



CREaTE

Canterbury Research and Theses Environment

Canterbury Christ Church University's repository of research outputs

<http://create.canterbury.ac.uk>

Please cite this publication as follows:

Wheway, C. and Punmanee, T. (2017) Global production networks and regional development: Thai regional development beyond the Bangkok metropolis? *Regional Studies, Regional Science*, 4 (1). pp. 146-153. ISSN 2168-1376.

Link to official URL (if available):

<http://dx.doi.org/10.1080/21681376.2017.1333919>

This version is made available in accordance with publishers' policies. All material made available by CReaTE is protected by intellectual property law, including copyright law. Any use made of the contents should comply with the relevant law.

Contact: create.library@canterbury.ac.uk





Global production networks and regional development: Thai regional development beyond the Bangkok metropolis?

Craig Wheway & Titiyawadee Punmanee

To cite this article: Craig Wheway & Titiyawadee Punmanee (2017) Global production networks and regional development: Thai regional development beyond the Bangkok metropolis?, *Regional Studies, Regional Science*, 4:1, 146-153, DOI: [10.1080/21681376.2017.1333919](https://doi.org/10.1080/21681376.2017.1333919)

To link to this article: <https://doi.org/10.1080/21681376.2017.1333919>



© 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 12 Jun 2017.



Submit your article to this journal [↗](#)



Article views: 1250



View Crossmark data [↗](#)

SHORT ARTICLE



Global production networks and regional development: Thai regional development beyond the Bangkok metropolis?

Craig Wheway^a  and Titiyawadee Punmanee^b 

ABSTRACT

There is a growing recognition that regional growth outside major urban centres should not – indeed cannot – be marginalized or ignored. In Europe, especially, important work now considers the growing role and importance of small and medium-sized cities in terms of spatial flows and networks and alternative pathways to economic growth than the city-centric, mega-urban approach. However, despite their prominence in economy geography, there is little mention of global production networks in this debate; and there has been much less focus on national contexts that lie beyond the traditional Euro-American heartlands of neoliberal capitalism. In the paper we address this issue by analysing the province of Korat in the north-east Thailand, revealing how Korat was unprepared for an influx of new firms; however, we note the untapped potential of peripheral regions to contribute to ameliorating regional inequalities.

ARTICLE HISTORY

Received 9 January 2015; accepted 19 May 2017

KEYWORDS


Bangkok Metropolitan Region; Nakhon Ratchasima (Korat); regional development; global production networks; Southeast Asia; Thailand

INTRODUCTION

The Bangkok Metropolitan Region (BMR) (including the adjoining provinces of Nakhon Pathom, Pathum Thani, Nonthaburi, Samut Prakan and Samut Sakhon) has become the dominant economic power in Thailand including the eastern seaboard, composed of Chonburi province, Chachoengsao, Samut Prakan and Rayong province. The BMR (Figure 1) is an example of a dynamic city region that accounts for 42.2% of Thai gross domestic product (GDP) (NESDB, 2013). However, there have been appeals to spread the economic benefits of regional development more widely, and Thailand has an historically poor record of disbursing funds for regional economic development upcountry according to The World Bank (Yuthamanop, 2012).

This paper focuses on debates concerning peripheral regions, but it analyses the Thai context through the lens of global production networks (GPNs). GPNs are defined as ‘organizational platforms through which actors in different regional and national economies compete and co-operate

CONTACT

^a(Corresponding author)  cwheway@rmu.ac.th

Faculty of Humanities and Social Sciences, Rajabhat Maha Sarakham University, Maha Sarakham, Thailand

^bDepartment of Sport Science, Tourism and Leisure, Canterbury Christ Church University, Canterbury, UK

for a greater share of the creation, transformation, and capture of value through transnational economic activity' (Yeung, 2015, p. 2). Employing Korat and a case study of Seagate Technologies, the key question we are posing here is can GPNs that are locked into the technology sector aid regional development outside the BMR, or has the BMR region already 'embedded' itself as the centripetal force driving the Thai economy and, as a consequence, squeezed out regional development up-country in the north-east of Thailand?

