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CLOSE ENCOUNTERS: CHINESE BUSINESS NETWORKS AS INDUSTRIAL CATALYSTS IN SUB-SAHARAN AFRICA

DEBORAH BRÄUTIGAM

ABSTRACT

Chinese business networks form an important (and well-studied) component of transnational industrial capitalism in East and South-east Asia. Yet almost no attention has been paid to the dynamics of the growing role of Chinese networks as catalysts for industrial development in sub-Saharan Africa. This article explores two contrasting cases, in Mauritius and in Nigeria. In a hostile or indifferent policy environment such as that of Nigeria, and in a locale where there were no resident overseas Chinese, the Asia-Africa linkages remained limited to information, input supply, consulting services, and technical assistance. In contrast, in the encouraging policy environment of Mauritius, which also had a sizeable overseas Chinese population, transnational Asian capitalists created strong connections with local capital (Asian and other), invested in joint ventures, and formed part of a successful export-oriented industrialization. These cases suggest that, as Asian business networks expand their global reach to sub-Saharan Africa, they can provide an important catalyst for local industrialization.

ETHNIC BUSINESS NETWORKS FACILITATE THE EXCHANGE OF INPUTS critical to global capitalism — finance, technical knowledge, and marketing information. In East and South-east Asia, Chinese business networks are increasingly acknowledged as an essential component of the area's industrial dynamism. In the now well-known 'flying geese' pattern, business networks facilitated the diffusion of manufacturing from the earliest industrializer, Japan, to the 'newly industrialized countries', Taiwan, Korea,

Deborah Bräutigam is Associate Professor in the International Development Program, School of International Service, American University, Washington, DC. She acknowledges with thanks resident fellowships from the Woodrow Wilson International Center for Scholars, Washington, DC and the Christian Michelsen Institute in Bergen, Norway. Fieldwork in Mauritius and Nigeria was made possible through a Fulbright Senior Research Fellowship, and by grants from the Aga Khan Foundation, administered through the World Bank's Regional Program on Enterprise Development (RPED) and USAID under Co-operative Agreement No. DHR-0015-A-00–0031–00, respectively. Thanks are also due for helpful comments from David Hirschmann, Dorothy McCormick, Shawkat M. Toorawa, several anonymous reviewers, and participants at the International Conference on Social Capitals at Michigan State University and a public lecture organized by the Chinese Business Chamber in Réduit, Mauritius.

Hong Kong, and Singapore.[1] In the manner of a flock of geese shifting leadership as they continue moving forward, these later industrializers in turn became new leaders as they spread their investment networks to Indonesia, Malaysia, Thailand, and coastal China.

Entrepreneurial networks and clusters in sub-Saharan Africa have not generally produced the kind of strong, transnational links that characterize Asia's 'flying geese' pattern of industrial diffusion. The reasons for this are complex; part of the explanation lies in differences in geography, in the different models provided by leading countries in the neighbourhood, and in the policies adopted by governments in the respective regions. Over the past two decades, however, Chinese businesses in Asia have increased their ties to entrepreneurs in sub-Saharan Africa, leading to consulting, input supply, and, sometimes, joint ventures. There has been little attention to the dynamics of this growing phenomenon, the ways in which sub-Saharan business networks might connect with Chinese networks, or the potential of Chinese business networks to contribute to Africa's troubled industrial development.

This article explores two contrasting cases of Chinese business networks as they connected with local networks of entrepreneurs in sub-Saharan Africa. The first part of the article briefly contrasts the role of ethnic business networks in industrialization in East and South-east Asia (concentrating on the Chinese), and in sub-Saharan Africa. The second part presents two case studies of links between Asian business networks and networks of African entrepreneurs. In the first case, Chinese entrepreneurs in Mauritius helped persuade the government to establish an export processing zone, and then travelled to Asia, inviting co-ethnics from Taiwan, Hong Kong, and Malaysia to join them in joint ventures. These investments exposed Mauritians (both Chinese and non-Chinese) to the intricacies of global production and export processes, leading to dynamic, export-oriented manufacturing growth. In the second case, Nigerian entrepreneurs in the eastern Nigerian town of Nnewi used their connections to Chinese trading networks (mainly in Taiwan) to assist in the transition from importing auto spare parts, to producing them, creating a small industrial boom.

In both cases, local business networks forged links with networks of Asian capitalists, leading to the rapid establishment of a vigorous local manufacturing base. Both cases suggest that important, positive externalities can result from the linkages made possible when Chinese business networks connect with business networks in Africa, or with Chinese who have long

1. On the 'flying geese model', see Kiyoshi Kojima, 'The "flying geese" model of Asian economic development: origin, theoretical extensions, and regional policy implications', *Journal of Asian Economics* **11**, 4 (Winter 2000), pp. 375–401. For a critical perspective on the model, see Martin Hart-Landsberg and Paul Burkett, 'Contradictions of capitalist industrialization in east Asia: a critique of "flying geese" theories of development', *Economic Geography* **74**, 2 (April 1998), pp. 87–110.

made Africa their home. However, while the Mauritian case can be seen as an extra-Asian example of the global reach of Chinese business networks, and even evidence of the growing transnationalism of domestic capital in the Third World (as Mauritian investors expand their investments in nearby Madagascar), the Nnewi case suggests that domestic factors still present significant obstacles to industrial stimulation via transnational business networks. A detailed analysis of those domestic factors is beyond the scope of this article, but we shall return to them in the conclusion.

Ethnic business networks and industrialization in comparative perspective

Ethnic business networks comprise professional and social relationships among entrepreneurs sharing a particular ethnic or cultural background. These relations exist in at least three separate forms: kinship ties that link together components of extended family enterprises; social ties that form through shared social histories, for example attendance at the same school or membership in the same clubs; and professional ties based on connections formed in the course of repeated business transactions: buying, selling, or subcontracting. These three categories span the range from informal to formal, and they often overlap. The networks themselves are woven together with strands of information, shared contacts, sometimes finance (credit or investment), and a degree of trust (frequently backed up by group-based sanctions). An important element of exclusion is present in the notion of networks, epitomized by the term 'old boys' network'. Networks are part of why 'capitalism remains a social phenomenon, embedded in particular cultures and places'.[2]

Both East and South-east Asia and sub-Saharan Africa have strong ethnic business networks. Those in East and South-east Asia have been discussed extensively in the literature, with most attention being given to the Chinese business networks that knit together the export manufacturing success stories in Taiwan, Hong Kong, Singapore, and parts of South-east Asia.[3] Sub-Saharan Africa also has extensive ethnic business networks, but, with the exception of the settler areas of South Africa and Zimbabwe, the East African case of Kenya, and the island of Mauritius, these ethnic networks do not seem to have stimulated significant industrial development.

