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CLUSTERING IN EAST ASIA – IMPLICATIONS OF JAPAN’S INDUSTRIAL DEVELOPMENT MODEL¹

Summary: East Asia has experienced a radical transformation of development policy, determined by the Japanese model of industrialisation, local specificities and contemporary global challenges. Clustering, stimulated by the open, liberal course of regional economies, contributed to the massive inflow of FDI and formation of networks involving local SMEs. The unilateral “race to the bottom” trade liberalisation and aggressive competition among East Asian developing economies in attracting FDI became harsh in the early 1990s. Japan’s traditional industrial policy’s orientation on competitiveness has been replaced by a focus on innovativeness. Product and process innovations, and new business models are expected to stimulate productivity, and so export’s competitiveness, which is crucial from the perspective of states with export-based growth model. The dramatic experiences of the Asian financial crisis of 1997–98 inspired the reconfiguration of development policies from the heavy dependence on input of additional physical capital goods and labour forces towards innovation-driven, network-type, open, flexible production structures, vertical specialisation and clustering of networked local SMEs. The major determinants of the East Asian industrial cluster approach are as follows: intensive R&D activities by public and private entities that stimulate innovativeness, development of ICT that favour competition, cooperation and communication, finally – more intensive interactions between manufacturing and the service sector, especially because of the added value that occurs when combining managerial or marketing innovations with particular industries, products and processes.

Keywords: industrial policy, industrial cluster, industrialisation, districts.

1. Introduction

Industrial policies among East Asian states differ considerably. When analyzing the specificity of the development path of various regional countries, it is necessary to consider the influence of the “front runner” economy in this part of the world – Japan and the context of globalisation.

Undoubtedly, the novel development strategies adopted by a developing East Asia – with special regard to ASEAN member states (to a larger or a lesser extent

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to Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam) – take advantage of globalizing forces when compared to other developing regions of the world, rejecting the traditional concept of infant industry protection or the development model involving import – substituting foreign direct investments (FDIs).²

From the traditional perspective, the flying geese pattern developed by Akamatsu provided a useful framework to understand the sequential catching-up in the industrial development of East Asia,³ especially when referring to the experiences of Newly Industrializing Economies (NIEs), such as the Republic of Korea and Taiwan. Shifting away from the industrial division of labour towards the production process division of labour⁴ led to the formation of production networks⁵ and clustering in the developing East Asia.

Policy frameworks of industrial development were formed by Japan's Ministry of International Trade and Industry (MITI) in the early 1950s, adopted until the late 1980s, and were followed by the East Asian Newly Industrializing Economies or East Asian NIEs, such as the Republic of Korea and Taiwan since the late 1960s. The Japanese model was defined as an industrial policy approach, based on the concept of the international competitiveness of manufactured goods within export markets. Another framework, accepted by the developing East Asia, with special regard to ASEAN economies, in the late 1990s, was the industrial cluster approach,

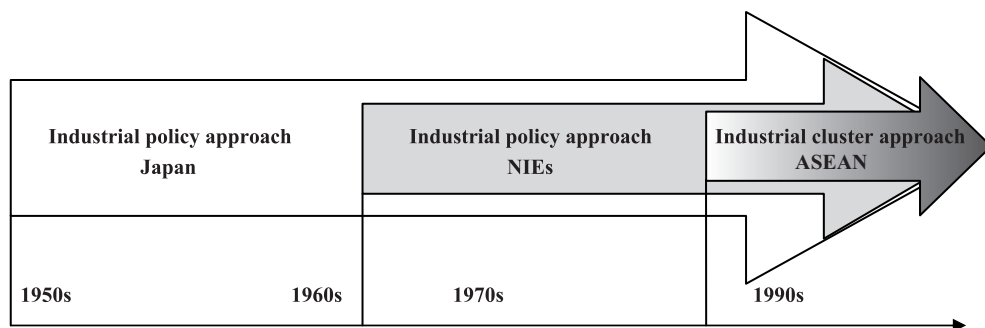


Figure 1. Time frameworks of industrial policy in East Asia

Source: authors' own work.

