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CONCEPTUALIZATION OF ECONOMIC GROWTH IN SOUTHEAST ASIA

Abstract: The "flying geese" paradigm by Kojima indicates the sequence of processes of economic development in East Asian region. Transfer of technological knowledge and knowhow from Japan to neighbouring states, especially "Asian tigers", reflects strengthening intraregional interdependence by rising importance of adaptive capabilities and international trade in context of convergence of regional emerging economies. Optimal direction of institutional factors' influence is to create positive correlation between international trade, intraregional growth dynamics and processes of economic growth, following the experiences of leading regional economies.

Keywords: "flying geese" paradigm, economic growth, transfer of technology.

1. Introduction

While the discussion on determinants of East Asian economic growth performance is supposed to be far from concluded,¹ more consensus have been reached as for the place of technology transfer and spillover within development process. Still, there is a question about the benefits from spillovers gathered by leading East Asian economies, and their particular scale within a group of emerging states. Mechanisms of international trade and regional growth dynamics' impact on economic growth could be determined by international factors and policy instruments that improve absorptive potential of companies.

The "flying geese" theory explains the sequence of economic development within East Asian region. Industrial progress and technological convergence were initiated by "leading geese" – Japan, that reached higher phase of economic and technological development, transferring know-how and production centres to regional neighbours. Four Asian tigers (Hong Kong, South Korea, Singapore and Taiwan) followed Japan by initiating similar development process within a group of

¹ L. Cuyvers, D. Van Den Bulcke, Some reflections on the outward oriented development strategy of the Far Eastern developing countries, [in:] W. Adriaansen, G. Waardenburg (Eds.), *A Dual World Economy*, Wolters Noordhoff, Groningen 1989.

so-called "pussycats", like Indonesia, Malaysia and Thailand.² The foundations of influence of regional FDI flows could not be precisely sketched because of lack of data. However, FDI remain, in context of "flying geese" paradigm, basic mechanism of economic development.

Analysis confirmed thesis as for influence of export and import on growth dynamics within such states like Hong Kong, Indonesia, South Korea and Malaysia – particularly, positive correlation between growth and export in case of Hong Kong, on the other hand – far from stimulating impact of import on Indonesian and Korean economics.

2. The economic scores of leading regional countries

In Table 1 the average growth of GDP *per capita* for eight key East Asian economies in the 1960-2000 period was illustrated, in order to compare with similar indicators for OECD member states and China.

1960-1969)	1970-1979)	1980-198	9	1990-2000)
Singapore	10.3	Singapore	8.3	Taiwan	6.6	China	7.7
Japan	9.6	Taiwan	8.2	South Korea	6.3	Singapore*	5.8
Hong Kong	7.7	South Korea	7.0	Hong Kong	5.8	Taiwan**	5.5
Taiwan	6.7	Hong Kong	6.9	Thailand	5.2	South Korea	5.2
South Korea	6.3	Indonesia	5.6	China	5.1	Malaysia	4.5
Italy	5.1	Malaysia	5.1	Singapore	5.0	Thailand	4.3
Thailand	5.0	Thailand	4.7	Indonesia	4.3	Indonesia	3.0
France	4.7	Japan	4.0	Japan	3.3	Hong Kong	2.7
Belgium	4.4	Italy	3.2	Malaysia	3.0	Netherlands	2.4
Netherlands	3.7	Belgium	3.2	Italy	2.6	USA	2.2
USA	3.4	France	3.1	UK	2.2	Belgium	1.9
Malaysia	3.1	USA	2.7	Belgium	2.2	UK	1.8
UK	2.3	China	2.7	USA	2.1	Japan	1.4
China	1.8	Netherlands	2.4	France	2.0	Italy	1.3
Indonesia	1.1	UK	2.2	Netherlands	1.6	France	1.3

Table 1. Average real GDP per capita (in constant prices) growth, 1960-2000

* Average over 1990-1996; ** average over 1990-1998.

