions' backed by state industrial policy (e.g. South Korea), *international partnerships* (e.g. Taiwan) and more dependent *production platforms* (e.g. coastal China). This was further conceptualized as three modes of coupling that characterize the relationship between regional actors and global production networks that are marked by different forms of autonomy and value capture opportunities: *indigenous*, *functional* and *structural coupling* (Coe & Yeung, 2015).

Table 1 adapts this concept of *strategic coupling* to understanding governmental strategies on transnational education. Of course, the concept of *strategic coupling* was developed to explain global 'production' networks rather than foreign investments in HE and there are important limits to its transferability. However, the different ways of how foreign investments in HE are strategically used within broader economic development policies in Southeast Asia may be usefully thought as different modes of *strategic coupling*: *functional coupling* through international partnerships, in which knowledge from foreign HEIs is transferred to domestic institutions through joint ventures and partnerships, and *structural coupling*, in which transnational education is simply delivered to domestic students by foreign providers, without any strategic learning for domestic institutions. Finally, *indigenous coupling* relates to the upgrading of HE systems without relying on foreign capital or expertise of foreign HEIs but rather on domestic state subsidies to create international actors in their own right.

*Strategic coupling* is a dynamic concept and can involve *decoupling* as well as *recoupling* (cf. Horner, 2014) with transnational HE providers. So, it may be useful for the advancement of domestic HE systems to strategically decouple from transnational HE provision—and eventually recouple—after domestic HEIs have been upgraded. In the following, we will apply the economic-geographic concept of *strategic coupling* to understand different state strategies for engaging with transnational education investors and regional development visions of *international education hubs*.



TABLE 1 Strategic coupling for industrial development and in HE provision

Type of strategic coupling	Characteristics	Examples from global production networks	Adaption to HE provision
<i>Structural coupling</i>	High dependency on foreign actors; limited knowledge transfer	Assembly in textile and electronics through production platforms (e.g. coastal China)	Programme delivery by transnational HE providers' subsidiaries disconnected from domestic HEIs
<i>Functional coupling</i>	Limited dependency on foreign actors; knowledge transfer through collaboration	Joint ventures and international partnerships in production (e.g. Taiwan)	Programme delivery through transnational HE providers' partnerships with domestic HEIs
<i>Indigenous coupling</i>	Autonomy of domestic actors; internationalizing domestic lead firms	Domestic 'national champions' backed by state industrial policy (e.g. chaebol in South Korea)	National universities becoming 'world-class' institutions & venturing abroad

Source: Compiled by the authors, columns 1–3 based upon Coe and Yeung (2015).

## METHODOLOGY

These conceptual backgrounds frame the following empirical analysis. The comparative case-study approach between Malaysia and Singapore was chosen given the similarities of practices, i.e. attracting offshore campus investments, and linked visions, i.e. becoming *international education hubs*, but also to understand the differences governmental strategies make to the outcomes, i.e. differently developed HE systems. We draw on Goddard and Vallance's (2013, p. 3) view that university-location relations are 'contingent on the particular configuration of higher education and territorial governance systems'.

Empirical evidence for the analysis is drawn from 42 semi-structured interviews, 24 from Malaysia and 18 from Singapore. 33 of the interviews were conducted with high-level management officials of offshore campuses and their partners. This covers more than 80 percent of all 37 transnational HE providers that offered certified HE programmes and operated physical presences in Malaysia or Singapore in 2019. The other nine interviews were conducted with HE policy stakeholders, individuals who worked in advisory positions on private HE policy or who are retired government officials. Their expert knowledge was useful for reconstructing the regulatory backgrounds and governments' rationales towards governing transnational education domestically. All interviews took approximately one hour each and were conducted by the authors in person in 2019. All interviews were treated with personal anonymity and transcribed verbatim. Interview data were triangulated with documents and web sources and thematically coded and analysed.