² F. Kimura., A. Obashi, *Production Networks in East Asia: What We Know So Far*, ADBI Working Paper 320, Asian Development Bank Institute, Tokyo 2011, pp. 15–21.

³ K. Akamatsu, A historical pattern of economic growth in developing countries, *The Developing Economies* (Institute of Asian Economic Affairs) 1962, Preliminary Issue 1, March-August, pp. 3–25.

⁴ For further information about vertical specialisation in production see: F. Kimura, A. Obashi, *Production Networks...*, *op. cit.*

⁵ K.-M. Yi, Can vertical specialization explain the growth of world trade?, *Journal of Political Economy* 2003 Vol. 111, No. 1, pp. 53–102.

deeply rooted in the concept of innovativeness (see Figure 1). The East Asian region, affected by the financial crisis of 1997–98, sought opportunities to revitalise and activate its industrial sector. In fact, Japan's conventional approach to the export-oriented development model was out of date at that time.

To illustrate the main differences between the two concepts of industrialisation, Japan's catch-up type industrialisation model was studied first.

2. Japan's industrial development model

A sequential catching-up in industrial development assumes the active managerial and promotional role of developing countries' governments, which are expected to formulate a national economic development plan, while specifying and promoting particular industries perceived as strategic in the context of the stimulation of industrialisation.⁶ The adaptation of a staged development model of industrialisation as a theoretical framework was found useful to list as the main characteristics of this kind of industrial policy (see Figure 2).

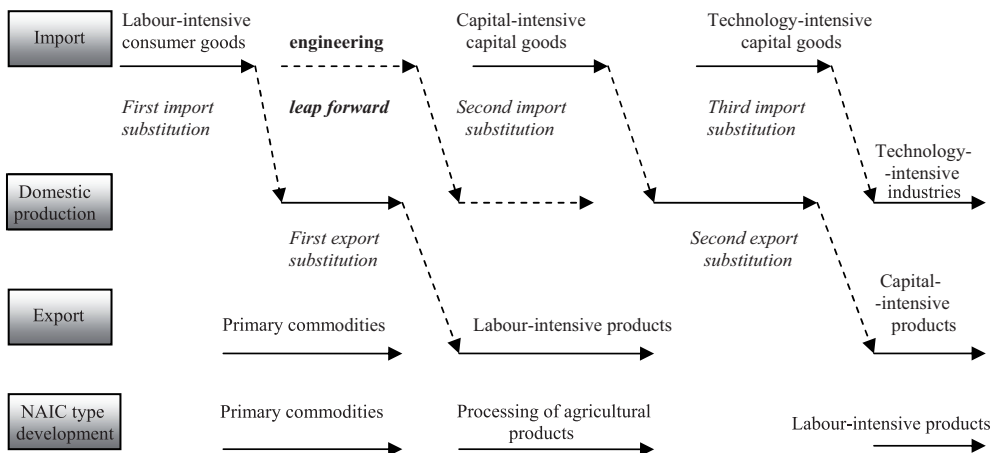


Figure 2. Staged development model of industrialisation: import substitution and export substitution

Source: A. Suehiro, From an industrial policy approach to an industrial cluster approach: Japan, East Asia and Silicon Valley, [in:] B. Ganne, Y. Lecler (Eds.), *Asian Industrial Clusters, Global Competitiveness and New Policy Initiatives*, World Scientific Publishing, Singapore 2009, p. 28.

According to Chenery and Srinivasan,⁷ there are three potential scenarios of industrialisation of developing countries:

⁶ A. Suehiro, *Catch-up Industrialization: The Trajectory and Prospects of East Asian Economies*, National University of Singapore Press, Singapore 2008, p. 130.

⁷ *Handbook of Development Economics*, H. Chenery, T.N. Srinivasan (Eds.), Vol. 2, North-Holland, Elsevier Science Publisher, Amsterdam 1989, Sections 29–31.

- to export primary products and import industrial goods;
- to launch domestic production of previously imported industrial goods (import substitution industrialisation);
- to export industrial goods produced domestically (outward-looking and export-oriented industrialisation).