Source: from data in: A. Heston. R. Summers, B. Aten, *Penn WorldTable Version 6.1*, Center for International Comparisons at the University of Pennsylvania, 2002.

² K. Kojima, The "flying geese" model of Asian economic development: Origin, theoretical extensions, and regional policy implications, *Journal of Asian Economics* 2000, Vol. 11, pp. 375-401.

In the 1960s Japan and four tigers occupied first five places as for average economic growth rate. However, Thailand also represented high growth rate, whereas two "pussycats", Malaysia and Indonesia, did not follow this trend. In the 1970s and 1980s eight leading Asian economies reached higher growth rate than OECD states. Japan has experienced difficulties that arose due to the recession of the 1990s. Meanwhile, China is supposed to remain apart from any competition within the dynamic of economic growth. In the majority of cases, Asian economies recovered smoothly from the Asian crisis 1997, facing high growth rate next few years.

Data presented above indicate convergence of four tigers within number of hightech disciplines compared to EU member states. Second generation ("pussycats"), like Indonesia, Malaysia and Thailand did not catch up with OECD states, gap between them and Japan and four tigers appears even to grow. The question is, what is the role of intraregional dynamics of growth and specification of countries in the context of future perspectives for economic development and technological progress.

3. Accumulation of capital and technological progress

In theoretical dimension there have been many conceptualizations of rapid growth and development of leading Asian economies. In the 1993 the World Bank published the report *East Asian Miracle* which illustrated determinants of developing regional economies. However, the World Bank found the so-called "Asian model" rather disputable. Asian success was explained by policy of macroeconomic stability and promotion of investment in physical and human capital. This point of view may be considered as an exemplification of the neoclassical growth theory.

The problem was the failure of the other developing economies within convergence processes. Modern growth models establish impact of economies of scale dynamics on rising primacy of developed country over emerging economies. Still, there is no explanation for such benefiting from transfer of technology by four Asian tigers.

The World Bank contented that achievements of leading Asian economies could not be associated with policy of "free market – free trade" because of instruments of state interventionism applied, for example, by some Northeast Asian countries that experienced higher and sustainable growth.³ Some sectors were directly subsidized, export was promoted, internal markets were protected from import substitutes, necessary foreign capital flows were imported without high tariffs. Governments have invested a lot in research and knowledge transfer between public and private sector.

R. Wade indicated a possibility of intraregional reallocation of firms from Japan and four tigers that stimulate growth within Southeast Asia. Liberal policy determined dynamic flows of private investments from East Asia to Southeast Asia, that increase the position of foreign export-oriented TNC. Over two thirds of regional production

³ The East Asian Miracle: Economic Growth and Public Policy, World Bank, Oxford University Press, New York 1993, pp. 5-6.

are exported, which characterizes internal market of East Asia. R. Wade claimed that governments of Southeast Asia do too little in order to reinforce relations between domestic and foreign companies, which results mainly in limited flows of technology through FDI.⁴

The theory that export and investments stimulate economic growth (for example, through economies of scale and technological progress), could not be positively verified because of the problem of "reverse causation".⁵ D. Rodrik and A. Young pointed out the impact of investments within physical and human capital in leading Asian economies. Those investments are supposed to stimulate economic growth and productivity, that improve states' competitiveness and export potential.⁶ K.Y. Khalafalla and A.J. Webb argued that economic growth involves structural changes which determine the model of trade, comparative advantages and *terms of trade*, causing the reconstruction of relations between export and import.⁷ K. Krishna, A. Ozyildirim and N.R. Swanson indicated that export-oriented companies have reached a certain level of productivity.⁸

Opening to trade is not characteristic only of leading Asian economies.⁹ D. Rodrik proved the importance of education, balance of income and distribution of land as determinants of growth.¹⁰ The World Bank noted in 1965 higher level of primary and secondary education within group of leading Asian economies in comparison to other developing countries.¹¹ J.-I. Kim, L.J. Lau and A. Young claimed that hypothesis as for lack of technological progress within region of East Asia could not be undermined.¹²

The World Bank assessed that accumulation of labour and capital determines two thirds of leading Asian economies' economic growth. Therefore, accumulation ex-

⁴ R. Wade, Selective industrial policies in East Asia: Is the East Asian miracle right?, [in:] A. Fishlow (Ed.), *Miracle or Design? Lessons from East Asian Experience*, Policy Essay No. 11, Overseas Development Council, Washington DC 1994, pp. 65-69.

