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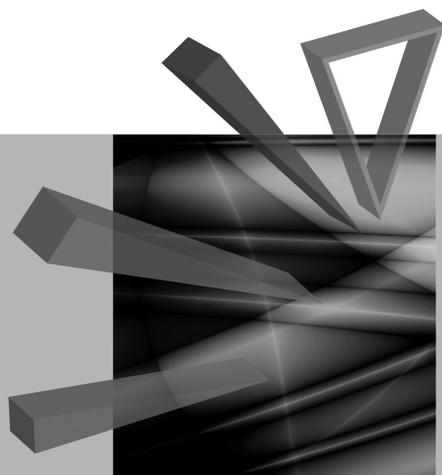
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Clusters, Networks and Markets in the Asia-Pacific Region



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PRODUCTION, INNOVATION, INFORMATION NETWORKS IN ASIA: THE ROLE OF INSTITUTIONS

Abstract: Globalization is the keyword of the beginning of the 21st century since Ohmae's "Triad Power" is replaced by globally present MNCs, production networks, subtle disappropriation of innovation, globalized digitalization of information seem to devalue regional attributes such as Asian culture, business, formal and informal social networks. But there is ample literature on change-resistant – because institutionalized-Asian-style political, economic and social structures. The paper aims to shed light on the question whether the traditional institutions shaping the Asian developmental model are weakening because of globalization or adapting to it. Another aim is to find evidence for the institutional forces which resist or change the Asian cohesion. The current paper is a starting point for further investigation and is a work in progress.

Keywords: production networks, innovation networks, social networks, East Asia.

1. Introduction

The literature on regions and their development trajectories can be divided into three main schools of thoughts. Management-based studies in the 1980s argued that large MNCs in developed countries reach out to less developed or emerging countries by establishing networks of production which aim to exploit factor endowment and location advantages offered by a number of neighbouring countries. Rigorous economic control by multi-plant companies ended in forming economic regions uncoupled from political institutions.¹ Social networks, e.g. ethnic diasporas, may support the process of externally driven region-building. A second type of region emerged from cultural ties and was institutionalized in the developmental state model.² In a principally market-oriented economy, the strict orientation on economic

¹ P. Dicken, The multi-plant business enterprise and geographical space: Some issues in the study of external control and regional development, *Regional Studies* 1976, vol. 10, pp. 401–412.

² C. Johnson, *MITI and the Japanese Miracle*, Stanford University Press, Stanford 1982; M. Woo-Cumings, *The Developmental State*, Cornell University Press, Ithaca, NY, 1999.

development can only deliver positive growth effects if the state's policy relies on strong networks to the administration and the industry. By informal "administrative guidance," the political/administrative elite succeeded in making out of the business elite the executing agents of the development strategy. Informal social networks resulting from common times in schools and universities served as transmission channels. The third type of explaining regions mixes singular entrepreneurial spirit with hybrid knowledge, information and innovation networks. The literature on clusters, agglomeration, innovative milieus focus on the internal region-building driving forces by emphasizing the importance of production and social networks.³ Agglomeration and networks are not necessarily complementary, but can also be substitutive.

A cautious evaluation of the recent literature on networks and regions may lead to the following hypotheses:

- Production networks function on low-context culture basis. They respond positive to regional institutional arrangements.
- Innovation networks function on high-context culture basis. They respond positive to informal institutional arrangements.
- Information networks seem to lose their high-contextual binding. They are getting more and more independent from socio-cultural and spatial arrangements.

In any case the starting point is the definition of "region." Especially the research on networks resulted in overcoming the traditional territorial view. Following R. Hudson, regions should be "seen as constituted from spatialized social relationships, stretched out over space and materialized in various forms, and representational narratives about them."⁴

The following chapters aim at finding evidence for the validity of the above-mentioned hypothesis with respect to production, innovation and information networks in East Asia. The results presented in sections 3–5 are a first step toward in-depth analysis of the role of institutions in shaping the three network types.

2. Theoretical approaches

The dynamics of global production networks is challenging the literature focusing on the developmental state model as the key driver of the economic emergence of East Asia. It is argued that this model is a necessary but not sufficient condition to

³ A.L. Saxenian, *Regional Production Networks and the Resurgence of Silicon Valley*, Working Paper 508, Institute of Urban and Regional Development, University of California, Berkeley 1989; eadem, *The Origins and Dynamics of Production Networks in Silicon Valley*, Working Paper 516, Institute of Urban and Regional Development, University of California, Berkeley 1990; I.R. Gordon, P. McCann, Industrial clusters: Complexes, agglomeration, and/or social networks, *Urban Studies* 2000, vol. 37, pp. 513–532.

⁴ R. Hudson, Region and place: Devolved regional government and regional economic success?, *Progress in Human Geography* 2005, vol. 29, no. 5, p. 620.

explain East Asian production networks.⁵ After the Asian economic crisis in 1997/98, the focus of the policy shifted from the original model of developmental state to a regulatory state model.⁶