Studying Japan's and regional NIEs' experiences, the following sequence was utilised: export of primary products, followed by domestic production of industrial goods, labour-intensive export, then import and export substitution, initially within labour-intensive industries, then capital- and technology-intensive industries. Obviously, this path embodies Akamatsu's pattern mentioned earlier.

Following Ohkawa and Kohama,⁸ in the staged development model of industrialisation, government is obliged to undertake the following actions:

- to promote exports of domestically manufactured industrial products to replace those of primary goods (export substitution);
- to promote the domestic production of intermediate and capital goods that are necessary to manufacture at home (the second phase of import substitution);
- to promote the machinery industry (engineering), because of the smooth way of moving from the first stage of import substitution to the second one by various developing economies; in fact, the machinery industry was perceived by Japan, the same as NIEs and so-called "late comers" as a strategic one because of being at the core of the supporting industries for exportable finished goods and involving a large number of small- and medium-sized enterprises (SMEs).⁹

Furthermore, there are two essential conditions that have to be met in the described model:

- a major player is a country, the main determinant – competition among the countries within a certain industry, while the industrial cluster approach puts an emphasis on regional production networks and global chain of value;¹⁰
- a leading industry is a manufacturing sector, the policy is focused on the competitiveness of a particular industry in terms of international market shares

⁸ K. Ohkawa, H. Kohama, *Lectures on Developing Economies: Japan's Experience and Its Relevance*, University of Tokyo Press, Tokyo 1989, Lecture 2.

⁹ In fact, the machinery industry has become an integral component of the regional division of labour based on production networks, vertical specialisation and industrial agglomerations; advanced and complex fragmentation of production is especially useful in machinery manufacturing because of the large number of parts and components produced using diversified technologies and inputs (based on F. Kimura, A. Obashi, *International Production Networks in Machinery Industries: Structure and Its Evolution*, ERIA Discussion Paper Series No. 2010-09. Jakarta: ERIA, 2010); see also: M. Domiter, Uwarunkowania ekonomiczne wzrostu w regionie Azji i Pacyfiku, [in:] B. Drelich-Skulska (Ed.), *Azja i Pacyfik. Obraz gospodarczy regionu*, Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, Wrocław 2007, pp. 115–120.

¹⁰ See also: *Commodity Chains and Global Capitalism*, G. Gerrefi, M. Korzeniewicz (Eds.), Praeger, Westport 1994; G. Gerrefi, International trade and industrial upgrading in the apparel commodity chain, *Journal of International Economics* 1999, Vol. 48.

Table 1. Industrial policy and industrial cluster approach

		Industrial cluster			
		Industrial Policy (Japan)	District-based Model (Japan)	Export Processing Zone Model (East Asia)	Silicon Valley Model (United States)
Key components		<ul style="list-style-type: none"> Promotion of specific industries Exchange of information between government and industrial environment 	<ul style="list-style-type: none"> Promotion of specific areas Social division of labour within a given area 	<ul style="list-style-type: none"> Promotion of export Provision of infrastructure 	<ul style="list-style-type: none"> Innovativeness Networked industrial base
Promoter		<ul style="list-style-type: none"> Government and state banks 	<ul style="list-style-type: none"> Historical products, autonomous development 	<ul style="list-style-type: none"> Government 	<ul style="list-style-type: none"> Historical products, autonomous development
Organiser/ coordinator		<ul style="list-style-type: none"> Business associations 	<ul style="list-style-type: none"> Local government, marketers 	<ul style="list-style-type: none"> MNC's headquarters, foreign customers 	<ul style="list-style-type: none"> Universities, research institutes, corporate associations
Players		<ul style="list-style-type: none"> Small-, medium- and large-sized manufacturing enterprises 	<ul style="list-style-type: none"> Local small- and medium-sized enterprises 	<ul style="list-style-type: none"> Foreign and local large-sized enterprises 	<ul style="list-style-type: none"> Large-sized and venture-type enterprises
Type of business		<ul style="list-style-type: none"> Electronics, tool and machinery, supporting industries 	<ul style="list-style-type: none"> Consumer goods 	<ul style="list-style-type: none"> Labour-intensive, export-oriented industries 	<ul style="list-style-type: none"> Technology & knowledge-intensive industries
Finance, type of support		<ul style="list-style-type: none"> Fiscal finance (loans), R&D 	<ul style="list-style-type: none"> Fiscal finance, tax incentives 	<ul style="list-style-type: none"> Tax incentives 	<ul style="list-style-type: none"> Stock market, seed money, R&D