## STRATEGIC COUPLING OF HIGHER EDUCATION SYSTEMS WITH TRANSNATIONAL PROVIDERS

Malaysia and Singapore have both transformed their HE systems and formulated ambitions to become *international education hubs*, particularly since the mid-1990s. In both cases, these aspirations are historically rooted in the states' interrelated post-colonial histories. Historically, Malaysia's domestic HE system has been characterized by strong outward mobilities of students. Over decades, many young Malaysians had pursued university studies—including spending tuition fees and other daily expenses—abroad, with Singapore being one of the most often chosen destinations besides the UK, Australia and Taiwan (Wan et al., 2015). For the Malaysian economy, this not only entailed imbalances of trade and payments up to the 1990s. Also brain drain and potential lack of skilled manpower were to be feared if young Malaysians would not return home after graduation (Koh, 2017). Additionally, ethnic quota systems in the multi-ethnic state of Malaysia severely restricted the de facto access of non-Bumiputera Malaysians to domestic public HE. Above all, Chinese Malaysians, a substantial part of the population, looked for alternative HE options outside of the public universities, either abroad or at private colleges that became widespread in Malaysia since the 1980s and offered foreign university degrees as franchises. In the 1990s, the idea of becoming an *international education hub* took shape in Malaysia, whose initial focus was on retaining domestic students at home and offering quality HE programmes without Malaysians migrating abroad (Aziz & Abdullah, 2014).

With having developed into a regional centre under British rule, Singapore has historically not as much suffered from students' exodus as Malaysia and has rather early utilized education as a tool for its economic development. The domestic HE system has been subordinated to the benefit of the economy; students have been strongly educated and trained for their future



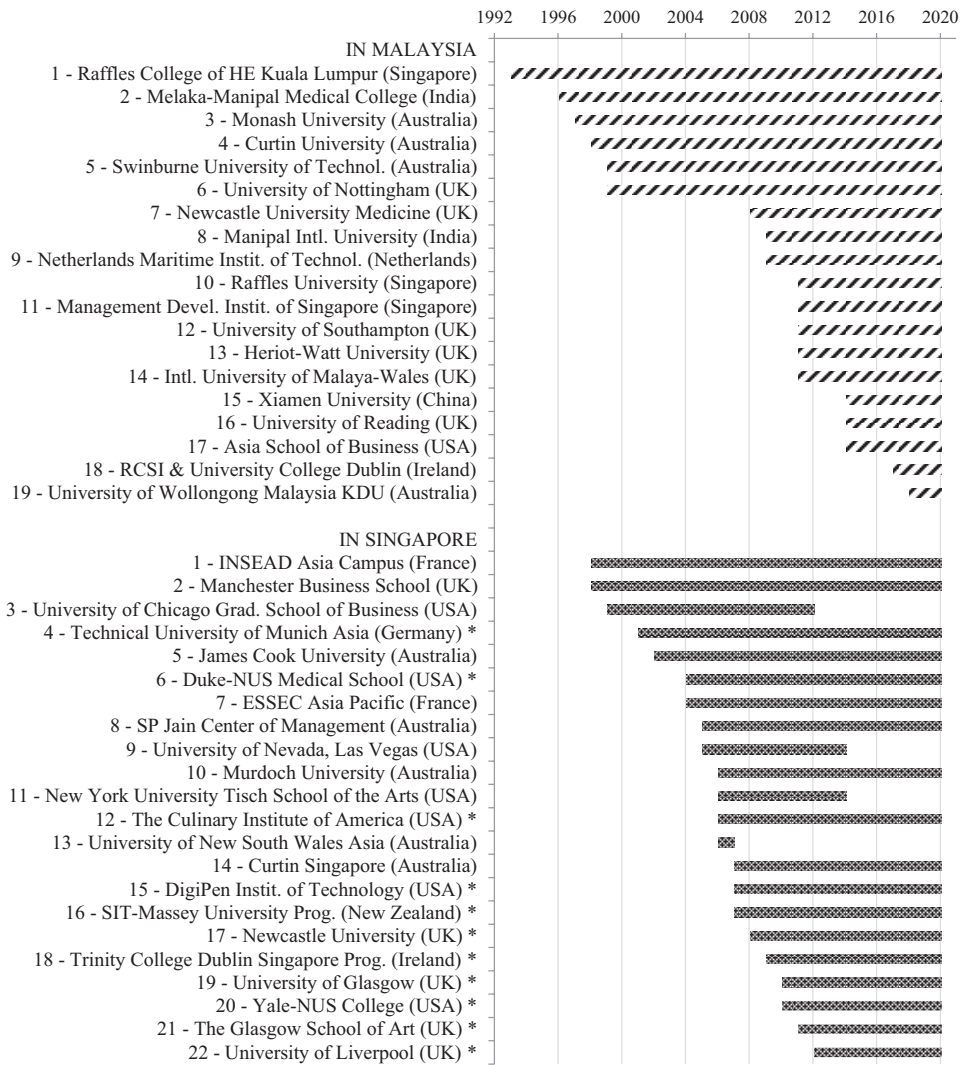
usefulness to society and development rather than for individual self-realization (Olds, 2007). When the government introduced several manufacturing and service-related development programmes during the mid-1980s to mid-1990s, the Singaporean HE system experienced the masification drive that continued to the early 2010s. As a reaction to the Asian crisis in 1997/1998, the government set the target to gear the Singaporean economy with knowledge-based industries and accentuated education services ‘as a vehicle to diversify the economy, spur on restructuring in indigenous HEIs, while also re-branding Singapore as a hub of the global KBE [knowledge-based economy]’ (Olds, 2007, p. 964). Additionally, constructing new citizen-subjects moved to the centre of governmental reform agendas: Singapore’s education system should turn to form Singaporeans to (self-) entrepreneurs, who see education as investments in their human capital and are ‘versatile and alert to global as well as local opportunities, willing participants in lifelong learning, with a sense of personal responsibility and moral obligation to contribute to society’ (Shih Choon Fong, former president of the National University of Singapore (NUS), quoted in Collins et al., 2014, p. 666). In this way, the city-state embraced the ‘KBE’ as the central theme for reforming several fields of public policy (Sidhu, 2008) and pursued its *international education hub* ambition, focusing on educating and training the labour force (cf. Sidhu et al., 2011).