2. Darryl Crawford, 'Chinese capitalism: cultures, the southeast Asian region, and economic globalization', *Third World Quarterly* **21**, 1 (2000). p. 72.
3. For an early example of this research, see Yuan-li Wu and Chun-hsi Wu, *Economic Development in South East Asia: The Chinese dimension* (Hoover Institute Press, Stanford, CA, 1980). Other good studies include Ruth McVey (ed.), *Southeast Asian Capitalists* (Cornell University, Southeast Asia Program, Studies on Southeast Asia, Ithaca, NY, 1992); and Peng Dajin, 'Ethnic Chinese business networks and Asia-Pacific economic integration', *Journal of Asian and African Studies* **35,** 2 (2000). Rajeswary Ampalavanar Brown's excellent study, *Capital and Entrepreneurship in South-East Asia* (St Martin's Press, London, 1994) surveys the South Asian business diaspora in South-east Asia.

Asia has a long history of Chinese and Indian business networks that stretch across the region. Chinese merchants in East Asia and Gujarati Muslim traders in South Asia had expanded their trading circuits to include South-east Asia by the thirteenth century, and the Muslims brought their banking and letter of credit system to the region.[4] Chinese (and, to a lesser extent, Indians) became important parts of the population in several South-east Asian countries.[5] By the late nineteenth century, South-east Asia had many large Chinese family firms, already diversified into a number of activities, with networks that extended across borders. For example, the Khaw family began to accumulate wealth in the nineteenth century as tax farmers in Hong Kong and South-east Asia, moving in the early twentieth century into insurance, shipping, and tin mining and smelting in Siam (Thailand), Burma and the Malay States.[6] Indian firms also became true multinationals: by the 1930s, the Indian Sindhi company Chellarams had expanded into South-east Asia, the UK, the Middle East, the West Indies, and West Africa, while the Chandaria Group had subsidiaries in Kenya, Nigeria and elsewhere.[7]

Chinese businesses were particularly important in South-east Asia's industrial development and its export-oriented growth. In 1937, half of the capital invested in Thailand came from Chinese businesses, and the Chinese controlled almost a third of the capital in Malaya-Singapore, and 10 percent in Indonesia.[8] Yet the region's significant export-oriented trajectory was in large part a function of Japanese investment after World War II. Japanese firms in South-east Asia relied on Chinese businessmen who 'provided important distribution networks which were vital for the Japanese because they were newcomers'.[9] Over time, the trading firms that originally helped pass on the imported Japanese goods became manufacturers themselves, helped enormously by the example and knowledge they had gained through close association with Japanese producers.[10] This was the well-known 'flying geese' pattern; in only one example: in the mid-1960s,

4. Brown, *Capital and Entrepreneurship*, pp. 11–13.
5. Currently, Indonesia has between 5 and 6 million Chinese (2.5–3 percent of the population), while Malaysia has approximately 4.3 million Chinese (29.4 percent), and 1.4 million Indians (9.5 percent), Lynn Pann (ed.), *The Encyclopedia of the Chinese Overseas* (Archipelago Press for the Chinese Heritage Center, Singapore, 1998).
6. Brown, *Capital and Entrepreneurship*, p. 87.
7. Brown, *Capital and Entrepreneurship*.
8. Jamie Mackie, 'Changing patterns of Chinese big business in southeast Asia', in McVey, *Southeast Asian Capitalists*, p. 164.
9. James Jesudason, *Ethnicity and the Economy: The state, Chinese business and multinationals in Malaysia* (Oxford University Press, Singapore, 1990), pp. 58, 153.
10. For a discussion of the Japanese links to Chinese business in the industrialization of South-east Asia, see, in addition to Jesudason, *Ethnicity and the Economy*, Akira Suehiro, 'Capitalist development in postwar Thailand: Commercial bankers, industrial elite, and agribusiness groups', in McVey, *Southeast Asian Capitalists*, and Anuwar Ali and Wong Poh Kam, 'Direct foreign investment in the Malaysian industrial sector', in K. S. Jomo (ed.), *Industrializing Malaysia: Policy, performance, prospects* (Routledge, London, 1993), pp. 77–117.

Japanese companies owned most of the textile industry in Thailand, but by the1980s, most were owned by Thai (Chinese) firms.[11]

Networks were the primary means by which Asia's Chinese and Indian business groups accessed finance, ideas, and overseas markets, as numerous case studies have documented.[12] In the Philippines and Thailand, Doner found that Chinese informal credit networks and trading company links were critical for companies trying to make the transition into export-oriented manufacturing in the auto industry.[13] Korean networks provided similar benefits as they expanded. Rhee described how Korean firms linked new Bangladeshi export industries to distribution systems in Europe and the United States.[14]

At an early date, the Asian diaspora's capital and networks reached across to sub-Saharan Africa. Some sources date the origin of trade links between South Asia and Africa to the first century AD.[15] Gujarati traders followed the dhow routes from Muscat to Mombasa and Zanzibar as early as the thirteenth century, bringing Indian textiles and buying ivory and gold, and later settling along the coast. The eunuch admiral Zheng He sailed fleets of enormous Chinese junks, each carrying up to a thousand men, to the east coast of Africa between 1405 and 1433. After three officially sponsored voyages, the second Ming emperor forbade further expeditions, and these early contacts failed to establish any direct trade links between Chinese and Africans.

By the twentieth century there were significant communities of Asians in some parts of Africa. In some states such as Kenya, Uganda, and South Africa, clusters of South Asian settlers began to make the transition into industrial production.[16] Syrian/Lebanese businesses (mainly in West Africa)

11. Kunio Yoshihara, *The Rise of Ersatz Capitalism in South East Asia* (Oxford University Press, Oxford, 1988), p. 19.
12. For a small sample, see Gary Hamilton, *Asian Business Networks* (Walter de Gruyter, New York, 1996); Murray Weidenbaum and Samuel Hughes, *The Bamboo Network: How expatriate Chinese entrepreneurs are creating a new economic superpower in Asia* (The Free Press, New York, 1996).
13. Richard Doner, 'Politics and the growth of local capital in SEA: Auto industries in the Philippines and Thailand', in McVey, *Southeast Asian Capitalists,* pp. 212–13.
14. Yung Whee Rhee, 'The catalyst model of development: Lessons from Bangladesh's success with garment exports', *World Development* **18**, 2 (February 1990), pp. 333–46.
15. In a personal communication, Dorothy McCormick (Institute of Development Studies, Nairobi, Kenya, 17 October 2001) noted that the *Periplus of the Erythraean Sea*, written in the first century AD, describes direct trade between East Africa and India, with East Africa trading gold, ivory, and slaves for Indian cloth and beads. This may also have been part of the ancient Arab-mediated 'dhow trade'. See also Shawkat Toorawa, 'Imagined territories: The pre-Dutch history of the Indian Ocean', in S. J. T. Evers and V. Y. Hookoomsing (eds), *Globalisation and the South-West Indian Ocean* (University of Mauritius/International Institution for Asian Studies, Réduit, Mauritius/Leiden, 2000), pp. 31–9.
16. For an excellent study of South Asian industrialists in Kenya, see David Himbara, *Kenyan Capitalists, the State and Development* (Lynne Rienner Publishers, Boulder, CO, 1994). See also Keith Hart and Vishnu Padayachee, 'Indian business in South Africa after apartheid: New and old trajectories', *Comparative Studies in Society and History* **42**, 4 (October 2000), pp. 683–712.

also made some initial industrial investments, although there is comparatively little research on their contribution. Chinese immigration was significant only in South Africa, Madagascar, and Mauritius, and in all three countries Chinese entered into manufacturing.[17] Most Asian business communities retained ties with their Asian homeland, often through business networks.