The paper is structured as follows. First, we examine the related literature including a brief outline of the methodology employed; and second, a case study of Seagate Technologies. Additionally, we examine whether attracting an outside investor might not be sufficient to ameliorate regional inequality when enrolled in GPNs. We also consider some of the problems Korat faces in anchoring a major technology multinational in a provincial location; and finally we relate the above to policy and theory.

BANGKOK AND REGIONAL DEVELOPMENT THEORY

As mentioned, the BMR is a dominant city-region, also performing as an escalator region (Fielding, 1992). This 'escalator effect' has had the effect of curtailing the development of the poorest regions in Thailand. Coupled with this, there is little coordination of policies to facilitate government action (Walsh, 2010) due to poor institutional frameworks (including government/private sector cooperation), lack of stakeholder involvement (Intarakumnerd, 2011) and frequent bureaucratic delays with local government (Doner, 2009).

These factors have led to industrial support being poorly designed and, in general, not effective, with economic success and attraction of foreign direct investment (FDI) deriving from factors including favourable initial conditions, natural resource abundance and financial inducements. Unger and Mahakanjana (2013) also note the relative lack of spillover benefits and the importance of sub-national governance to future initiatives building on economic success, and promoting growth in the face of intense competition for investment in Southeast Asia. For example, Malaysia can boast greater English language proficiency, industrial policies aimed at diversifying and moving up the value chain (as laid out in the Third Industrial Master Plan 2006–20), and good bureaucratic coordination. The absence of government intervention in the Thai context stands at odds to the model often characterized in regional development literature as 'Southeast Asian' with significant state intervention, although this supports the assertion by Douglass that the 'developmental state' has become differentialized – the Thai state has become proficient in promoting the BMR (also classed as a mega urban region – MUR) without intervening significantly to fix regional inequalities (Douglass, 1994).

This has implications for how Thailand interacts with GPNs because the Thai state is still wedded to the notion that economic benefits emanating from the BMR will trickle towards the peripheral regions (Douglass, 2000). However, GPNs remain under-theorized regarding their relationship to regional policy (Yeung, 2015). Smith argues that 'there is a need to understand the state as constituted at different geographical scales and as an institutional and relational actor in the governance of global production arrangements' (Smith, 2015, p. 311).

The strategic nature of GPN engagement requires continuous interactions between all the relevant institutions – it is not a simple one-off process of attracting a global investor (Yeung, 2009), which involves analysing coordination strategies and power relations (Yang, 2009; Yeung & Coe, 2015). Regional assets should effectively integrate through twin dynamic processes of strategic coupling (MacKinnon, 2012; Yang, 2009) – 'a mutually dependent and constitutive process involving shared interests and cooperation between two or more groups of actors who otherwise might not act in tandem for a common strategic objective' (Yeung, 2009, p. 332) and upgrading (Gereffi, 1999) defined as 'organisational learning to improve the position of firms or nations in