⁵ H. Yamada, A note on the causality between export and productivity: An empirical re-examination, *Economics Letters* 1998, Vol. 61, pp. 111-114.

⁶ D. Rodrik, King Kong meets Godzilla: The World Bank and the East Asian miracle, [in:] A. Fishlow (Ed.), *Miracle or Design? Lessons from East Asian Experience*, Policy Essay No. 11, Overseas Development Council, Washington DC 1994, pp. 13-53; A. Young, Lessons from the East Asian NICs: A contrarian view, *European Economic Review* 1994, Vol. 38, pp. 964-973.

⁷ K.Y. Khalafalla, A.J. Webb, Export-led growth and structural change: Evidence from Malaysia, *Applied Economics* 2001, Vol. 33, pp. 1703-1715.

⁸ K. Krishna, A. Ozyildirim, N.R. Swanson, Trade, investment, and growth: Nexus, analysis, and prognosis, *Journal of Development Economics* 2003, Vol. 70, No. 2, pp. 479-500.

⁹ M. Sarel, *Growth in East Asia – What We Can and What We Cannot Infer*, Economic Issues No. 1, IMF, Washington 1996, pp. 16-20.

¹⁰ D. Rodrik, op. cit.

¹¹ The East Asian Miracle...

¹² J.-I. Kim, L.J. Lau, The sources of economic growth in the East Asian newly industrialized countries, *Journal of the Japanese and International Economies* 1994, Vol. 8, No. 3, pp. 235-271; A. Young, Lessons...

plains the scale of disparities between achievements of leading Asian economies and regions of Latin America and Sub-Saharan Africa.¹³ However, according to Dowling and Summers, accumulation does not explain process of catching-up with Japan and four tigers.¹⁴ The World Bank argued that technological effectiveness, similar to the process of catching-up, remains an important indicator for developing countries. The World Bank's estimations remain diversified within the group of leading Asian economies. Hong Kong, Taiwan, Japan and Thailand represent economies geared towards productivity, characterized by high technological effectiveness. Singapore, Malaysia Indonesia and, to a large extent, South Korea experienced negative productivity and technological effectiveness, far from leaders' indicators.¹⁵

As a result, two tigers participate in second group, and Thailand in the first one. In particular, Singapore was characterized by negative indicator of effectiveness within the group of leading Asian economies. Undoubtedly, in that case, economic growth could be completely associated with accumulation of production factors. However, the World Bank's analysis confirms specific situation of Singapore within the group of leading Asian economies. Still, there is no explicit conclusions as for discussion over productivity in the context of relation between economic growth and accumulation. Dowling and Summers concluded that even low level of productivity observed within the group of leading Asian economies in comparison to industrialized partners.¹⁶ Therefore, statistics should be evaluated with reserve and cautiousness.¹⁷

4. International transfer of technology and know-how

Many arguments might be referred in order to confirm influence of technological knowledge transfer and know-how from USA and Europe on economic achievements and technological convergence within the group of leading Asian economies. Through investments in R&D, education and adequate policy, absorption and diffusion between firms and research institutes may rise.

L. Kim, C.J. Dahlman and K. Ramanathan argue that, taking into consideration the stage of development, a part of transfer mechanisms may turn out to be more adequate than others.¹⁸ Figure 1 illustrates three stages of transfer identified by the authors.

¹³ The East Asian Miracle..., p. 53.

¹⁴ M. Dowling, P.M. Summers, Total factor productivity and economic growth issues for Asia, *Economic Record* 1998, Vol. 74, No. 225, p. 171.

¹⁵ The East Asian Miracle..., pp. 57-58.