Figure 1 illustrates foreign HEIs’ activity in Malaysia and Singapore, summarizing background information on the transnational providers and their involvement in the *international education hub* projects. The following analysis compares the two states’ policies and rationales of transforming their HE systems through integrating foreign direct investments since the 1990s in more detail. They are distinguished with respect to the states’ predominant coupling strategies with transnational providers, i.e. *structural coupling* in Malaysia and *functional coupling* in Singapore.

## Transnational-domestic partnerships

In Malaysia, foreign HE providers have been key actors for the construction and rapid expansion of private HE since the 1990s: in the late 1980s/early 1990s, foreign universities had started to become active in Malaysia by franchising their foreign degrees to domestic private providers, even though the operations of these private colleges were formally illegal at this time. The Private Higher Education Institutions Act and other acts from 1996 not only formally legalized private HE and enabled the foundation of private colleges and foreign providers’ offshore subsidiaries as private business entities in Malaysia. They also retrospectively delivered the jurisdictional base for this flourishing, already existing economic sector, which had previously been unregulated and largely driven by market forces (Tham, 2019). Transnational HE providers thus centrally contributed to upgrading private domestic HE to a market-driven economic sector separated from and about the same size as public HE.

Given the already large demand for and popularity of foreign HE programmes among Malaysians, the government acknowledged the benefits of foreign HE provision with its legalization in 1996. Transnational education—at best foreign HEIs offering their whole degrees at physical presences on-site—should serve as an instrument for both creating and keeping revenues from the HE economic sector domestically as well as reducing current account deficits and potential brain drain (cf. Wan et al., 2015). Akin to Malaysian New Economic Policy from the 1970s that relied on attracting foreign investment to the manufacturing industries, foreign investments in offshore subsidiaries were seen as resources that can be mobilized quickly to domestically provide HE services on a larger scale in Malaysia. This is why in the 1990s, Malaysian ministerial representatives started to actively approach foreign universities’ officials and promoted and



**FIGURE 1** Transnational HE providers' subsidiaries in Malaysia and Singapore, country of origin (in brackets), involvement of domestic public universities as academic partners (marked with \*) and years of operation (bars)

negotiated plans for offshore subsidiaries in Malaysia. With many of the representatives in the post-colonial state having education backgrounds and personal networks in the UK, they initially mainly targeted British universities (see country of origins in Figure 1).