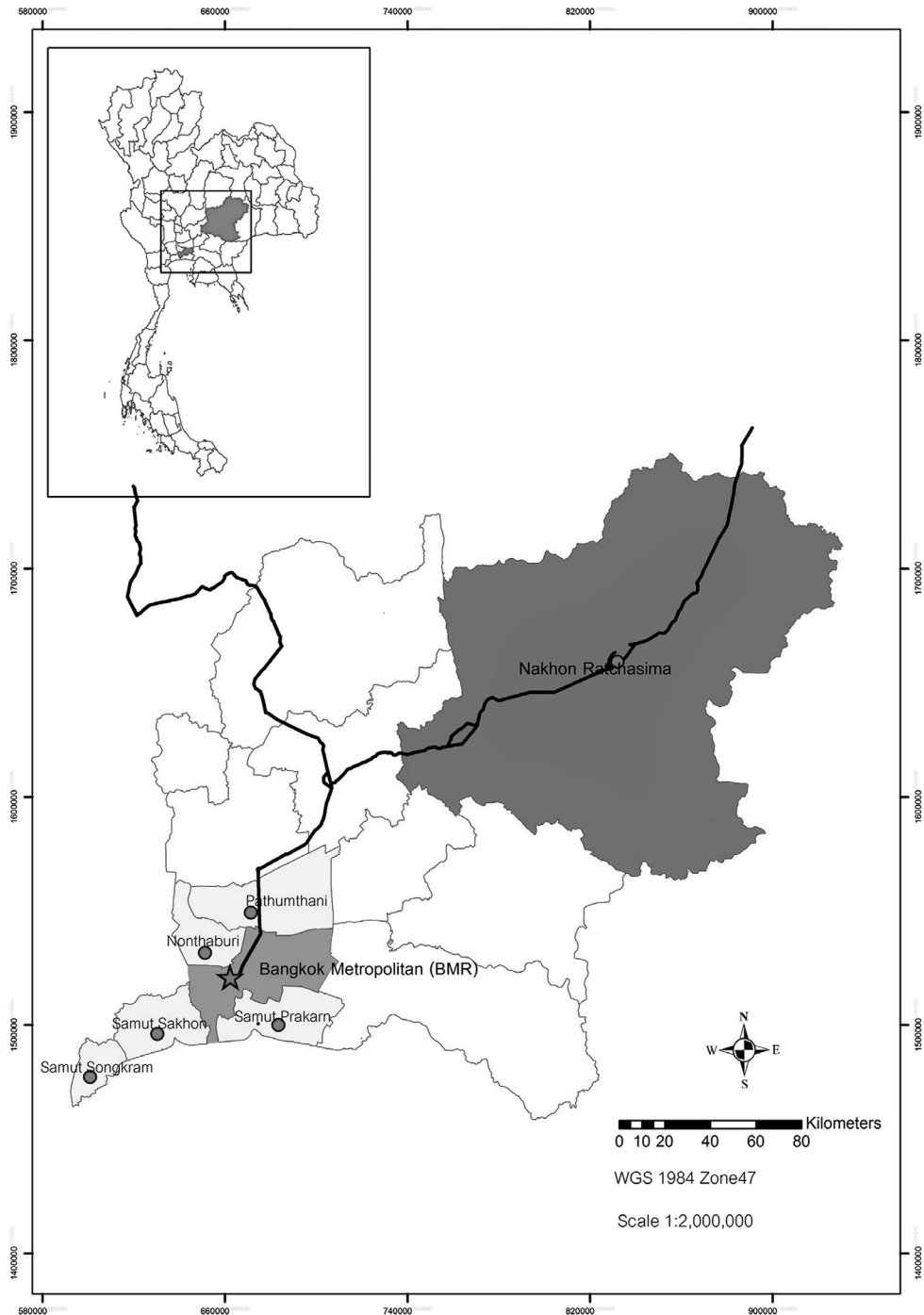


Figure 1. The Bangkok Metropolitan Region (BMR) and the case study location of Nakhon Ratchasima (Korat). Source: Siranee Piachamart, Faculty of Information and Technology, Rajabhat Maha Sarakham University.

international trade networks' (Gereffi, 1999, p. 39). Issues of embeddedness of the global partner are fundamental to realizing upgrading in a region (Wei & Liao, 2013).

Data employed in this study included quantitative datasets: first a database of promoted companies from the Board of Investment in Thailand (BOI); and second, gross provincial product (GPP) figures for Korat and related provinces. Qualitative data examined the barriers experienced by Seagate specifically focusing on issues of local governance. The next section outlines the promoted companies and GPP to highlight the potential of Korat to develop economically.