Many of sub-Saharan Africa's indigenous entrepreneurs also belong to well-established business networks. The trading networks of the Hausa and Igbo are legendary, as are the 'Mercedes mamas', market women of West Africa, who ply the region's trading circuits with their goods in large bundles. However, research on indigenous business networks in sub-Saharan Africa suggests that they are less likely than European or Asian networks (in Africa) to provide the kind of credit, information, and examples that can launch an entrepreneur into manufacturing.[18] Much of sub-Saharan African business remains in the informal sector, and this would explain some of the limits of indigenous networks. Researchers also suggest that indigenous African business networks are segregated by ethnicity as well as socio-economic status, and that African businesses seem less likely to be linked to other groups outside the region that could provide important models, ideas, and resources. McCormick's work in Kenya's garment sector demonstrates that networks of Asian (generally, Indian) and African entrepreneurs in Kenya seldom overlap. In her study, mass producers of garments for export (with global linkages) were 100 percent Asian, while custom tailors (limited to the domestic market) were 95 percent African.[19] McCormick argues that access to entrepreneurial networks helps explain why Asian manufacturers in Kenya produce more efficiently than others, and why they have more potential for growth.

Networks among indigenous Africans may be less able to provide access to capital and credit. In Nigeria's northern plastics industry, Zakaria found that up to 60 and 70 percent, respectively, of Lebanese and Chinese factory owners got their initial capital from their extended families and networks.

17. In Mauritius the Chinese population reached 25–30,000, or nearly 3 percent, in Madagascar 18,000 (including children of mixed parentage), and in South Africa 20–25,000. Chinese immigration was not significant in any other African country. Pann, *Encyclopedia* (*passim*).

18. See, for example, Kinuthia Macharia, *Social and Political Dynamics of the Informal Economy in African Cities* (University Press of America, Lanham, MD, 1997). Dorothy McCormick discusses the informality of African business in Kenya in her paper 'Enterprise clusters in Africa: On the way to industrialisation?' Discussion Paper (Institute of Development Studies, University of Sussex, Brighton, 1998). For a study that includes both formal and informal businesses, see Abigail Barr, 'Enterprise performance and the functional diversity of social capital'. Working Paper 98/01 (Centre for the Study of African Economies, Oxford University, 1998).

19. Dorothy McCormick, 'Industrial district or garment ghetto? Nairobi's mini-manufacturers', in Meine Pieter van Dijk and Roberta Rabellotti (eds), *Enterprise Clusters and Networks in Developing Countries* (Frank Cass, London, 1997), p. 117.

By contrast, 71 percent of indigenous Hausa entrepreneurs funded their investments through personal savings.[20] Fafchamps found that, in Kenya and Zimbabwe, only European and Asian networks offered their members significant, preferential access to supplier credit, primarily because non-indigenous groups had access to information about the reliability of others in their network, but not those outside.[21]

Little research has been done on Chinese business networks in an African context. An exception, Gillian Hart's case study of Taiwanese networks in a KwaZulu-Natal, South Africa cluster of garment manufacturing, provides a rare look at the start of an investment sequence that might have represented the early stage of the flying geese model.[22] Hart's research focused primarily on a comparison between the mode of production in Taiwan and that used by the Taiwanese industrialists in South Africa, but her study provides insights that are useful for understanding how this network worked as an extension of those operating in Asia, and how the connections were first made between Africa and the Asian firms. Hart found that the initiative rested first with local government officials in KwaZulu-Natal, assisted by their own contacts with a Hong Kong industrialist who had relocated nearby. Around 1984, with the help of this Hong Kong industrialist, municipal bureaucrats from the town of Newcastle travelled to Taiwan and Hong Kong to hold seminars publicizing the attractions of their region for Chinese investors.[23] Eventually, some 59 Taiwanese firms invested in Newcastle and other approved regions, mainly producing knitwear for the South African market. Some tried to export, but met with difficulty because frequent strikes by a mobilized labour force made it hard to meet order deadlines. Hart demonstrated how the original investors were joined by small, new firms established by their own former technicians (most of them also from Taiwan) who began to subcontract to their former firms. Some of the older firms supplied credit to the new firms.[24] In one case, a former technician who subcontracted to his former firm was a black South African. This entrepreneur, who was 'unlicensed and operates out of an old grain storage facility',[25] may represent the first

20. Yakuba Zakaria, *Entrepreneurial Ethics and Trust: Cultural foundations and networks in the Nigerian plastic industry* (Ashgate, Brookfield, 1999), pp. 25–6.
21. Marcel Fafchamps, 'Ethnicity and credit in African manufacturing', *Journal of Development Economics* **61**, 1 (February 2000), pp. 205–35; Marcel Fafchamps, 'Trade credit in Zimbabwean manufacturing', *World Development* **25**, 5 (May 1997), pp. 795–815.
22. Gillian Hart, 'The agrarian question? Agro-industrial linkages through Asian lenses', *Journal of Peasant Studies* **23**, 2–3 (January–April 1996), and Gillian Hart, *Global Connections: The rise and fall of a Taiwanese production network on the South African periphery*. Working Paper No. 6. (University of California, Institute of International Studies, Berkeley, CA, 1996). See also J. Pickles and J. Wood, 'Taiwanese investment in South Africa', *African Affairs* **88** (1989), pp. 507–28.
23. Hart, *Global Connections*, p. 14.
24. *Ibid.*, p. 19.
25. *Ibid.*, p. 28.

glimpses of what might eventually be a 'flying geese' model, or he may represent a dead end; it is difficult to tell from the case.

Three fundamental differences between East and South-east Asia and sub-Saharan Africa may account for the fact that business networks in Asia facilitated the 'flying geese pattern' of industrialization there, while business networks in sub-Saharan Africa apparently have not done so: maritime geography, the 'neighbourhood' effect, and the policies followed by post-independence governments towards Chinese and Indian businesses. First, the historic ease of maritime travel in South-east Asia, and along the extended coast of China and southern India, meant that these areas were incorporated into extensive, dense, cross-regional trading networks as long ago as the Roman Empire. These maritime networks were extended to some parts of the coast of East Africa — Zanzibar, Kilwa, and other towns — but maritime trade was completely absent from the rest of sub-Saharan Africa until the fifteenth century. The simple fact of easy and regular transport in Asia allowed significant trading ties to build up; later, coastal East Africa was linked to networks that were already strong in South Asia.