Then we decided to go into [...] getting foreign universities to come and set up branches in Malaysia. Now, it was a never a situation where foreign universities wanted to come to Malaysia. No. It was us who made the effort to approach foreign universities to consider setting up universities in Malaysia. (Former official at Malaysian Ministry of Education)

Budget constraints, which were exacerbated by the Asian crisis in 1997/1998, led the Malaysian government to rely on foreign providers as private business entities that brought in capital for their

own operations of physical campuses and have aimed at generating revenue through leveraging tuition fees. In return, transnational HE providers on the private HE market were subject to a rather less restrictive state regulation, especially those with foreign university branch campus classification which is not full-pledged university status (Mok, 2011).

In contrast to Malaysia, in Singapore state actors have strongly been involved in funding transnational HE provision. The Economic Development Board, a statutory board of Singapore's Ministry of Trade and Industry, has not only granted several foreign HEIs double-digit millions of US dollars as direct subsidies as well as discounts on land and rents or easier access to work permits and housing for their staff (Olds, 2007).

The good thing [...] is that the Singapore government supports us by giving us matching grants. In other words, if I raise a dollar, I get a dollar and a half from the Singapore government, and then it goes to an endowment, which is then invested by some specialists, and then we use the return from the endowment to help fund the [HEI] as well. (Campus manager in Singapore)

The board also adopted key responsibilities in governing transnational HE programmes by approaching and negotiating with foreign HEIs on subsidiaries and strategic alignments, not least providing for the first foreign HEIs setting shop in Singapore in the late 1990s (Sidhu et al., 2014). These transnational providers were internationally renowned business schools, which have predominantly taught Master of Business Administration and executive education programmes and which are related to the city-state's ambition as a global centre for business and (financial) services where the future business elite and rules of the global economy are made (cf. Hall, 2008).

Singapore's Global Schoolhouse Programme, launched in 2002 and administered by the Economic Development Board, marked a critical milestone in transnational HE provision and the rapid spread of various further foreign universities' offshore subsidiaries since 2002 (see bars in Figure 1). Many of these HEIs provide highly specialized subject programmes, with a strong tendency towards applied STEM disciplines, and recruit local polytechnic graduates into their top-up undergraduate programmes, which upgrade vocational training diplomas to full university degrees. This mobilization of foreign expertise was additionally backed by substantial indirect state subsidies: Singapore's national public polytechnics, for example, have provided rent-free/-reduced or shared infrastructures and access to public teaching grants to the foreign HEIs. The city-state's rationale behind this largely resulted from state-calculated assessment of Singapore's economic needs and demand for labour, which is very much in line with Singapore's known strategies of knowledge import via multinational corporations: after analysing which sectors of industry and public service would lack trained specialists, the government filed (top) universities worldwide for their expertise and reputation and orchestrated the provision of their programmes in Singapore.

Through their partnerships with Singaporean national universities, i.e. NUS or the Singapore Institute of Technology (SIT), many transnational HE providers are indirectly enshrined with Singapore's model of state capitalism (cf. Sidhu et al., 2014) in the HE sector. With reconceptualizing primary to postsecondary education 'services' and corporatizing its HEIs in 2005, Singapore embraced the global tendency to re-model its public universities as entrepreneurial entities. Yet, this transformation did not come with radical reductions in state funding as seen in many other contexts (Mok, 2011).