PROMOTED COMPANIES AND GROSS PROVINCIAL PRODUCT

Promoted companies are defined by the BOI as companies that meet six criteria, including enhancement of national competitiveness, aiding environmentally friendly business activity, clustering of related firms, supporting business, development of special economic zones, and linking Thai business interests into the global economy. Table 1 indicates that many promoted companies are in large urban centres.

Moving into the GPP statistics, Figures 2 and 3 indicate the level of GPP that measures economic activity at provincial level (below the Thai state and regions). Figure 2 shows Korat is economically strong compared with its regional neighbours in the north-east of Thailand. It has anchored key firms such as hard disk drive (HDD) manufacturers in a cluster proximate to Bangkok (3–4 hours' travel time).

However, Figure 3 indicates that when comparing Korat with provinces in the BMR, there is a noteworthy income gap per capita to achieve economic parity. We should caution that Korat has a population twice the size of some BMR provinces.

Figure 4 examines manufacturing and investment growth in the north-east and the BMR during 2014. Whilst total investment through most of 2014 was below BMR levels, during November and December investment spiked to a higher proportion (more than 50%) compared with Bangkok at less than 30%. Staffing and manufacturing data over-represent the dominance of the BMR and, in addition, Bangkok's associated provinces are characterized by export-led manufacturing and service provision. These data, however, cannot account for historical and contemporary sociocultural shifts in Thai society.

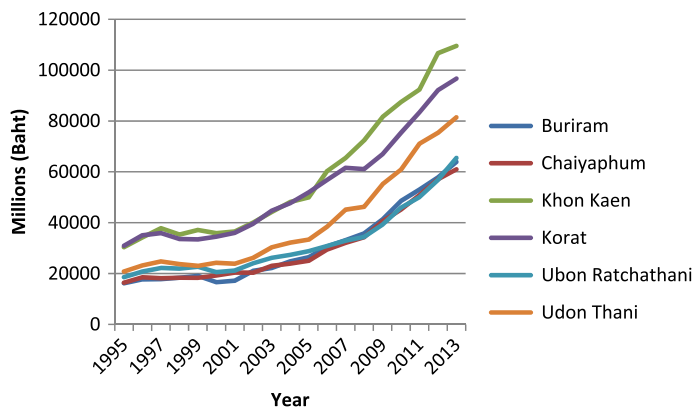
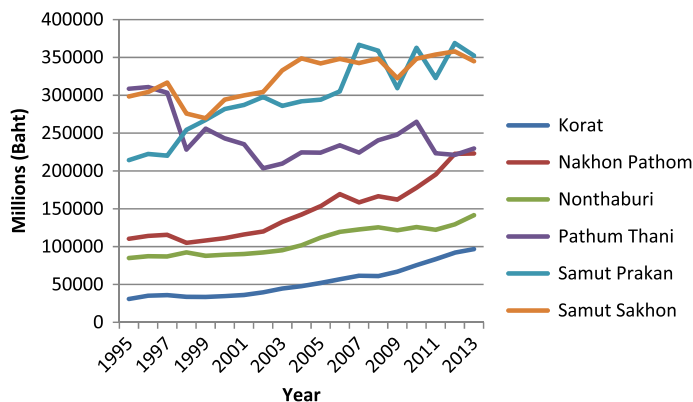
The potential for graduates from Bangkok universities to return to their home provinces in the north-east is a recent analysis and has the potential to aid regional development (Evans & Jancik, 2012). The Stock Exchange of Thailand (SET) indicated that with the expansion of satellite urban centres across Thailand, the production of university graduates has increased between 2001 and 2011.

Such trends influence the north-east of Thailand because within Thai family structure children are often tasked with taking care of elderly parents. Graduates from the north-east might be attracted by the development of universities back home and the desire to care for families, which could expand the pool of skilled labour locally.