¹⁶ M. Dowling, P.M. Summers, op. cit.

¹⁷ A. Young, The tyranny of numbers: Confronting the statistical realities of the East Asian growth experience, *Quarterly Journal of Economics* 1995, Vol. 110, No. 3, pp. 641-680.

¹⁸ L. Kim, C.J. Dahlman, Technology policy for industrialization: An integrative framework and Korea's experience, *Research Policy* 1992, Vol. 21, pp. 437-452; K. Ramanathan, An analytical framework for technology transfer, [in:] P. Gougeon, J. Gupta (Eds.), *Contemporary Issues in Technology Transfer*, Editions ESKA, Paris 1997, pp. 21-46.



Figure 1. The time dimension of technology transfer and technological catch-up

Source: based on: K. Ramanathan, An analytical framework for technology transfer, [in:] P. Gougeon, J. Gupta (Eds.), *Contemporary Issues in Technology Transfer*, Editions ESKA, Paris 1997, pp. 21-46; L. Kim, C.J. Dahlman, Technology policy for industrialization: An integrative framework and Korea's experience, *Research Policy* 1992, Vol. 21, pp. 437-452.

In the first stage (initiation), countries use mature technologies in order to initiate the process of industrialization. The most important mechanisms typical for this stage include purchasing of installation and equipment, technical information and services. Imitation and assimilation may be stimulated by activity of R&D. The next stage (internalization) includes such mechanisms as licensing and joint ventures that enable to be in charge of transferred technologies of innovative companies. R&D activity might concentrate on developing new products or improving existing ones.

Finally, in the last stage (generation), a company (country) reaches the level of technological leader within technological domain. Then, foreign companies will not be interested in transferring technologies to companies (countries) which represent similar stage and might become (potential) competitors. Strategic alliances are the basic mechanisms within the described stage, whereas foreign private investments enable to supervise technological progress within foreign markets.

Table 2 illustrates the importance of channel of international technology transfer within a group of Wight leading Asian economies. Blanks mean lack of information about transfer mechanism. Analysis of degree of economies' openness calculated by relation between the sum of export and import and GDP indicated that tigers, especially Hong Kong and Singapore, were the most open countries, whereas Taiwan and South Korea were characterized by much lower indicators of openness, similar to estimations for Japan and USA. Tigers of second generation ("pussycats") also represent relatively high level of openness.

At the beginning of industrialization import of capital goods played significant role within leading Asian economies. The "flying geese" model by Kojima defined import of industrial foods from better developed countries as a source of stimulation of economic development. With time import was replaced by domestic production, in the last stage internal producers export goods that were previously imported.¹⁹

Economies like Hong Kong and Singapore have promoted free trade policy. Other countries, like Japan and South Korea, were much more restrictive realizing concept of industrialization based on import substitution. Characteristics of Japanese import of capital goods policy, formulated by Ozawa, indicate that by purchasing new kind of capital goods another ones were bought at Japanese producers that were licensed by foreign companies. In order to improve processes of duplication and imitation of foreign capital foods, many efforts were implemented for development of R&D. Ozawa found that kind of policy effective in a long term, but at variance with the comparative advantages theory, if such country as Japan, equipped with labour forces, characterized by lack of capital and raw materials, focuses its attention to capital-intensive sectors.²⁰

In case of South Korea, import of capital foods was accompanied by import substitution and protection of internal market, policy that preferred capital goods' users.²¹

R.E. Caves considered three potential gains from FDI: improvement of allocation effectiveness; increase of technical effectiveness; technology transfer from home to host country.²². However, FDI may influence the production sphere without any technology transfer to host country, especially in case of many countries – "pussycats".²³

Asian countries participate to a larger extent in alliances with USA, Europe and Japan, than regional partners.²⁴ The Triad countries account for over 80% of international technological alliances, with rising involvement of smaller Asian countries.²⁵ As K. Ramanathan concluded, common research projects and strategic

²¹ L. Kim, C.J. Dahlman, op. cit., p. 443.