## Knowledge transfer and mutual learning

In academic respects, foreign providers' subsidiaries deliver their programmes largely independently in the Malaysian private HE sector, which is strictly separated from the public HE sector. Thus, the operation of foreign HE providers in Malaysia has not led to major learning processes for domestic public universities. However, it is domestic private actors' commercial activities in the HE sector that centrally contributed to getting foreign HEIs' subsidiaries in Malaysia off the ground in the late 1990s (Schulze, 2021). Foreign brands' and degrees' symbolic value had already been established on the domestic market; mutual trust and routines had already evolved through private sector partnership networks.

It is the first of its kind in Malaysia, and they were a partner known to us. We have worked too well together, we know each other, we trust each other. We just said, 'Hey, let's do it together!' (Campus manager in Malaysia)

Many of the foreign HEIs' offshore campuses have in effect been business joint ventures with Malaysian business conglomerates from other economic sectors, which started to venture into HE. One example is Boustead Holdings Berhad, which is the joint-venture partner of the University of Nottingham's Malaysia campus and has key businesses in plantations, pharmaceuticals and military weaponry. In line with earlier New Economic Policy-strategic restrictions that have required domestic shareholders for foreign investments, government regulations limited foreign equity ownership to 49 percent in HEIs from the 1990s to the 2010s (Tham, 2014). This explains the continuing central role of Malaysian business conglomerates, both private and government-linked, in private HE in Malaysia. For foreign HEIs, the partnerships with domestic shareholders had the advantage of lower initial investment costs, including access to reduced rents and land development. For the domestic business conglomerates, involvement in HE joint ventures enabled increasing market shares, influence and profits in the rapidly expanding HE industry as well as business diversification and agglomeration effects for their non-HE businesses like real estate, hospitality or entertainment. While business partnerships with transnational HE providers offer opportunities for value capture to domestic capitalists,<sup>2</sup> these are unlikely to transfer knowledge and upgrade domestic HEIs.

In contrast to Malaysia, where foreign HEIs did predominantly not form academic partnerships with domestic public universities, in Singapore foreign providers are complexly intertwined with domestic HEIs. As indicated by asterisks in Figure 1, around two-thirds of the foreign HEIs run their operations in partnership with domestic public universities directly governed by Singapore's Ministry of Education. Particularly in the case of SIT, inter-institutional learning and knowledge exchange seem to have coincided with the institution's upgrading and expansion: not only have programmes and courses, which are taught by the foreign HEIs at the joint venture, been designed under supervision of and in close coordination with the SIT. But also have some of the academic staff been employed by SIT while or immediately after working in a teaching or organizational position at the foreign provider's subsidiary.

SIT, which you can't separate from the Ministry of Education [MoE] Singapore, so MoE-SIT Singapore provides infrastructure. They provide buildings, desks, tables, equipment that we've requested. They also provide some staff [...] that is paid for and provided. (Campus manager in Singapore)

Since its foundation in 2009, SIT has been upgraded from an umbrella platform that enabled and facilitated foreign universities' physical presences to the fifth autonomous public university in Singapore. It may be expected that with its new 'Smart Campus' the university can even upgrade its expertise in teaching those programmes by itself that has been taught by foreign providers before.

This upgrading of domestic HEIs via flows of expertise has been flanked by symbolic processes of reputation building: the reputation of foreign HEIs and their ranking position in their respective academic fields was a central criterion when being selected as the national universities' foreign partners. The symbolic 'flagship' effects, which should be radiated by the joint ventures, were cushioned by discursive twists. On the one hand, the foreign-domestic partnerships' highly specialized foci, such as teaching Singapore-adapted versions of Fine Arts, tie in with 'Western' university tradition. On the other hand, attention was paid not to rhetorically place the foreign partner above the domestic university. For example, foreign HEIs must not—with very few exceptions—be named 'universities'.

## Dynamics in state regulation

After a period of facilitating the inflow of foreign capital and transnational HE providers, the Malaysian government has more recently restricted the entry to the domestic private HE market for new transnational HEIs' subsidiaries. Since 2013, moratoriums on both the foundation of new private universities and introduction of certain degree programmes have been imposed (Tham, 2019). However, Malaysia's economic development strategy continues to rely heavily on foreign HE provision and hence can be understood as continuously characterized by *structural coupling*.