Source: A. Suehiro, From an industrial policy approach to an industrial cluster approach: Japan, East Asia and Silicon Valley, [in:] B. Gamme, Y. Lecler (Eds.), *Asian Industrial Clusters, Global Competitiveness and New Policy Initiatives*, World Scientific Publishing, Singapore 2009, p. 41.

of a given country, while the industrial cluster approach involves different industries like R&D, logistics or business services.

In order to identify the implications of Japan's industrial development model on developing East Asia's clustering policy, a brief comparison has been made (see Table 1).

3. Industrial districts in Japan

The Japanese government defines and promotes chosen agglomeration areas (precisely the particular industries located there), while specifying legally the targets, type of business, financial support and variety of different business services. According to Kiyonari¹¹ and Hashimoto,¹² there are four main categories of Japanese industrial districts:

- castle town, centered around the core company (i.e. Toyoda-shi of Aichi prefecture with Toyota Motor Co. Ltd., Hitachi-shi of Ibaragi prefecture with Hitachi Ltd., Kamaishi-shi of Iwate prefecture with Nippon Steel Co. Ltd., and Hino-shi of Tokyo, Metropolitan City with Hino Motor Co. Ltd.);
- industrial complex-type district, located in coastal areas (i.e. Chiba complex, Mizushima complex (Okayama prefecture) and Niihama complex);
- SMEs networking-type district, with spatial concentration of small-sized and family-owned enterprises (i.e. Ohta-ku in Tokyo Metropolitan City and Higashi-Osaka-shi in Osaka City);
- industrial district specialised in a particular consumer good and a district with community-based industry¹³ (i.e. Tsubame-shi of Niigata prefecture, Wajima-shi of Ishikawa prefecture).

All the types of the aforementioned districts, excluding the second one, are not an emanation of government policy, but just a product of the long-term autonomous development of local markets and companies. The first type is characterised by intensive, face to face interactions among assemblers and suppliers; the third one is dominated by a sophisticated network of SMEs; while the last one puts a special

¹¹ T. Kiyonari, Sirikon Barei no Gendai-teki Igi [English: "Implication of the Silicon Valley's Development"], [in:] T. Kiyonari (Ed.) *Nihon-gata Sangyo Shuseki no Miraizo* [English: "Perspective of the Japanese Style Industrial Agglomeration"], Nikkei Shimbun 1997.

¹² J. Hashimoto, Nihon-gata Sangyo Shuseki no Saisei no Hokosei [English: "Scenario of Revitalization of Japanese Style Industrial Agglomeration"], [in:] T. Kiyonari (Ed.), *Nihon-gata Sangyo Shuseki no Miraizo* [English: "Perspective of the Japanese Style Industrial Agglomeration"], Nikkei Shimbun 1997.

¹³ See also: M. Yamazaki, *Japan's Community-based Industries: A Case Study of Small Industry*, Asian Productivity Organization, Tokyo 1980; *Henbou suru Jibasangyou: Fukugo Kinzokuseihin Sanchi ni Mukau Tsubame*, [English: "Changing Community-based Industries: Tsubame-shi Going Toward Integrated Production Area of Metal Products"], M. Seki, J. Fukuda (Eds.), Shin Hyoron, Tokyo 1998.

emphasis on the social division of labour. When compared to Silicon Valley,¹⁴ the Japanese network-type districts are not so centered around non-manufacturing sector as are R&D or universities.

4. Industrial cluster approach

In order to distinguish two approaches to industrial development, cluster structures formed in Japan, East Asia and the USA should be compared first (see Table 1). Analysis was based on six indicators: key components, promoter, organiser/coordinator, players, type of business and mechanisms of support. In terms of MITI's classification, industrial policy may be oriented basically on industry, item (specific task across the industry) or area (regardless of the type of industry). Industrial policy in Japan is equipped with a special temporary law, industrial council and financial instruments provided by the Japan Development Bank (JDB).