Thus, maritime geography helped coastal Asia, and coastal areas of sub-Saharan Africa (but, importantly, not the rest of the continent), to become host to extended business groups that could potentially have served as a 'flying geese' conduit allowing manufacturing to spread from its earlier home to more outlying areas. This happened in East and South-east Asia. Yet two other factors were also different. In Asia, Japanese entrepreneurs came first, making contacts with the Korean, Chinese and Indian firms in the area, and eventually passing technology and leadership on to these firms. Sub-Saharan Africa had no similar neighbourhood leader who could act as an 'export catalyst' or be the first leading goose in the flying geese model. South Africa could have played this role, but instead of facilitating investment in neighbouring countries, as Japan had done, the government in South Africa chose to insulate itself in an effort to preserve its apartheid system.[26]

This brings us to the third factor: government policy. Even in those areas where Asian capital was already providing significant economic stimulus, some governments reacted by trying to crush a group they saw as a political threat. Uganda's Idi Amin expelled some 80,000 Asians, including many who had started manufacturing firms. Tanzania nationalized many Asian businesses. Asian entrepreneurs encountered perhaps the least oppression in Kenya, where the Kenyatta government (like the post-colonial government of Malaysia) chose an affirmative action approach to

26. For discussions of the experience of Indian business in South Africa, see Vishnu Padayachee and Robert Morrel, 'Indian merchants and *dukawallahs* in the Natal economy, c1875–1914', *Journal of Southern African Studies* **17**, 1 (March 1991), pp. 71–102; Hart and Padayachee, 'Indian business in South Africa', p. 683.

provide advantages to indigenous business. As a consequence, Asians owned 55 percent or more of the medium and large manufacturing firms in Kenya in 1998.[27] Finally, as many studies have pointed out, the policies of post-colonial governments in most parts of sub-Saharan Africa made industrialization difficult for private capital.[28] In part this was due to the political threat posed by business as a rival source of power. At the same time, some leaders believed that their domestic capitalists were too weak to lead the industrialization effort, and put resources into building up state-owned manufacturing as an alternative strategy. In contrast, a business-friendly policy environment in many Asian countries is widely agreed to be one of the fundamental components of the 'East Asian miracle', even if dispute still exists over what those policies were, and which were critical.[29]

In Africa, the dynamic business networks that brought East Asian capital and dynamism to South-east Asia and coastal China and that have received so much attention in Asia's 'flying geese model' are notable mainly for their absence. This has started to change, in small degrees. Taiwanese and Hong Kong firms began in the 1970s and 1980s to establish closer business ties in sub-Saharan Africa, leading in some cases to investment. Their reach has been quite uneven, with a small number of countries (mainly in southern Africa) receiving the bulk of interest.[30] Yet as the research reported below illustrates, the origins of some of sub-Saharan Africa's manufacturing success stories can be traced to direct links formed between Asian and African networks. Do Chinese networks operating in Africa represent an extension of the 'flying geese' model whereby a more developed trading partner begins by producing goods at home and exporting, then moves into direct production in a less-developed foreign country, providing a stimulus for investment by example, and by joint ventures, and finally moves on, bought out by local entrepreneurs, who then take over the lead? What are the possibilities for businesses in Africa to form linkages with transnational

27. A. Bigsten, P. Collier, S. Dercon, M. Fafchamps, B. Gauthier, J. W. Gunning, A. Isaksson, A. Oduro, R. Oostendorp, C. Patillo, M. Soderbom, F. Teal and A. Zeufack, 'Contract Flexibility and Conflict Resolution: Evidence from African manufacturing', (Department of Economics, Stanford University) (mimeo), cited in Marcel Fafchamps, 'Business networks in sub-Saharan Africa', in Masahiko Aoki and Yujiro Hayami (eds), *Communities and Markets in Economic Development* (Oxford University Press, New York, 2001), p. 196.

28. There are extensive analyses of the problematic policy environment in sub-Saharan Africa. See, in particular, Howard Stein (ed.), *Asian Industrialization and Africa: Studies in policy alternatives to structural adjustment* (St Martin's Press, New York, 1995), which provides useful comparisons.

29. See World Bank, *The East Asian Miracle* (World Bank, Washington, DC, 1993); Deborah A. Bräutigam, 'What can Africa learn from Taiwan? Political economy, industrial policy, and adjustment', *Journal of Modern Africa Studies* **32**, 1 (1994) as well as Stein, *Asian Industrialization and Africa*, for a sample of these debates.

30. United Nations Conference on Trade and Development (UNCTAD) Annual Report for 1997: *Transnational Corporations, Market Structure and Competition Policy* (United Nations, New York and Geneva, 1997) gives a table listing recent Asian investment in Africa.

Chinese networks that enable them to reap some of the synergies of this particular model of capitalism?

Exploring these questions thoroughly would require the examination of multiple cases of Chinese networks operating in Africa. Very little research of this nature exists; Hart's study of Taiwanese investment in South Africa is an exception. My own preliminary investigation of these issues draws on fieldwork from two additional cases of Chinese networks in Africa.[31] One, the island nation of Mauritius, demonstrates the ease with which Chinese capitalists with deep roots on the island were able to reach back to East Asia and join their own local knowledge and resources with those provided by transnational Chinese networks. The second case, the decades-long relationship between Igbo trading networks in Nigeria's eastern city of Nnewi and Chinese production and distribution firms scattered across East and South-east Asia, demonstrates the potential, but also the limits, of a strategy of linking indigenous African networks to Chinese networks in Asia. Both the Nigerian and Mauritian cases also highlight the importance of the state in providing an environment where capitalist networks can flourish.

Chinese business networks and capitalism in Mauritius

Chinese business networks are responsible for some of the information, ideas, and capital that helped launch the small Indian Ocean nation of Mauritius as an important centre for export-oriented industry. Yet the fact that these moves required the 1970 'trigger' of legislation establishing an export processing zone (Africa's first) and were boosted in 1983 by the fears of Hong Kong industrialists as Great Britain negotiated the return of Hong Kong to China, provides an important corrective to the idea that Chinese networks might simply spread from one area to another, given the adequate density of a Chinese population.

The presence of Chinese business in Mauritius has deep roots, although not nearly as deep as those in South-east Asia. Chinese were among the earlier settlers in Mauritius, a country that was uninhabited when it was first discovered and settled by Europeans. Fujian and Cantonese merchants in partnership with French traders brought the island into the direct China trade soon after 1750.[32] Two Chinese men began planting tea on the island

31. My fieldwork on these cases took place in multiple visits to Nigeria and Mauritius in the period 1991–9. In the case of Nnewi, all manufacturers of auto spare parts were interviewed. In Mauritius, interviews took place with officials of the Chinese business associations and with several influential Chinese businessmen.
32. Huguette Ly-Tio-Fane Pineo, 'Mauritius', in Pann, *Encyclopedia*, p. 351.

in 1770.[33] An early traveller reported seeing Chinese men smoking pipes in Port-Louis's tea shops and cafés in 1801, and a small but distinct Chinatown had been established by 1817.[34] By the mid-1880s, the Chinese in Mauritius numbered several thousand.[35] At that time, the Port-Louis market in Mauritius was said to be 'dominated' by Chinese traders, and one visitor reported, 'in every out-of-the-way nook and corner of the island' you found 'a Chinaman's shop'.[36] Mauritius also became an important transit point for overseas Chinese moving on to settle on the African continent and in Madagascar.