Beyond the domestic private HE sector, Malaysia's ambitions to develop the entire country into an *international education hub* have shifted the HE sector's focus beyond domestic private HE students towards attracting more international fee-paying students. With potentially upscaling the domestic market beyond Malaysia, private HE should be further geared towards an economic sector that creates additional revenues through export orientation. In particular, the endowment of Education Malaysia Global Service with comprehensive resources and competencies can be seen as emblematic of this outlook. Since its establishment in 2013, the government-owned company has been entrusted with the active management of international student issues such as visa applications (Lo & Wan, 2021) and, disputably aggressive, promotion of Malaysia as a students' centre in the greater Southeast Asia region, in which the comparatively low costs of an 'international' degree and students' experience have been marketed as a key comparative advantage.

That is the whole idea of why we would like to offer Malaysia as an international education hub, so that students will save money by having quality education without going to the UK, and Australia, or even China [...]. Everything will be here in Malaysia. People would have easy access coming to Malaysia, and easy access to the other Southeast Asian countries. (Official at government-linked agency in Malaysia)

In this greater attempt to international student recruitment, foreign HEIs' subsidiaries in Malaysia are assigned to take a central role (cf. Aziz & Abdullah, 2014), which is not least exemplified by the legal requirement for foreign HEIs to enrol a minimum of five percent non-Malaysian citizens. In practice, however, the turn toward recruiting more foreign students often conflicts with continuing highly restrictive (labour) immigration policies such as requirements of yearly renewal of student visas, prohibition of part-time work for student visa holders and limited options to obtain follow-up

visas for graduates. These regulations are rather detrimental to student inward mobility. Overall, these intensified ambiguities in Malaysian transnational education regulation since the early 2010s need to be understood as historically linked back to continuities with Malaysia's ethno-religiously shaped New Economic Policy.

In Singapore, the government's dominant role in steering the economy has also translated into a highly dynamic coupling process with transnational HE providers, which even indicates a selective *decoupling*. The phasing out of the Global Schoolhouse Programme since the mid-2010s suggests that the Economic Development Board has started to withdraw from funding existing and new foreign HE providers.<sup>3</sup> In many ways, the coupling with transnational HE providers was intentionally set up for a limited time period only, during which knowledge should be transferred to domestic institutions. The SIT's joint ventures with foreign HEIs have been designed for a limited time horizon. Most agreements need to be re-negotiated after some years, and some foreign HEIs have raised concerns that the government may not extend contracts and foreign programme operations in the future.

If you look at how Singapore handles this, the Ministry of Education tends to absorb what it can from its partners and then bring that partnership to an end. (Campus manager in Singapore)

After domestic training and education institutions—such as SIT as a public HEI—have been upgraded and acquired expertise via partnerships with transnational providers, the regulation for transnational education providers has tightened and state funding has been reduced. The Singaporean state may choose to decouple from transnational HE providers if they cannot prove their continued relevance to the human capital development of the city-state.

The Ministry of Education has become stronger and stronger. [...] It moves very quickly on things. [...] suddenly there'll be a new government initiative that pops up. [...] The government always has an agenda. [...] Last week, for example, [...] the Minister of Education had decided that we were going to have work-study degrees, which would include polytechnics and universities. Just like that. This was announced on Friday afternoon, that polytechnic students will go through their polytechnic diplomas, but when they reach the third year selected, good students would start taking year one university modules and then move into the second year in university. Before we knew it, we'd move from doing what we're doing now to being embraced or brought in this new initiative. Of course, you can't really turn around to them and say, 'Sorry, that's not us'. Because then you're not flavour of the month anymore, you're not playing the game. (Campus manager in Singapore)

Singapore's strategy of *functional coupling* has also encompassed an avenue and efforts of *indigenous coupling*. The high position of NUS, Singapore's key institution, in global university rankings indicates the success of this parallel coupling strategy.<sup>4</sup> Overall, this increased international visibility of Singaporean universities blends perfectly into Singapore's ambition of positioning the city-state on imagined regional and global geographies of HE and highly skilled labour. In the city-state's *international education hub* project, the role of international students has shifted away from being considered a source of short-term financial revenues towards rather forming a—temporary and state regulated—part of Singapore's highly skilled workforce (cf. Lo & Wan, 2021). The recruitment of international students as highly skilled labour lies mostly with domestic public HEIs. Whereas