Japan's district-based model, specific for industrial areas specializing in a particular industry or product lines, is essentially unique to the East Asian region, while Tokyo's promotion measures are adopted by some local governments when supporting strategic industries like electronics, machinery, automobiles, petrochemicals and semiconductors. To attract more large foreign companies and promote strategic industries, more and more export processing zones (EPZ) were formed in the developing East Asia, especially up to the early 1990s (i.e. in Taiwan – Gaixiong (1966) and Taizhong (1970), in the Republic of Korea – Mazan Export Free Zone (1971)). The Philippine government introduced the Export Processing Area Act in 1970, while Malaysia introduced the Special Incentive Act for the Electronics Industry a year later to construct EPZ in Penang Island.¹⁵

Local governments were traditionally responsible for the business climate to attract foreign direct investments, provided infrastructure, purchased the land site, offered tax incentives within EPZ, simplified administrative procedures, etc. Unlike Japan's industrial district, EPZ is perceived as a typical policy product.

Silicon Valley's model has much in common with the Japanese one, especially because of the limited monetary and physical engagement of the local government while supporting R&D activities. Such elements like networking or the social division of labour encourage information exchange and transfer of knowledge.¹⁶ There is one important difference between both described models – while Silicon Valley is based on SMEs and large-sized assemblers' network, connecting manufacturing and non-

¹⁴ For further information about Silicon Valley see: A. Saxenian, J.Y. Hsu, The Silicon Valley-Hsinchu connection: Technical communities and industrial upgrading, *Industrial and Corporate Change* 2001, Vol. 10, No. 4, pp. 893–920.

¹⁵ A. Suehiro, *op. cit.*, p. 42.

¹⁶ L. Edvison, M.S. Malone, *Kapitał intelektualny*, Wydawnictwo Naukowe PWN, Warszawa 2001, pp. 34–45.

manufacturing sectors, Japan's district includes a group of SMEs coordinated by local traders.

The growing importance of innovativeness in industrial upgrading led to the reorientation of local governments from the EPZ-type to the network-type model.

5. East Asian path towards industrial clustering

As already stated, newly industrializing regional economies, like Taiwan and the Republic of Korea, adopted Japan's model of industrialisation,¹⁷ when selecting strategic industries and support them in various ways (i.e. Korean Machine Industry Promotion Act from 1968 or Electronic Industries Promotion Act from 1969).¹⁸ A very characteristic feature of the Korean industrialisation model was the role of large-sized enterprises (*chaebols*¹⁹) rather than SMEs, together with the very limited involvement of immature, underdeveloped commercial banks at that time.

Unlike in the Republic of Korea, Taiwanese SMEs constructed much more flexible, network-type connections when forming industrial clusters. This is quite similar to Japan's district-based model stimulated by the autonomous development of local SMEs. Because of that, Taiwanese clusters adjusted to the new innovative challenges more quickly than the rest of the developing East Asia.

The Asian financial crisis of 1997–98 exposed dramatically the consequences of the conventional model of economic development in East Asia, characterised by a heavy dependence on the input of additional physical capital goods and labour force, with very limited attention paid to productivity²⁰ and its improvement.

¹⁷ For further information about Japan's industrial policy see: D. Friedman, *The Misunderstood Miracle: Industrial Development and Political Change in Japan*, Cornell University Press, Ithaca 1998; J. Hashimoto, *Koudo Seichoki niokeru Nihon Seifu, Gyokai Dantai, Kigyo: Kikai Kougyo Shinkou Rinji Sochi-hou no Jirei* [English: "Relationship among the Government, Business Associations and Firms in Japan: A Case Study of the Temporary Measure for the Promotion of the Machinery Industry Law"], Institute of Social Science, University of Tokyo, Shakai Kagaku Kenkyu, 45(4), January 1994, pp. 235–256; about Japanese clusters: B. Jankowska, Cluster policy in Japan and its results. The case of Kansai Front Runner Project Neo Cluster, [in:] P. Skulski (Ed.), *Competitiveness of Economies in the Asia-Pacific Region. Selected Problems*, Research Papers of Wrocław University of Economics, No. 192, Publishing House of Wrocław University of Economics, Wrocław, 2011, pp. 90–98; A.H. Jankowiak, Cluster models in Japan on the example of Toyota cluster, [in:] B. Skulska, A. H. Jankowiak (Eds.), *Faces of Competitiveness in Asia Pacific*, Research Papers of Wrocław University of Economics, No. 191, Publishing House of Wrocław University of Economics, Wrocław 2011, pp. 173–182.