The Chinese in Mauritius were well organized and maintained ties with their homeland through return visits to their ancestral place of origin, often to find spouses. The colonial government banned Chinese from buying land unless they severed their ties with China, and the Chinese, who were reluctant to do so, did not become plantation owners, as did some of the wealthier Indians on the island.[37] By the early twentieth century, there were some 25 to 30 separate Chinese clans in Mauritius, mainly Hakka, but also Cantonese.[38] In 1908, Chinese businesses organized a Chinese Chamber of Commerce, only two years after the founding of a Chinese chamber in Singapore. Some of the region's earliest factories were established by Chinese: tobacco processing (1874) and alcohol distillation (1897).[39] By 1925, Chinese manufacturers were producing boots and shoes, rum, and aloe bags for shipping sugar. Seven out of eight cigarette factories were owned by Chinese families, including the clans of Ng Cheng Hin, Venpin, Lueng Pew and Ah-Fat.[40] While many Chinese lived in the rural towns of the island, each clan established a business and social centre in Port Louis, the capital. There they would find Chinese food and accommodation, and the opportunity to make business contacts, or perhaps share the cost of a truck to transport their goods to the rural areas. At the turn of the century, some 80 percent of the Chinese in Mauritius were traders, but as their level

33. Prof. Sir Edouard Lim Fat, 'The contribution of the Chinese in the industrialization of Mauritius', talk given at the First World Chinese Conference held in Mauritius, 23–26 April 1992.
34. Burton Benedict, *Mauritius: Problems of a plural society* (Frederick Praeger Publishers, New York, 1965), p. 20.
35. Mauritius was also an important destination for immigrant Indians, including Gujarati Muslim merchants, as discussed above, but this narrative will focus on the Chinese.
36. Philip Snow, *The Star Raft: China's encounter with Africa* (Weidenfeld & Nicolson, New York, 1988), p. 55.
37. Kevin Shillington, *Jugnauth: Prime minister of Mauritius* (Macmillan Education, Basingstoke, 1991).
38. Interview, Prof. Donald Ah Chuen, President of the Chinese Chamber of Commerce, Port Louis, 21 April 1999.
39. Lim Fat, 'Contribution of the Chinese'.
40. Chinese Chamber of Commerce, 'The Chinese Chamber of Commerce: a few historical notes', 90th Anniversary Special Souvenir Magazine (December 1998); Pineo, 'Mauritius,' p. 354.

of education rose, other opportunities presented themselves, and by 1944 only 33 percent remained as merchants.[41]

Ethnic networks continued to connect Sino-Mauritians to the Chinese diaspora in Asia, even when they moved into other professions. The case of Sir Edouard Lim Fat demonstrates how helpful this was for the industrial transition in Mauritius. In 1970, Mauritius became one of the earliest developing countries to establish a duty-free export processing zone (EPZ). An institutional invention of the Irish, EPZs were rapidly adopted in the 1960s by countries in East and South-east Asia, where their tax-free incentives helped launch the region's export-led growth. An engineering professor at the University of Mauritius and also a businessman, Dr Lim Fat was one of the early visionaries pushing for the establishment of an EPZ. The idea for the zone came to him during frequent visits to Asia in the 1960s.[42] The Lim Fat family was originally from China's Canton area, and Dr Lim Fat's in-laws had fled to Taiwan after 1949. (Other parts of their family emigrated to Singapore and Hong Kong.) In this case, it was the diaspora connections and social networks that provided the idea of an export processing zone, but it would be the business networks that would bring capital from Hong Kong and Taiwan, for investment in export-oriented manufacturing.[43]

Dr Lim Fat travelled to Puerto Rico to compare its EPZ with those he had seen in Asia. His research was reported in a paper delivered in November 1969 at the World Sugar Congress held in Mauritius, and later circulated widely in the government. The paper directly stimulated the December 1970 Export Processing Zones Act No. 551. Shortly after the act was passed, Sino-Mauritians such as Dr Lim Fat travelled to Asia, 'taking advantage of [their] numerous personal contacts in these Far Eastern lands' to promote the EPZ 'with ceaseless missionary zeal'.[44] The Lim Fat family established one of the first three EPZ factories, with a partner he first met in Hong Kong.[45]

Sir Jean Ah Chuen was another early investor in the EPZ.[46] Sir Jean was the first Sino-Mauritian to be nominated to the Legislative Council in Port Louis (in 1948). Active both in politics and in business, Sir Jean also had

41. Huguette Ly-Tio-Fane Pineo, *Chinese Diaspora in the Western Indian Ocean* (Éditions de L'Océan Indien and Chinese Catholic Mission, Port Louis, Mauritius, 1985), pp. 80–1.
42. Interview, Professor Sir Edouard Lim Fat, Port Louis, 19 April 1999; see also Dick Chan, 'Mauritius wants to be Hong Kong', *South China Morning Post* (Hong Kong), 23 January 1995.
43. Investors from Europe and (less so) the United States also invested in the Zone at first; later, most of the capital came from Mauritians themselves.
44. L. M. Lim, 'Hong Kong and the free zone', *L'Express* (Port Louis, Mauritius), 11 July 1997. See also Michael Young, 'Mauritian development strategy: Hong Kong is the model', *The Financial Times*, 5 May 1971.
45. Ironically, his partner was German, although he met him through Chinese network connections. Interview, Port Louis, 19 April 1999.
46. Interview with Professor Donald Ah Chuen, Port Louis, 21 April 1999.

extensive connections in Asia. His sister was married to a Hong Kong businessman, Joseph Lee, originally from Shanghai, who served as the honorary consul for Mauritius in Hong Kong. Through Lee's contacts with Shanghai manufacturers who had settled in Hong Kong after the Communist victory in 1949, the Ah Chuen family bought second-hand machinery from a Hong Kong firm and established a wig factory in the EPZ. Although this venture failed after 18 months, their second venture was more successful. An effort to produce cotton t-shirts, and later on woollen knitwear, this investment (in which the Ah Chuen family was a minority shareholder) also boasted a Shanghai–Hong Kong connection through the firm Textile Industries.

