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Growing with global production sharing in Malaysia*

The Penang export hub—Part 1**

• Summary

Global production sharing – the division of production processes into geographically separated stages – has been an increasingly important facet of economic globalization over the past few decades. This study seeks to broaden understanding of global production sharing and explore policy options for developing countries to engage effectively in production networks as part of a national development policy.

The export production hub in the State of Penang, Malaysia, with more than four decades as a major hub in global production networks, provides a valuable laboratory to study government policies and global sourcing strategies of MNEs in determining developmental gains from global production sharing.

This study focuses on the role of public-private partnerships in forging links between MNEs and local firms to achieve self-sustained growth through enhanced local capabilities. It probes the role of public-private partnerships in Penang in the context of rapid changes in global production networks and increased competition faced by existing production locations as production networks expand to new locations with greater relative cost advantages.

The policy lessons from the Penang experience are relevant for other developing countries. Countries that seek to use technology to move up the value chain and increase national income will also find insights from this case study.

The study first provides an overview of initial economic conditions in Penang to set the stage for the ensuing analy-

sis. Next it discusses the policy context, key elements of policy reforms and the institutional setting in which export-oriented development strategy was implemented. The Penang state government made innovative efforts to gain policy space and financial autonomy within the Malaysian federal system. Next, evolution of the export hub is discussed. Investment patterns and export performance are then examined, followed by a discussion on the economy-wide implications of export-led growth. Key findings and policy lessons are presented in the conclusion.

• The rise of global production

With a modest start in the electronics and clothing industries,

multinational production networks have evolved and spread into many industries such as sports footwear, automobiles, televisions and radio receivers, sewing machines, office equipment, power and machine tools, cameras and watches, and printing and publishing. At the formative stage, production sharing involved assembly of small fragments of the production process in a low-cost country and re-importing the assembled parts and components to be incorporated in the final product.

Subsequently, production networks began to encompass many countries engaged in the assembly process at different stages, resulting in multiple border crossings by product fragments before they were incorporated in the final product. As international networks of parts and component supply have become firmly established, producers in advanced countries have begun to move the final assembly of an increasing range of consumer durables to overseas locations to be closer to their final users and in some instances to take advantage of cheap labour. These consumer goods include computers, cameras, televisions and automobiles. There has been a steady rise in trade in parts and components and assembled final products – ‘network trade’ – in global production networks. In 2007, network trade accounted for 51% of total world manufacturing exports, with 41% of these exports originating in developing countries.

Global production sharing in consumer goods such as garments and footwear normally takes place through arm’s length relationships, with international buyers playing a key role in linking producers and sellers in developed countries. However, the bulk of global production sharing in electronics and other high-tech industries still takes place under the

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** This is the first part of the case study which will be carried in 6 parts

aegis of MNEs. This is because the production of final goods requires highly customized and specialized parts and components whose quality cannot be verified or assured by a third party. In addition, it is not possible to write a contract between the final producer and input supplier that would adequately specify product quality.

This is particularly the case when establishing production units in countries that are newcomers to export-oriented industrialization. As the production unit becomes well-established in the country and it forges business links with private and public-sector agents, arm's length subcontracting arrangements with local firms can develop, leading to firm-level upgrading of technology and management capabilities.

Global production sharing creates opportunities for developing countries to participate in a finer international division of labour and specialize in production processes in vertically integrated global industries depending on relative cost advantage. Because parts and components, capital and production technology are mobile within global production networks, relative unit labour cost determines a country's success from engaging in global production sharing. However, in addition to labour abundance, several factors impacting the business climate are important in attracting MNEs to set up assembly plants and deepening their engagement with local enterprises.

• Penang's origin as an export hub

Penang, a state located on the northwest coast of Malaysian Peninsula, is divided into two parts: Penang Island (Pulau Pinang, in Malay), an island located in the Strait of Malacca; and Seberang Perai (formerly Province Wellesley). Penang is the second smallest among the 13 states in area, but the eighth most populous at 1.52 million, according to the 2010 census. In terms of natural resources relative to its population, Penang is the least favourably endowed of all the states of Malaysia.

Penang's modern history began with the arrival in August 1786 of Captain Francis Light to set up an East Indian Company trading post. Under British rule, Penang became the first port of discharge for ships sailing from Europe and India to the Strait of Malacca, and a trade centre for the northern Malay Peninsula, Sumatra, Burma, South Thailand and the Dutch East Indies (Indonesia) after the opening of the Suez Canal in 1869. British protection drew merchants

and migrants from neighbouring countries, with Chinese immigrants soon becoming the largest community. From the early 20th century, Penang was a regional centre of Islamic, Chinese and English education.

At independence in 1957, Penang's economic status was healthier than other Malay states and comparable to Singapore and Hong Kong SAR. Trade-related infrastructure, including its airport, container port and sea-cargo terminal, was the best in Malaysia. There were well-developed banking, insurance and freight forwarding services, water supply, electric power, telecommunication services and transport facilities. Penang had a relatively well-developed network of small enterprises evolved around warehouse activities. People in Penang were relatively well educated; most of them had at least nine years of schooling, with a substantial number proficient in English.

When Malaysia attained independence in 1957, attention focused on the new national capital, Kuala Lumpur, which became the country's main port. Penang's trade from Thailand, Burma and Indonesia dwindled as each country developed its own ports. Indonesia's confrontation with Malaysia from 1963-1965 cut off lucrative trade. The final blow came with the revocation of its free port status in 1967. Consequently throughout the 1950s and 1960s, Penang's trade-dependent economy slid while the population grew rapidly due to the post-war baby boom.

In the early 1960s, the Alliance Party state government attempted to avert the collapse of Penang's economy through a programme of import substitution industrialization. An industrial state was set up in Perai in 1964 to produce goods for the domestic market, but most of these industries failed within few years. By the end of 1960s, Penang's per capita income was 12% lower than the national average. The unemployment rate reached 9% – 16% when underemployment is considered – and the population's general mood was rebellious. Penang was plagued by frequent strikes, social unrest and racial tension.

In this volatile climate, revitalizing the economy was the dominant issue of the May 1969 general elections. The newly formed Gerakan Rakyat Malaysia (Malaysian People's Movement Party), led by Dr. Lim Chong Eu, won by promising to revitalize the economy through export-oriented industrialization. This new political leadership ushered in an era of policy reforms that set the stage for the emergence of Penang as an export hub.