Khon Kaen University and Suranaree University of Technology each have been earmarked to construct science parks – an attempt by the Thai state to encourage institutional upgrading (Stock Exchange Thailand, 2013). By 2011, close to 1.1 million students were produced by provincial universities compared with fewer than 900,000 via Bangkok. Lagging regions, such as the north-east, can benefit from skilled labour that would otherwise be concentrated in primate cities such as Bangkok. Not only that, the return of students earning degrees from Thailand's stronger academic institutions will support institutional upgrading, which could enable local firms to become enrolled in GPNs more easily. The existing literature points to lack of promotion of skilled labour by the provincial authorities, which have had inadequate capital to invest because central government still dictates spending (Unger & Mahakanjana, 2013). The next section analyses the case of Seagate concerning Malaysia and Thailand.

Table 1. Promoted company database: north-east Thailand (Board of Investment, 2014)

Province	Promoted companies	Dominant company type
Amnat Charoen	0	None
Bueng Kan	4	Electricity power from solar cells
Buriram	79	Chicken rearing
Chaiyaphum	32	Electricity from solar power
Kalasin	8	Electrical power from biomass
Khon Kaen	111	Roof panelling
Loei	11	Iron ore mining/silo and crop drying
Maha Sarakham	13	Garment production
Mukdahan	13	Rubber compound/electrical power from biogas
Nakhon Phanom	5	Hotel
Nakhon Ratchasima	462	Automotive products
Nong Bua Lamphu	13	Pig production/processing
Nong Khai	16	Electricity from solar power
Roi Et	21	Electricity from biomass
Sakon Nakhon	5	Transportation
Sisaket	19	Rice grading/garment production
Surin	48	Chicken production/rice grading
Ubon Ratchathani	63	Food production
Udon Thani	53	Rice grading
Yasothon	6	Rice grading/food production

**Figure 2.** Gross provincial product per capita, 1995–2013 (GPP) in Korat compared with north-eastern provinces. Source: NESDB (2013).**Figure 3.** Gross provincial product per capita, 1995–2013 (GPP) in Korat compared with Bangkok Metropolitan Region (BMR) provinces. Source: NESDB (2013).

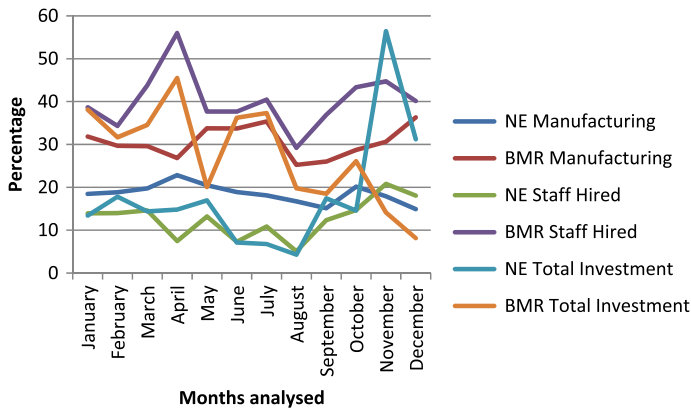


Figure 4. Manufacturing, total investment and staff hired in the north-east and Bangkok Metropolitan Region (BMR), 2014.

Note: Manufacturing investment = number of manufacturers; Total investment = millions of baht; Staff hired = number of persons hired in the manufacturing/industry. Source: Department of Industrial Works (2014).

KORAT AND SEAGATE: THE POLICY ENVIRONMENT

Seagate planned to expand within Korat; however, it was thwarted by the desire of the Office of Town and Country Planning Board (OTCPB) – a national governmental body – to approve zoning for green space.