The success of Sino-Mauritian business networks showed in the percentage of Hong Kong equity capital invested in the EPZ: more than 90 percent in the early years.[47] Taiwan and Malaysia also sent investors, and a few Singapore firms set up operations. Between 1971 and 1975, EPZ exports grew by 31 percent per annum. By 1982 there were more than 115 EPZ firms, and 59 percent of the capital invested in the EPZ came from Hong Kong Chinese.[48] In 1983, as the British and Chinese governments held talks about the future of Hong Kong, the Mauritian Prime Minister (who was quite aware of the fears of the Hong Kong Chinese and determined to take advantage of the situation) made an official trip to China, stopping over in Hong Kong to give two seminars on the attractions of Mauritius as an investment site. Following this up with other government contacts, the Mauritian government established itself as the partner of the Mauritian Chinese in their networks, working with them to foster Asian investment in the island.[49] The appeal of the Chinese overseas network in making Mauritius a destination for Hong Kong capital was clear, as a Sino-Mauritian remarked: 'The Hong Kong investor who comes here does not feel so much like a stranger as he would in Africa. He sees Chinese faces, he eats Chinese food, his wife has someone to talk to.'[50]

Early in the life of the EPZ, joint ventures between East Asian and local investors were common, although this was not a requirement for foreign investment. Joint ventures appealed both to Franco-Mauritians who had amassed capital in the sugar industry, and Sino-Mauritians who had become wealthy through trade and local manufacturing. Because Mauritians had the desire to learn the business, while the Asian firms needed the

47. An anonymous reviewer of this article noted that many of the Asian industrialists brought in used machinery from Asia, but valued it at the price of new equipment; thus the value of this Asian investment may have been inflated.
48. Roland Lamusse, *The Breakthrough in Export-processing Industrialization in Mauritius*. (African-American Issues Center Discussion Paper No. 13, Boston, MA, no date, c.1985).
49. This is discussed in Shillington, *Jugnauth*, pp. 142–4.
50. Comment by Philippe Chan Kin, former chairman of the Mauritius Export Processing Zone Association, in Blaine Harden, 'Mauritius breaks out of Africa's poverty: free export zone works wonders for tiny island', *Los Angeles Times*, 21 November 1988.

risk-sharing and the local knowledge and contacts, the joint ventures were genuine, not 'paper' partnerships like so many joint ventures between Indians and Africans in Kenya, for example. The importance of the initial links with Chinese businesses clearly made the EPZ concept a success from the outset, by bringing capital from Chinese in Asia to Mauritius. But these links were also important for transferring information that would reduce the risks and costs to Mauritians of embarking on export-oriented industry. A Sino-Mauritian analyst pointed this out in a 1997 newspaper article:

> Most of [the local investors] were ex-partners or employees of EPZ firms who over the years had acquired the necessary experience and know-how from the Hong Kong industrialists in such vital areas as international marketing, the latest technology and large-scale industrial production and management, and felt confident enough to start their own EPZ enterprises.[51]

This was the 'flying geese model' in action. In time, many local Mauritians invested in the EPZ. Two of the earliest firms were established by Sino-Mauritians with overseas partners: Suzy Toys (Lim Fat), and Textile Industries Ltd., now part of the Esquel Group (Ah Chuen).[52] Other firms were established by the Lai Fat Fur and Lam Po Tang groups. Franco-Mauritians and Muslim Indian Mauritians also invested, including the Espitalier Noël family and the Currimjee group. By the late 1980s, more than half of the equity in the EPZ was local, and Mauritius had become the third largest exporter of 'Woolmark' knitwear in the world. Support industries producing boxes, thread, buttons, and packaging materials for export firms had also grown, and most of these firms were owned by local Chinese. At present, Mauritian owners account for about 60 percent of the capital invested in export manufacturing in Mauritius.[53]

The Chinese networks in Mauritius also continue to facilitate a role that Mauritius first began to play in the eighteenth century: they serve as a gateway for overseas Chinese entrepreneurs interested in investing both in Mauritius and elsewhere in Africa. Some of the promotion of Mauritius took place during large clan reunions, which have brought overseas Chinese from across the diaspora to gather in Mauritius. One such meeting of the Chung family brought some 200 overseas Chinese relatives to Mauritius, including some who were in business in Malaysia. The clan members made plans to conduct a joint mission to South Africa and Namibia to explore business opportunities there. The first World Conference of Overseas Chinese, held in Mauritius in 1992, performed a similar role.[54]

51. Lim, 'Hong Kong and the free zone'.
52. *Ibid.*, p. 3.
53. 'L'apport hongkongais dans la ZF', *L'Express*, 1 July 1997.
54. It is not known whether any of these meetings have actually led directly or indirectly to new investment or joint ventures in continental Africa. This would be an interesting subject for further research.

Chinese entrepreneurs in Mauritius have also formed new networks with other Chinese outside their direct kin groups. The US Africa Growth and Opportunity Act, passed in late 2000, offered duty-free entry to garments and other industrial goods produced in sub-Saharan Africa. This has reawakened interest in Africa as a production location among Asian investors who have run up against quotas in exports from Asia to the United States. In anticipation of the passage of the Act, the Federation of Textile Manufacturers and Merchants of Malaysia (largely a Chinese organization) asked the Chinese Chamber of Commerce (CCC, one of two Chinese business associations on the island) to help facilitate a 1998 visit to Mauritius and Southern Africa to explore investment possibilities in the region. Another network was expanded when Chinese business leaders from the Chinese Business Chamber (CBC) in Mauritius met the head of the Associated Chambers of Commerce and Industry of Malaysia (ACCIM — whose members are largely Chinese) at a conference organized in Mauritius by the UN Conference on Trade and Development. The two groups arranged to take CBC members from Mauritius to meet the ACCIM in Malaysia in 1999. The CBC promoted investment opportunities in the EPZ and the offshore financial sector, and showed a documentary put together by the Mauritius Freeport Authority, an organization headed by Dr Lim Fat. They also urged the Malaysians to consider Mauritius as a convenient gateway to the markets of the Southern Africa Development Community and the Common Market for Eastern and Southern Africa. The CBC proposed that members from the two organizations study the possibility of joint ventures in Namibia, Botswana, Mozambique, and Madagascar.[55]

In recent years, the Chinese in Mauritius have been actively exploring business opportunities in Southern Africa, where they may run into a growing number of Taiwanese and Hong Kong businesses that are investing in Lesotho, Madagascar, and South Africa. At least twenty Chinese firms have established factories in Lesotho, producing clothing for the European and American markets. Again, much of this investment came through business networks. A Hong Kong executive explained that he was 'originally from Taiwan and his friends in the business there told him about the opportunities [in Lesotho]'.[56] These examples paint a picture of Chinese business networks operating to expand Chinese investment in sub-Saharan Africa, something that by itself can help the process of industrial transformation in the region. But Chinese business networks have also facilitated industrial investments by indigenous Africans, who themselves

55. Léon Baya, 'Mission en Malaisie: la Chinese Business Chamber confiante des possibilités de "joint-ventures"', *Le Mauricien* (Port Louis), 13 February 1999.
56. Angela Mackay, 'Africa woos far eastern fashion factories', *Sunday Business,* 23 September 2001.

used their own networks to connect to the information and resource channels available in ethnic Chinese networks. The case of Nnewi, below, illustrates this.