¹⁹ K. Kojima, op. cit., pp. 377-379.

²⁰ T. Ozawa, Macroeconomic factors affecting Japan's technology inflows and outflows: The postwar experience, [in:] N. Rosenberg, C. Frischtak (Eds.), *International Technology Transfer: Concepts, Measures and Comparisons*, Praeger, New York 1985pp. 230-231.

²² R.E. Caves, Multinational firms, competition and productivity in host-country markets, *Economica* 1974, Vol. 41, pp. 176-193.

²³ R. Wade, op. cit.

²⁴ D.C. Mowery, J. Oxley, op. cit., pp. 147-148.

²⁵ Second European Report on S&T Indicators 1997, European Commission, Luxembourg 1997, p. 617.

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Item	Japan	South Korea	Taiwan	Hong Kong	Singapore	Thailand	Indonesia	Malaysia
Inward FDI	limited	important	relatively limited	important	very important	relatively limited	relatively limited	important
Import substitution	1950-60s	1950-60s	1950-60s	no	1959-65	1960-70s		limited
Import of capital goods	important (import limited often to one specimen)	important		very important	very important	limited		limited
Reverse engineering/ imitation	important	important	important					
Export promotion		important		from 1967		from mid-80s		important from 1970
Alliances, M&A	important	important (semi-condutors)						
Licensing	important in the beginning	important (chemical industry, electrical and non-electrical machinery)				important		
Education/formation abroad	very important	important						
Outward FDI	important	important						

Source: based on: L.H. Lynn, Technology transfer to Japan: What we know, what we need to know, and what we know that may not be so, [in:]

Paper No. 146, Washington 1996; Z.-T. Bae, Role of R&D in technology transfer, [in:] P. Gougeon, J. Gupta (Eds.), Contemporary Issues in Technology Transfer, Editions ESKA, Paris 1997, pp. 47-59; L. Kim, Imitation to Innovation: The Dynamics of Korea's Technological Learning, Har-N. Rosenberg, C. Frischtak (Eds.), International Technology Transfer: Concepts, Measures and Comparisons, Praeger, New York 1985, pp. 255-276; T. Ozawa, op. cit.; L.E. Westphal, L. Kim, C.J. Dahlman, Reflection on the Republic of Korea's acquisition of technological capabilpp. 167-221; The East Asian Miracle...; K. Kochhar, L. Dicks-Mireaux, B. Horvath, Thailand: The Road to Sustained Growth, IMF Occasional vard Business School Press, Boston, MA, 1997; D.C. Mowery, J. Oxley, Inward technology transfer and competitiveness: The role of national innovation systems, [in:] D. Archibugi, J. Michie (Eds.), Technology, Globalisation, and Economic Performance, Cambridge University Press, ity, [in:] N. Rosenberg, C. Frischtak (Eds.), International Technology Transfer: Concepts, Measures and Comparisons. Praeger, New York 1985. Cambridge 1997, pp. 138-171; K. Ramanathan, op. cit., pp. 21-46. alliances represent an option only for those domestic firms that have reached advanced technological level.²⁶

As mentioned above, some causal linkages between economic growth and potential determinants like import and export might be outlined. Interdependence of leading Asian economies creates frameworks for testing an intraregional growth dynamics. R. Moreno and B. Trehan proved that long term domestic growth is correlated with neighbouring countries' development and the size of the market. As a consequence, rapidly growing countries represent tendency of geographical concentration, which might be associated with "flying geese" paradigm.²⁷

5. Conclusions

Even though macroeconomic stability and investments in physical and human capital may determine processes of economic growth within a group of leading Asian economies, the World Bank confirms that limited degree of state interventionism may stimulate high and sustainable growth, especially in comparison with other newly industrialized and developing countries.

Technology and knowledge transfer from USA and Europe strongly influenced leading Asian economies' economic stores. Suitability of implemented technology and know-how transfer channels is conditioned by the stage of technological development. Within development processes, leading Asian economies confirm the importance of investment in R&D and human capital absorptive potential, in context of economic growth, giving the secondary meaning to the nature of knowledge transfer channels.