¹⁸ A.H. Amsden, *Asia's Next Giant: South Korea and Late Industrialization*, Oxford University Press, New York 1989; A. Suehiro, *Catch-up Industrialization: The Trajectory and Prospects of East Asian Economies*, National University of Singapore Press, Singapore 2008, pp. 143–144.

¹⁹ For further information about *chaebols* see: S. Bobowski, B. Skulska, A.H. Jankowiak, Działalność przedsiębiorstw międzynarodowych na rynkach Azji i Pacyfiku, [in:] B. Skulska (Ed.), *Biznes międzynarodowy w regionie Azji i Pacyfiku*, Wydawnictwo Adam Marszałek, Toruń 2009, pp. 381–388.

²⁰ P. Krugman, *The Myth of Asia's Miracle*, *Foreign Affairs* 1994, Vol. 73, No. 6, pp. 62–78.

According to Yusuf and Evenett, “[...] innovation will be the engine of growth for much of Asia now that the initial resource-intensive phase of industrialisation is ending. Innovation in a broad range of areas, from products to services and business organisation, will be the principal source of increases in productivity and in export competitiveness”.²¹

Furthermore, Yusuf and Evenett identified three potential sources of innovativeness, critical to resume sustainable growth:

- environment, that stimulates innovativeness resulted from R&D activities of public and private entities (As they stated, “product and process innovation is a function not just of investment in R&D, but also of the clustering of networked firms in an open and competitive policy environment”);
- more intensive interaction between manufacturing and the service sector, especially because of added value that occurs when combining managerial or marketing innovations with particular industries, products and processes;
- information and communication technologies (ICT), which encourage cooperation, communication and competition.²²

As a consequence, the traditional development strategy of the developing East Asia, deeply rooted in a resource base, state-led industrial promotion policy, and EPZ-type district approach, has been replaced by flexible, decentralised regional networks characterised by complex combinations of services and manufacturing. Such an innovation-led development strategy, according to Booz-Allen and Hamilton,²³ also referred to the Korean economy, which sought for new stimulus in the late 1990s.

The developing East Asia perceives innovativeness and clustering, just as ICT, as key components of the development strategy, considering the liberalisation, competitiveness, and restructuring challenges. Industrial promotion policy, like EPZ-type industrial districts are outdated, while the industrial cluster approach is a matter for the present and future.

6. Conclusions

The developing East Asia, inspired by Japan’s path of development, challenged by global environment’s pressures, abandoned protectionism while choosing an open, liberal course that encourages international division of labour, formation of networks and clustering. However, the promotion of economic liberalisation has to be combined with a new industrial policy focused on industrial upgrading,

²¹ *Can East Asia Compete? Innovation for Global Markets*, S. Yusuf, S.J. Evenett (Eds.), The World Bank, Washington, D.C. 2002, pp. 3–4.

²² *Ibidem*, pp. 4–5; J.H. Dunning, Towards a new paradigm of development: Implications for determinants of international business, *Transnational Corporations* 2006, Vol. 15, No. 1, p. 181.

²³ Booz-Allen and Hamilton, *Korean Report: Revitalizing the Korean Economy Toward the 21st Century*, Booz-Allen and Hamilton, Seoul 1997.

knowledge intensity and rising managerial skills. Conventional policy instruments and incentives, i.e. tax reliefs, loans or nontariff barriers imposed on competitive imports, cannot be utilised anymore when facilitating trade and concluding more and more Free Trade Agreements (FTAs) with neighboring countries.²⁴ The liberalisation of the financial sector, a feature of Asian regionalism these days, may hinder public financial support for strategic industries, while streamlining FDI regimes will discourage the utilisation of joint ventures as a platform of exchange of various assets and information. Therefore, some foreign companies may prefer competition to cooperation with local business.