TABLE 2 Coupling strategies with transnational HE providers in Malaysia and Singapore

	Malaysia	Singapore
Transnational-domestic partnerships	Transnational HE providers' separation from domestic public HE system	Transnational HE providers predominantly in partnerships with domestic public universities
Knowledge transfer and mutual learning	Academically autonomous programme delivery by transnational education providers; business partnerships with domestic conglomerates	Knowledge transfer and learning between academic partners
Dynamics in state regulation	Upscaling the HE market as economic sector; shift toward recruitment of international students	Upgrading of domestic HEIs; shift toward reduced role of transnational HE providers ( <i>decoupling</i> )
Predominant type of <i>strategic coupling</i>	→ <i>Structural coupling</i> : transnational actors' service provision without strategic learning of domestic institutions	→ <i>Functional coupling</i> : knowledge transfer to domestic institutions through international academic partnerships

international students at national universities may be eligible for government-funded scholarships and part-time work permits (cf. Mok, 2011), these avenues are hardly available for international students at private HEIs, including most transnational HE providers.

## DISCUSSION

The key results from the analysis are synthesized in Table 2. It is shown that the rationales and outcomes of the two states' transnational education policies can be explained by different types of *strategic coupling*.

Classifying these different strategies as *structural coupling*, as in Malaysia, or *functional coupling*, as in Singapore, provides the missing link to contextualize the states' current transnational education policies and their embracement of *international education hub* imaginaries in the country-specific historical development of HE and economic development more generally. The way transnational education is regulated in Malaysia can be seen as continuing the countries' existing foreign direct investment strategies in private HE as an economic sector. These strategies are historically informed by Malaysia's New Economic Policy affirmative action agendas. Correspondingly, key features of Singaporean transnational education policies can be seen as translating existing economic development tools into the public-private HE system. This corroborates Sidhu's (2008, p. 23) argument that 'bringing in foreign expertise to contribute to Singapore's knowledge-economy agenda resonates with earlier state-led industrialization policies'. The knowledge transfer via domestic-foreign partnerships and the subsequent upgrading of domestic actors in transnational networks and service provision very much resemble Singapore's industrial policies of coupling and decoupling with foreign investors in other economic sectors. This highlights that country-specific coupling strategies in transnational HE are both derived from and continuing historical foreign direct investment and economic development strategies.

Thinking through the economic-geographic lens of *strategic coupling*, furthermore, helps extend research on states' *international education hub* projects by a process-focused perspective. Transnational HE and policy research has effectively conceptualized different *hub* types (cf. Knight, 2018) and has successfully pointed out countries' need to progress to higher-valued forms, i.e. the *knowledge-innovation hub* (Knight & Morshidi, 2011). While this has helped explain varieties between countries as territorial containers and between different nation-state *hub* projects that are primarily confined to HE systems, the *coupling* approach foregrounds dynamic processes of economic upgrading and interacting economic roles of transnational providers and the state. It allows for acknowledging that national HE systems have become both a key instrument on pathways of upgrading to knowledge-based economies and an economic sector that is itself shaped by state-driven upgrading processes. Different ways of embedding transnational HE providers represent different modes of upgrading sectors and economies, and changing HE policies correspond with different dynamics on trajectories into knowledge-based economies.

## CONCLUSIONS

The paper has shown that states' ostensibly similar aspirations of becoming *international education hubs* are in effect characterized by crucial differences in how and why states strategically couple their HE systems with transnational HE providers. *Structural coupling* has enabled service provision and revenue generation of foreign actors' subsidiaries in the HE sector. *Functional*

*coupling* in HE provision deploys foreign actors strategically for upgrading domestic HEIs through collaboration and knowledge transfer. These coupling strategies are in both explored cases rooted in country-specific regional development approaches and framed by the countries' positions in global economic-geographical relations. The discussed involvement of Malaysian domestic business conglomerates or Singaporean public national universities in transnational HE provision exemplifies that varying coupling strategies reflect states' varying potential to endow transnational HE provision with resources. In comparison with Malaysia, the Singaporean state has directly allocated financial resources to transnational HE via subsidies; state governance of national players has been deployed as a political resource; and geographical resources derived from its historically developed status as economic and educational regional centre and, more recently, as a global city have been utilized.