Taking intraregional linkages into account, the impact of export on economic growth was shown in case of Hong Kong, Indonesia, South Korea and Malaysia. Moreover, import influenced in a positive way the growth of regional tigers – Hong Kong and South Korea, whereas in a negative way – in case of some "pussycats" countries, like Malaysia and Indonesia.

Other conclusion is a process of creating of "export enclaves" within "pussycats" countries – they include production centre owned by foreign capital, concentrated on supplying the outside markets.²⁸ Economic growth and technological development of host country might be stimulated because of linkages between foreign subsidiaries and domestic firms and orientation on export goods.

Regional economic growth generates long-term effects within domestic growth processes. Moreover, impact of neighbouring countries should be considered. Previous research proved that rapidly growing economies reflect tendency of geographical concentration, and neighbourhood of large markets may stimulate

²⁶ K. Ramanathan, op. cit.

²⁷ R. Moreno, B. Trehan, Location and the growth of nations, *Journal of Economic Growth* 1997, Vol. 2, pp. 399-418.

²⁸ R. Wade, op. cit.

development processes. Analysis confirms foundations of "flying geese" paradigm that industrialization process was transmitted from Japan to countries – tigers, then – "pussycats". Unfortunately, because of lack of data, there is no possibility to verify the importance of FDI in context of described transmission processes.

Identification of some important linkages, determinants that define international trade and intraregional interdependence does not result in complete clarifying of growth processes' domain. Potential internal variables, like investments in human capital and education, require further analysis. Those variables are possibly important in the context of economic growth processes, determining absorptive capabilities, diffusion and using of knowledge and technologies transferred from highly developed countries. Desirable way of institutional factors and policy instruments' influence, concentrated on absorption of technologies, regardless of type of transfer channel, is to stimulate positive correlation between international trade, intraregional growth dynamics and economic growth processes, in accordance with leading Asian economies' experiences.

References

- Bae Z.-T., Role of R&D in technology transfer, [in:] P. Gougeon, J. Gupta (Eds.), Contemporary Issues in Technology Transfer, Editions ESKA, Paris 1997, pp. 47-59.
- Caves R.E., Multinational firms, competition and productivity in host-country markets, *Economica* 1974, Vol. 41, pp. 176-193.
- Cuyvers L., Van Den Bulcke D., Some reflections on the outward oriented development strategy of the Far Eastern developing countries, [in:] W. Adriaansen, G. Waardenburg (Eds.), A Dual World Economy, Wolters Noordhoff, Groningen 1989.
- Dowling M., Summers P.M., Total factor productivity and economic growth issues for Asia, *Economic Record* 1998, Vol. 74, No. 225.
- Heston A., Summers R., Aten B., *Penn WorldTable Version 6.1*, Center for International Comparisons at the University of Pennsylvania, 2002.
- Khalafalla K.Y., Webb A.J., Export-led growth and structural change: Evidence from Malaysia, *Applied Economics* 2001, Vol. 33, pp. 1703-1715.
- Kim J.-I., Lau L.J., The sources of economic growth in the East Asian newly industrialized countries, Journal of the Japanese and International Economies 1994, Vol. 8, No. 3, pp. 235-271.
- Kim L., Imitation to Innovation: The Dynamics of Korea's Technological Learning, Harvard Business School Press, Boston, MA, 1997.
- Kim L., Dahlman C.J., Technology policy for industrialization: An integrative framework and Korea's experience, *Research Policy* 1992, Vol. 21, pp. 437-452.
- Kochhar K., Dicks-Mireaux L., Horvath B., *Thailand: The Road to Sustained Growth*, IMF Occasional Paper No. 146, Washington 1996.
- Kojima K., The "flying geese" model of Asian economic development: Origin, theoretical extensions, and regional policy implications, *Journal of Asian Economics* 2000, Vol. 11, pp. 375-401.
- Krishna K., Ozyildirim A., Swanson N.R., Trade, investment, and growth: Nexus, analysis, and prognosis, *Journal of Development Economics* 2003, Vol. 70, No. 2, pp. 479-500.
- Lynn L.H., Technology transfer to Japan: What we know, what we need to know, and what we know that may not be so, [in:] N. Rosenberg, C. Frischtak (Eds.), *International Technology Transfer: Concepts, Measures and Comparisons*, Praeger, New York 1985, pp. 255-276.