A draft of the Korat Town Plan (KTP) was sent to the OTCPB in 2004. The flooding of Bangkok during 2011 encouraged many industries to move operations to Korat, and no provisions in the 2004 KTP were made to cope with a sudden influx of companies. During 2012, a new KTP was implemented and Seagate also announced a plan to invest US\$200 million a year in Thailand. This was to reassure stakeholders about its commitment to maintain production after the 2011 floods (Evans & Jancik, 2012). Subsequent to delays in declaring a new KTP during 2013, Seagate invested 10 billion baht (US\$303.58 million) in its Malaysian operation in Penang (Yu, 2014). A total of 1.05 billion ringgit (US\$295.77 million¹) was employed to open an investment in Batu Kawan Industrial Garden in Penang approved by the state of Penang and endorsed by the Malaysian government. The goal was to create a long-term production zone in Penang. Seagate planned to invest the 11.3 billion ringgit (US\$3.18 billion) within 5–10 years.

Malaysia has also been more active in establishing institutions to support regional development and attract FDI. Thailand delayed introducing institutions that directly aided the HDD sector until the 1990s such as the International Drive Equipment and Manufacturers Association (IDEMA). Evidence of the fluid nature of GPNs and the potential for ‘decoupling’ was illustrated by the closure of Seagate’s Ang Mo Kio plant in Singapore during 2009 (saving Seagate US\$40 million annually). However, during the production of this paper, Seagate announced additional investment for the Korat facility totalling 15.3 billion baht or roughly US\$437 million over five years.

CONCLUSIONS

This paper has shown that lack of independence in regional governance in Thailand has had consequences for the development of regional economic plans. Merely attracting FDI alone cannot ameliorate regional inequalities because the investment becomes ‘locked’ into the firm and the upgrading of local suppliers and the skills of the labour force have not kept up with the economic progress Thailand has made since the economic boom between 1986 and 1996.

If we compare Korat with the case of Wales in the UK, the deliberate measures and tax incentives employed to attract large, Asian investors (Koreans) and the long-term impact of attracting FDI did not result in the amelioration of regional inequalities in Wales (Phelps, Lovering, & Morgan, 1998). To this day, Wales is still economically disadvantaged, and this mirrors the Thai situation whereby close to half its GDP is absorbed through the BMR. MacKinnon (2012) argued that GPNs aim to 'globalize' regional development, but little thought has been dedicated towards a public policy paradigm shift towards peripheral regions.

However, there are positive lessons that can be garnered from Korat, which has performed as a provincial region. Korat can gain benefits by continuing to support expansion plans and up-skilling the workforce, a feature of GPNs lacking in the Thai context. Connections with regional universities can also aid Seagate to anchor its operations, and new plant openings emphasize R&D and not increasing production capacity. This could further 'embed' technology-based GPNs and supplier networks and encourage the development of more sophisticated research and development (R&D) activity.

This case confirms and provides further insight into Smith's (2015) argument that the state should be an integral actor in GPNs. Leading firms such as Seagate and the Thai government need to be working closely in order to 'embed' GPN networks relating to the HDD sector.

In policy terms, the evidence illustrates the need for policy-makers to use many types of policy levers at various governance levels. To achieve a successful and mutually beneficial strategic coupling, regions must use all the policy resources available not only to attract investment but also to embed an investor in a locality to aid in developing indigenous capabilities: improvements in connectivity were likely to have encouraged Seagate's initial investments, but there are risks inherent in a policy that aims primarily at attracting large outside investors for short-term employment gains.

DISCLOSURE STATEMENT


No potential conflict of interest was reported by the authors.

FUNDING

The authors thank the British Council Researcher Links Programme for providing a travel grant during 2014; and the Department of Geography at Loughborough University for hosting.

ORCID

Craig Wheway  <http://orcid.org/0000-0001-9401-5948>

Titiyarwadee Punmanee  <http://orcid.org/0000-0002-7213-3799>

NOTE

1. US\$1 = 4.46 ringgit as of 29 November 2016.

REFERENCES

Board of Investment. (2014). Promoted company database. Retrieved from http://www.boi.go.th/index.php?page=form_promoted_companies