The entanglement of different actors—domestic/foreign as well as private/government-linked—in transnational HE as a revenue-creating business opens up for critical reflection on the beneficiaries and those who shoulder the financial burden of the joint-venture partnerships and 'education industry'. State activity in market-driven transnational HE moves along a fine line between rolling back state responsibilities in public service provision and strategically deploying foreign/private capital, expertise and entrepreneurship for building effective education systems in the knowledge-based economy without neglecting their core function of delivering quality education and training. When pursuing *international education hub* ambitions, policy-makers face new quests, which go beyond regulating and allocating limited resources. Multiple political-economic relationships need to be facilitated; goals, pitfalls and different actors' roles in the *hub* projects need to be defined clearly, operationalized and carefully weighted.

Understanding changing state activity in transnational HE as navigating dynamic *strategic coupling* processes furthermore allows for carving out recent shifts in states' upgrading strategies. In both cases investigated there are indications that recent policies aim to go beyond upskilling the domestic labour force. Recently, Malaysian private HE as an economic sector has aimed to upscale its market by recruiting more international students as consumers. In Singapore, recent trends indicate moments of *decoupling*, i.e. a reduced role of transnational providers or even closures such as the termination of the Yale-NUS College partnership that has recently been announced for 2025<sup>5</sup> (Redden, 2021, August 27). These decouplings are likely related to prior successful *functional coupling* and upgrading of domestic players. Although obvious limitations apply to how far the *strategic coupling* concept can be stretched, its application in the field of HE provision can provide future research with more depth to understand the by now still underexplored transnational education-economic development nexus. The ground has been prepared to analyse different coupling strategies at the micro-level and situating them within broader geographical positionalities. Particularly promising research would, for instance, be to identify programmes in transnational HE provision beyond the standard techno-scientific and mainstream business disciplines that lend themselves to direct economic utilization, and to discuss their promotion against the background of states' changing geo-economic and geo-political ambitions.

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### CONFLICT OF INTEREST

We confirm that this paper is containing our original work, has not been submitted or published elsewhere and is not under consideration by another journal. There are no competing interests at stake and there is no conflict of interest that could inappropriately influence the content of our paper.

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### ENDNOTES

- <sup>1</sup> Transnational education is the term used by scholars and practitioners alike to refer to cross-border delivered degrees, in which programmes or providers rather than students and staff become mobile. It encompasses a broad range of activities, including online and distance education, franchising and licensing of programmes or offshore campuses. This paper concentrates on offshore campuses as one form of transnational education that entails the operation of physical subsidiaries and the delivery of HE programmes to students at a location outside of the institutions' home country.
- <sup>2</sup> In August 2021, the University of Nottingham Malaysia announced the buyout of its Malaysian majority shareholders for 23.5 million pounds, thus effectively ending the partnership and bringing the offshore campus under the full control of the University of Nottingham (Sharma 2021, August 26).
- <sup>3</sup> This is further visualised by Figure 1, showing that most foreign providers in Singapore were established between 2002 and 2012—the limited, dense timeframe of the Global Schoolhouse Programme and Economic Development Board involvement. No further providers have gained foothold since.
- <sup>4</sup> Moreover, Singaporean institutions have started to export HE transnationally, as can be seen in the operations of Singaporean Raffles University in Malaysia, which also links both case countries of this analysis.
- <sup>5</sup> In contrast to the recent merger event in Malaysia where the transnational provider, the University of Nottingham, bought out its Malaysian partner, in Singapore it is the Singapore side that made the decision to merge the offshore campus with an existing NUS programme.

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