Nnewi: the 'Taiwan of Africa'

At one point in Chinua Achebe's Nigerian novel *Anthills of the Savannah*, the main character disguises himself as an itinerant peddler of motor spare parts, describing his business thus: 'Na small motor part him I de sell. Original and Taiwan'.[57] Until the 1980s, motor spare parts sold in Nigeria generally came either from the 'original' manufacturer (Peugeot, Mercedes, etc.) or were counterfeit copies made in Taiwan. However, early in that decade, a number of factories sprang up in the eastern region of Nigeria, particularly in the town of Nnewi, producing a wide variety of spare parts for automobiles, trucks, and motorcycles. By the mid-1990s, there were more than 30 fairly modern factories, using imported technology and employing more than 2,700 workers. Some of these factories were exporting to neighbouring countries in West Africa, to the Middle East, and even to Europe. The manufacturing boom attracted attention both in and outside Nigeria.[58]

Trade and institutional innovation have a lively history in the Nnewi region, in part due to the area's early incorporation into international trading circuits. The settlement of the region by the Igbo people in the sixteenth century established nearby Onitsha, on the banks of the Niger River, as a major internal trading port. In the late nineteenth century, Nnewi elites joined the many Nigerians who were producing, collecting, and transporting palm oil for the export market.[59] As transport businesses based in Nnewi grew, other traders began to supply them with spare parts. Nnewi's large Nkwo market for used and new motor spare parts grew into the largest in the region. With time, Nnewi indigenes spread their transport and spare parts outlets from the Nkwo market to other parts of Nigeria (such as the famous Idumota spare parts market in Lagos), and eventually to other cities in West Africa. The Nnewi spare parts trading networks were organized by

57. 'Original' refers to parts made by Peugeot, Mercedes, Toyota, and other manufacturers; 'Taiwan' denotes the copies produced in Taiwan, and marketed in Nigeria.
58. See, for example, 'Managing Nigeria's own Taiwan', *Tell* (Lagos, Nigeria), 4 May 1992; Obi Nwekanma, 'Industrial revolution in the east', *The Sunday Magazine* (Lagos, Nigeria), 6 March 1994.
59. For excellent descriptions of the Nnewi transport networks in Nigeria, pre-manufacturing, see Stella B. Silverstein, 'Sociocultural organization and locational strategies of transportation entrepreneurs: An ethnoeconomic history of the Nnewi Igbo of Nigeria', (unpublished Ph.D. dissertation, Boston University, Boston, MA, 1983); and Stella Silverstein, 'Igbo kinship and modern entrepreneurial organization: The transport and spare parts business', *Studies in Third World Societies* **28** (1984).

family, and each family tended to specialize in a particular group of parts, or a particular brand.[60]

Nnewi's first factory, an aluminium foundry, was set up during the Biafran war in the late 1960s. Nnewi and other sites in eastern Nigeria became known for their innovative and desperate attempts to craft military equipment after the blockade imposed by the central government cut off their access to armaments. This resourceful spirit may have lingered after the end of the war, but it was contacts between Nnewi traders and their Taiwanese counterparts that proved the major catalyst to industrialization.

Spare parts for the Nnewi market network were imported at first primarily from Europe, but by the 1960s Asian distributors began to frequent the Nkwo market, offering to produce copies of the European 'original' brand name parts. The first Asian firms were Japanese, but they were rapidly supplanted by traders from Taiwan, who became the source of the 'Taiwan' spare parts that figured in Achebe's novel. Over time, Nnewi motor parts traders arranged to have their own brand name products made in Taiwan.[61] During the 1970s, many Nigerian traders travelled to Asia to meet their suppliers, and were thus exposed to the dynamism of the Asian newly industrialized countries, as well as the many small and medium-sized firms still operating in Japan. The contrast with Dr Lim Fat's travels to Taiwan from Mauritius is instructive, however. Dr Lim Fat noted the success of export processing zones in Asia, and eventually helped persuade the government in Mauritius to pass legislation establishing such an institution in Mauritius. He and other Sino-Mauritians travelled to Asia in part to persuade Chinese co-ethnics to invest in Mauritius. Many did, reassured in part by the extended family and professional connections made through the Chinese diaspora. The Nnewi traders, on the other hand, used their contacts with the Chinese in Nigeria to locate distributors and producers in Asia, with whom they could trade, and later from whom they could purchase machinery and technical assistance. Without those contacts, the transition to manufacturing might not have happened, but in contrast to Mauritius, there have been no joint ventures of Chinese and Nigerians and no Chinese investment in Nnewi.

The contacts between the Nnewi trading networks and the Chinese networks primarily enabled the diffusion of information and example. As the CEO of Edison Auto Industries, a manufacturer of brake linings and brake fluid, commented, 'For eight years I imported these things [from

60. Silverstein, 'Sociocultural organization and locational strategies'.

61. For an extensive discussion of the Nnewi industrialization experience, see Deborah Bräutigam, 'Substituting for the state: Institutions and industrial development in eastern Nigeria', *World Development* **25**, 7 (July 1997), pp. 1063–80. For a comparison between the Nnewi cluster and two Lagos clusters, see Banyi Oyelaran-Oyeyinka, *Networks and Linkages in African Manufacturing Clusters: A Nigerian case study* (United Nations University Institute for New Technologies (INTEC) Discussion Paper No. 2001–5, Maastricht, September 2001).

Asia] and saw how simple they were to make.' He moved into manufacturing after studying machinery and processes in use by his supplier firms in Asia. Connections with Chinese networks like these were particularly important for the Nnewi traders who were learning how to manufacture. Many entrepreneurs had imported parts through Chinese trading companies, which themselves distributed parts made by a number of small firms in Taiwan and elsewhere. All of the Nnewi spare parts firms that established factories in the 1980s and 1990s also continued their distribution networks in Nigeria, simply adding their new brands to existing lines that they continued to import from Taiwan and elsewhere in Asia.[62]

The networks of contacts established during years of trade eased the Nnewi entrepreneurs' task of gathering information about production. One manufacturer who had imported many lines of spare parts made in Taiwan solicited bids for machinery from a number of Taiwanese companies with whom he had grown familiar. In other cases, Nnewi entrepreneurs asked for recommendations from their Taiwanese networks for technical advisers to install the factories and train local people. Some companies, such as a producer of moulded plastic components, sent groups of workers to Asia (in their case, Shenzhen, China) for on-the-job training in Chinese factories. Others used their contacts with trading companies to identify Chinese manufacturers who were ready to sell used equipment, such as the oil filter manufacturer who purchased the entire plant of his Singapore supplier.