- Moreno R., Trehan B., Location and the growth of nations, *Journal of Economic Growth* 1997, Vol. 2, pp. 399-418.
- Mowery D.C., Oxley J., Inward technology transfer and competitiveness: The role of national innovation systems, [in:] D. Archibugi, J. Michie (Eds.), *Technology, Globalisation, and Economic Performance*, Cambridge University Press, Cambridge 1997, pp. 138-171.
- Ozawa T., Macroeconomic factors affecting japan's technology inflows and outflows: The postwar experience, [in:] N. Rosenberg, C. Frischtak (Eds.), *International Technology Transfer: Concepts, Measures and Comparisons*, Praeger, New York 1985.
- Ramanathan K., An analytical framework for technology transfer, [in:] P. Gougeon, J. Gupta (Eds.), *Contemporary Issues in Technology Transfer*, Editions ESKA, Paris 1997, pp. 21-46.
- Rodrik D., King Kong meets Godzilla: The World Bank and the East Asian miracle, [in:] A. Fishlow (Ed.), *Miracle or Design? Lessons from East Asian Experience*, Policy Essay No. 11, Overseas Development Council, Washington DC 1994, pp. 13-53.
- Sarel M., Growth in East Asia What We Can and What We Cannot Infer, Economic Issues No. 1, IMF, Washington 1996, pp. 16-20.
- Second European Report on S&T Indicators 1997, European Commission, Luxembourg 1997.
- The East Asian Miracle: Economic Growth and Public Policy, World Bank, Oxford University Press, New York 1993.
- Wade R., Selective industrial policies in East Asia: Is the East Asian miracle right?, [in:] A. Fishlow (Ed.), *Miracle or Design? Lessons from East Asian Experience*, Policy Essay No. 11, Overseas Development Council, Washington DC 1994, pp. 65-69.
- Westphal L.E., Kim L., Dahlman C.J., Reflection on the Republic of Korea's acquisition of technological capability, [in:] N. Rosenberg, C. Frischtak (Eds.), *International Technology Transfer: Concepts, Measures and Comparisons*, Praeger, New York 1985, pp. 167-221.
- Yamada H., A note on the causality between export and productivity: An empirical re-examination, *Economics Letters* 1998, Vol. 61, pp. 111-114.
- Young A., Lessons from the East Asian NICs: A contrarian view, *European Economic Review* 1994, Vol. 38, pp. 964-973.
- Young A., The tyranny of numbers: Confronting the statistical realities of the East Asian growth experience, *Quarterly Journal of Economics* 1995, Vol. 110, No. 3, pp. 641-680.

KONCEPTUALIZACJA WZROSTU GOSPODARCZEGO W REGIONIE AZJI POŁUDNIOWO-WSCHODNIEJ

Streszczenie: Paradygmat "lecących gęsi" Kojimy wskazuje na sekwencję procesów rozwoju gospodarczego w regionie Azji Wschodniej. Transfer wiedzy technologicznej i *know-how* z Japonii do państw sąsiednich, na czele z "azjatyckimi tygrysami", odzwierciedla postępującą współzależność wewnątrzregionalną przy wzroście rangi zdolności adaptacyjnych, a także handlu międzynarodowego w kontekście konwergencji wschodzących gospodarek regionu. Optymalnym kierunkiem oddziaływania czynników instytucjonalnych pozostaje przy tym kreowanie pozytywnych korelacji między handlem międzynarodowym, wewnątrzregionalną dynamiką wzrostu oraz procesami wzrostu gospodarczego, na wzór doświadczeń wiodących gospodarek regionalnych.