More and more lower income countries will look for niche advantages and complementarity to attract international business and expand abroad. Instead of protection of infant industries or support of start-ups of particular strategic sectors, product, process, marketing and managerial innovations determine the dynamism and directions of industrial upgrading. Networked companies involved in clustering may respond more flexibly and effectively to any challenges imposed by the contemporary IT revolution.

In order to minimise the risk of the partial marginalisation of local SMEs by large international enterprises – in many cases designers of East Asian production networks and industrial clusters, local government should act not as the conductor, but the coordinator of industrial policy. Moreover, networked local companies should be encouraged to identify their own core competencies within the cluster.

The transformation of the industrial development policy of East Asia is expected to proceed, involving other lower income regional states, and new service and manufacturing sectors. Their future is determined both by innovativeness and the ability to adjust to the turbulent global environment.

²⁴ For further information about East Asian FTAs see: S. Bobowski, Baldwin's "domino theory" of regionalism – its sources and implications for East Asian states, [in:] B. Skulska, A.H. Jankowiak (Eds.), *Faces of Competitiveness in Asia Pacific*, Research Papers of Wrocław University of Economics No. 191, Publishing House of Wrocław University of Economics, Wrocław 2011, pp. 29–41; S. Bobowski, Efekt spaghetti – przejaw czy zagrożenie procesów integracyjnych w regionie Azji i Pacyfiku?, [in:] B. Drelich-Skulska (Ed.), *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu nr 28, Ekonomia i Międzynarodowe Stosunki Gospodarcze, no. 19, Studia Azjatyckie*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław 2008, pp. 39–48; J. Ravenhill, The move to preferential trade on the Western Pacific Rim: Some initial conclusions, *Australian Journal of International Affairs* 2008, Vol. 62, pp. 129–150.

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KLASTERING W AZJI WSCHODNIEJ – IMPLIKACJE JAPOŃSKIEGO MODELU ROZWOJU PRZEMYSŁOWEGO

Streszczenie: Azja Wschodnia doświadczyła radykalnej transformacji polityki rozwoju, determinowanej w szczególności japońskim modelem uprzemysłowienia, lokalną specyfiką oraz współczesnymi wyzwaniem globalizacji. Klastering, stymulowany otwartym, liberalnym kursem regionalnych gospodarek, przyczynił się do masowego napływu BIZ i formowania sieci angażujących lokalne MSP. Unilateralna liberalizacja handlu i agresywna konkurencja między wschodnioazjatyckimi gospodarkami rozwijającymi się w przyciąganiu bezpośrednich inwestycji zagranicznych nabrały tempa w latach 90. Tradycyjną orientację polityki przemysłowej – na konkurencyjność – zastąpiła orientacja na innowacyjność. Innowacje produktowe i procesowe, nowe modele biznesowe miały podnosić produktywność, w konsekwencji – konkurencyjność eksportu, co miało kluczowe znaczenie dla państw realizujących model wzrostu gospodarczego opartego na eksporcie. Dramatyczne doświadczenia azjatyck-

kiego kryzysu finansowego 1997–98 zainspirowały rekonfigurację polityki rozwoju – z silnego uzależnienia od dodatkowej podaży fizycznych dóbr kapitałowych i siły roboczej w kierunku napędzanych innowacjami, sieciowymi, otwartymi, elastycznymi strukturami produkcyjnymi, specjalizacji wertykalnej, klastryzacji sieci lokalnych MSP. Główne wyznaczniki wschodnio-azjatyckich klastrów przemysłowych są następujące: stymulujące innowacyjność, intensywne prace badawczo-rozwojowe realizowane przez podmioty publiczne i prywatne, rozwój ICT, sprzyjające konkurencji, kooperacji i komunikacji, wreszcie – bardziej intensywne interakcje pomiędzy sektorem produkcji i usług, zwłaszcza w kontekście wartości dodanej generowanej wskutek transmisji innowacji organizacyjnych czy marketingowych do sfery produkcyjnej czy procesowej.

Słowa kluczowe: polityka przemysłowa, klaster przemysłowy, uprzemysłowienie, dystrykty.