- Department of Industrial Works. (2014). *Manufacturing and investment data in Thailand between 2013 & 2014*. Retrieved from <http://www.diw.go.th/hawk/default.php>
- Doner, R. F. (2009). *The politics of uneven development: Thailand's economic growth in comparative perspective*. New York: Cambridge University Press.
- Douglass, M. (1994). The 'developmental state' and the newly industrialised economies of Asia. *Environment and Planning A*, 26, 543–566.
- Douglass, M. (2000). Mega-urban regions and world city formation: Globalisation, the economic crisis and urban policy issues in Pacific Asia. *Urban Studies*, 37, 2315–2335.
- Evans, J., & Jancik, M. (2012). Regional development – The engine for Thailand's future growth. *Thai American Business*, 4, 8–11.
- Fielding, A. J. (1992). Migration and social mobility: South East England as an escalator region. *Regional Studies*, 26(1), 1–15.
- Gereffi, G. (1999). International trade and industrial upgrading in the apparel commodity chain. *Journal of International Economics*, 48, 37–70. doi:10.1016/S0022-1996(98)00075-0
- Intarakumnerd, P. (2011). Thaksin's legacy: Thaksinomics and its impact on Thailand's national innovation system and industrial upgrading. *Institutions and Economics*, 3, 31–60.
- MacKinnon, D. (2012). Beyond strategic coupling: Reassessing the firm-region nexus in global production networks. *Journal of Economic Geography*, 12, 227–245. doi:10.1093/jeg/lbr009
- NESDB. (2013). *Gross regional and provincial product chain volume measures 1995–2013 edition*. Retrieved from http://www.nesdb.go.th/nesdb_en/main.php?filename=national_account
- Phelps, N. A., Lovering, J., & Morgan, K. (1998). Tying the firm to the region or tying the region to the firm? *European Urban and Regional Studies*, 5, 119–137. doi:10.1177/096977649800500202
- Smith, A. (2015). The state, institutional frameworks and the dynamics of capital in global production networks. *Progress in Human Geography*, 39, 290–315. doi:10.1177/0309132513518292
- Stock Exchange Thailand (2013). *Emerging urbanisation trend. Thailand focus*. Bangkok: The Stock Exchange of Thailand (SET).
- Unger, D., & Mahakanjana, C.-N. (2013). Why sub-national governments in Thailand are not creating electronics industry clusters. In F. E. Hutchinson (Ed.), *Architects of growth?: Sub-national governments and industrialization in Asia* (pp. 121–147). Singapore: ISEAS Publications.
- Walsh, J. (2010). Thai Khem Kaeng: An inadequate response by the Thai state to the impact of the 2008 economic crisis. *Journal of Economics and Behavioral Studies*, 1(1), 1–8.
- Wei, Y. H. D., & Liao, F. H. F. (2013). The embeddedness of transnational corporations in Chinese cities: Strategic coupling in global production networks? *Habitat International*, 40, 82–90. doi:10.1016/j.habitatint.2013.01.005
- Yang, C. (2009). Strategic coupling of regional development in global production networks: Redistribution of Taiwanese personal computer investment from the Pearl River Delta to the Yangtze River Delta. *China Regional Studies*, 43, 385–407.
- Yeung, H. W. C. (2009). Regional development and the competitive dynamics of global production networks: An East Asian perspective. *Regional Studies*, 43, 325–351. doi:10.1080/00343400902777059
- Yeung, H. W. C. (2015). Regional development in the global economy: A dynamic perspective of strategic coupling in global production networks. *Regional Science Policy & Practice*, 7(1), 1–23.
- Yeung, H. W. C., & Coe, N. (2015). Toward a dynamic theory of global production networks. *Economic Geography*, 91, 29–58. doi:10.1111/ecge.12063
- Yu, E. (2014). Seagate to invest \$327 M, expand operations in Penang. *ZDNet*. Retrieved from <http://www.zdnet.com/article/seagate-to-invest-327-m-expand-operations-in-penang/>
- Yuthamanop, P. (2012). World Bank urges budget reform. *Bangkok Post*. Retrieved from <http://m.bangkokpost.com/business/292764>