Business relationships with Chinese networks in Asia were strengthened, but these overlapping networks did not lead to extensions of credit, something that is common in the internal operation of ethnic business networks. For example, a businesswoman in Taiwan commented that many years of working together with a Nigerian trader, now a manufacturer, built up a certain kind of trust: 'We started business long ago, so we are very close. We trust each other already. We feel more confident.'[63] The Taiwanese trading company helped the Nigerians to locate machinery when they decided to go into business, and continued to supply them with spare parts made in Taiwan for their trading business. However, when it came down to payment, the Taiwanese firm still refused to ship the goods until the money had been wired from Nigeria. Trust and confidence had limits.

The Nnewi case demonstrates that it is possible for business networks in Asia to form productive linkages with business networks in Africa, transferring ideas and technology and facilitating the development of dynamic manufacturing sectors. Not long after their initial links with the outer edge of the widespread wave of Asian business networks, Nnewi indigenes forged strong bonds with their Asian counterparts, taking Nigerian networks to

62. Bräutigam, 'Substituting for the state'.
63. Interview, Taipei, Taiwan, 25 July 1996.

Asia, and multiplying information, resources, and marketing links. In an interesting way, the relationship in the 1960s and 1970s between the network of Nnewi spare parts traders and the Taiwanese manufacturers does resemble the early 'flying geese' relationship between Japanese manufacturers and Chinese business networks in South-east Asia described above. Nnewi indigenes were able to learn quite a lot about industrialization from their contacts with Chinese businesses in Taiwan and elsewhere. But in the absence of Chinese investment in the region, there were limits to the transfer of knowledge and the building of the kind of multiple strands (family ties, social and cultural celebrations, exchanges of credit, etc.) that characterize business networks among people from the same cultural group. Because of this, the Nnewi trader-industrialists lacked the extra advantage of the kind of learning opportunities possible for Mauritians, who had many joint ventures with, and professional opportunities to work in, overseas Chinese firms set up in the Mauritian EPZ.

Although these two cases have focused almost entirely on the societal side of the development of transnational capitalist networks in Mauritius and Nigeria, the networks of Asian, Mauritian, and Nigerian traders and investors operate within different policy environments.[64] We can only explore these briefly, but they are critical for the successful operation of the 'flying geese' model. Without supportive investment policies, transnational relationships will generally be limited to trade, and when investment is shunned, the transfer of technology and learning is made much more difficult. Mauritius has implemented policies very similar to those in place in East and South-east Asia's most dynamic countries.[65] A well-working export processing zone is one aspect of this policy framework, but EPZs do not work in a vacuum. Economic policies also mattered. Both Mauritius and the East/South-east Asian successes have been called 'open economies', but in fact although they all have a high proportion of trade and are thus 'open' economies, they have not generally been 'open' in the sense of being 'free markets'. Exchange-rate and other, more interventionist policies strongly encouraged exports, yet at the same time many aspects of production for the domestic market were protected. Trade and capital account liberalization has taken place (somewhat) in most Asian countries (and in Mauritius), but it has been for the most part quite gradual, and does not characterize the early years when export-oriented industry was first established. In contrast, Nigeria and other sub-Saharan countries have repeatedly failed to establish an environment that would allow either domestic

64. I appreciate Dorothy McCormick's reminder that the policy aspects of business networks are of key importance, pers. comm. 17 October, 2001.
65. See Bräutigam, 'What can Africa learn from Taiwan?'.

industry or export-oriented firms to grow and thrive.[66] Finally, local governance and social relations also matter. As Hart has pointed out, the outcome of Taiwanese network investments in South Africa was in part dependent on militant local labour relations and municipal politics that were quite different from conditions in Taiwan.[67] This highlights another important aspect of the extension of business networks, and one deserving of further research.

Conclusion

Trading networks are the connective tissue of the global economy in developing countries, but because of their ability to accumulate profits and information, traders who move into production also play a key role in industrialization. Ethnic business networks, particularly Chinese, are an increasingly recognized feature of the dynamic capitalism present in East and South-east Asia. Through the 'flying geese' model, these networks transmit information and resources efficiently, while their members serve as models and tutors for co-ethnics aspiring towards export-oriented industrialization. Sub-Saharan Africa had far fewer networks of Asian traders, even in Mauritius, South Africa, Kenya and other countries where Asian entrepreneurs flourished (relatively). Although indigenous entrepreneurs in other parts of sub-Saharan Africa have long had cross-border trade networks, and many traders sell products made in Asia, few seem to have forged the kind of strong links with Asian networks seen in Nnewi and Mauritius — links that enabled entrepreneurs to learn how to industrialize with greater ease. This is beginning to change. Over the past two decades, Chinese transnational networks have made increasingly visible forays into sub-Saharan Africa, forging links with African capitalists and stimulating industrial transitions in areas such as eastern Nigeria, and Mauritius, that had shown little industrial development before.

The case of Mauritius demonstates that Asian networks in a remote Indian Ocean island can have a powerful impact on a country's economic development, when the networks' resources and information are combined with supportive economic policies. Even though the early 'geese' have long since left Mauritius, the joint ventures they formed with local entrepreneurs persist and have expanded under Mauritian sole ownership. Export manufacturing in Mauritius remains excessively specialized in garments, but

66. There are excellent discussions of the policy environment in all the regions mentioned in this article. For Mauritius, see Rajen Dabee and David Greenaway (eds), *The Mauritian Economy: A reader* (Palgrave, New York, 2000). On Nigeria, see Howard Stein, Olu Ajakaiye, and Peter Lewis (eds), *Deregulation and the Banking Crisis in Nigeria: A comparative study* (Palgrave, New York, 2002).
67. Hart, *Global Connections*, pp. 12–16.

many Mauritian entrepreneurs have managed to upgrade their product continually, and to seek out new markets overseas, something they learned from the Hong Kong manufacturers who first came to the island in the 1970s.[68]

The Nnewi case shows that indigenous African networks can take advantage of specific kinds of global trade links to form very helpful connections with networks in other parts of the world. Although these links were vital for producing an industrial transition in Nnewi, these networks are unlikely to produce the kind of export dynamism of Mauritius, mainly because the policy environment has not been conducive to exports. Sub-Saharan Africa's capitalists were left disadvantaged both by their geography and by their governments. Post-independence policy regimes did little to foster indigenous industrialization, and post-1990 structural adjustment policies do not seem to be leading to industrial transformation either. States in the region are weak, and infrastructure poor. Business networks cannot substitute for a weak state, but, as institutions, they can make markets work better by providing information, lowering risks, and easing the transaction costs that accompany transitions from trade to industry, and from production for the local market to production for export. As Asian and African business networks expand their global reach, these contacts and their associated benefits are likely to increase. In a supportive policy environment these business networks can be important catalysts for local industrialization in sub-Saharan Africa, as they were in South-east Asia.

68. For a critical but well-informed view of the Mauritian model, see Percy S. Mistry, 'Commentary: Mauritius – quo vadis?', *African Affairs* **98**, 393 (1999), pp. 551–69.