The focus on a culturally-based political economy approach does not give sufficient room for analysing the dynamics at the firm level. The dynamic growth and structural change of East Asian production networks indicate that firm's behaviour overcomes the rigid institutional boundaries of the developmental state model. The materialized-only approach is not enough to shed light on the impact of the social level on production networks. The gravity model-based analysis of production networks reduces the perspective to fragmentation, spatially decentralized production blocs, vertical FDI, vertical intra-industry trade. It has to be questioned whether determinants such as geographical proximity, factor endowment advantages, institutional arrangements (e.g. EU or NAFTA) explore the depth of production networks. Home and host country/region effects are measured by economic growth, productivity changes, both strongly depending on spill-over effects, changes in employment and wages. Pre-defined region approaches mostly include non-economic factors such as network capital that should explain regional growth.⁷ Without taking into account the global pressure on the region's closeness, the strength and resistance of region-determining factors cannot be sufficiently explored. A relatively new field of research in regional economics imposes similar restriction on its research design: Regional innovation systems are mostly analysed under the assumption of being a local phenomenon shaped by SMEs. There is still no convergence of the two schools of thoughts on regions, namely the one that focuses on intra-regional processes in order to characterize, categorize and evaluate regions; the other one that analyses regions in the context of their openness, embeddedness and exposure to global developments. The difference between the "new globalized regional development process" and the above-mentioned Dicken's approach is the relational character. Regional development trajectories are analysed in relation to complex dynamics of global production networks. "Both regions and GPNs, however, are relational constructions and social formations that are constituted through ongoing actor-specific practices and processes."⁸

A promising approach starts with the general perception of global production networks (GPN) as flows of goods, often preceded or accompanied by capital, persons, knowledge, between different types of spatial and functional nodes, partially embedded in changing multi-level governance arrangements and different forms of

⁵ H. Yeung, Situating regional development in the competitive dynamics of global production networks: An East Asian perspective, *Regional Studies* 2009, vol. 43, no. 3, p. 3.

⁶ J. Stiglitz, S. Yusuf (Eds.), *Rethinking the East Asian Miracle*, Oxford University Press, New York 2001.

⁷ R. Huggins, G. Thompson, A network-based view on regional growth, *Journal of Economic Geography* 2013, vol. 13, no. 4, pp. 1–35.

⁸ H. Yeung, *op. cit.*

networks. By analysing these GPN through the lens of a cultural political economy (CPE) approach,⁹ it might be possible to extract region-specific determinants that could at the end be labelled as East Asian, European, American production networks. Furthermore, this wide definition of production networks may allow to define and to isolate the impact of sub-categories such as information and innovation networks. Of course, the “material economy” – production and consumption – has to be the starting point. A second analysis refers to flows of knowledge and information which allow for extracting the culturally embedded content of production networks. The political economic perspective focuses on the institutional frameworks which shape the scope of actions of political, private, and economically and socially organized groups. A complete understanding of the nodes and flows requires to lay open the complex interdependencies. The origin of this approach stems from the idea to explain rather the global production system which includes the efficiency-driven production networks in the shape of trade in parts and components.

At the current stage of research there seems to be no other choice to shed light on the East Asian content of production, innovation and information networks than firstly separating them and finally searching for similarities and overlaps.

3. Production networks: East Asian, global?

There is ample literature on East Asian production networks.¹⁰ The “Asian Factory” – especially in electronics – dominated early empirical studies.¹¹ From the early 1960s non-Asian MNCs are involved in building these networks. To our knowledge, recent studies on characteristics of Asian management in the globalized economy are not systematically related to the “Asianess” of Asian production networks. This suggests that except geography the Asian input into the production networks is low.

Differently to the frequently-used approach where the East Asian production networks are analysed under the assumption of the validity of the developmental state model, our analysis starts on the firm level. Global players extend their production networks to East Asia and strategically tie up with local firms.

Global companies in Europe responded positively to EU’s institutional arrangements with the CEECs. In contrast, their response to the weakening of the developmental state model in East Asia seems to be positive. There is evidence that

⁹ R. Hudson, Cultural political economy meets global production networks: A productive meeting?, *Journal of Economic Geography* 2008, vol. 8, pp. 421–440.

¹⁰ W. Anukoonwattaka provides an extensive review of the literature on appearance and extension of Asian production networks from historical and theoretical perspectives, Driving forces of Asian international production networks: A brief history and theoretical perspectives, [in:] W. Anukoonwattaka, M. Mikic (Eds.), *India: A New Player in Asian Production Networks? Studies in Trade and Investment*, ESCAP, 2011, http://ideas.repec.org/h/unt/ecchap/tipub2624_chap1.html.

¹¹ D. Ernst, Beyond the global factory model: Innovative capabilities for upgrading China’s IT industry, *International Journal of Technology and Globalization* 2007, vol. 3, no. 4, pp. 437–460.

Asian individual virtues match the requirements of global production networks better than inflexible guidance and regulatory governance models. However, it has to be noted that governments in Asian countries such as China, Korea, Singapore introduced policies which focus on developing the human resources instead of guiding large domestic companies. As a result, global and local companies benefit. The former extend their production networks gradually by shifting R&D to East Asia and by upgrading knowledge content of their information networks. The latter upgrade their work force and improve their competitiveness especially as partners in global-local networks.

4. East Asian information networks: Losing high-contextuality?

Traditional growth models emphasize the importance of the stock of knowledge on economic growth. Innovation theories highlight the flow of knowledge as innovation enabling mechanism. From a general point of view, production networks are inter-organizational networks which do hardly function without flows of knowledge. Even more, production networks seem to create an encouraging, facilitating and probably necessary basis for inter-organizational knowledge flows within and across regions. Production networks create network capital which – in turn – enables firms to access external knowledge. This type of capital may be characterized as intangible, but the motivation is strategic in the sense of using the potential of access to information and knowledge as a resource to create benefits.¹² This approach supports the assumption that East Asian firms prefer formal information channels when being part of global production networks.

Growing geographical distance in production networks require standardized modes of communication and information. The global approach to regional communication networks in East Asia starts with the transnational elite community, especially from China and Japan. The resulting “brain circulation” has formed a global community of informal “brain networks” that is affected by national and or cultural origins. This suggests that Asian-type communication is rather globalizing than global communication styles change Asian informal network communication. In addition, the transnational East Asian business networks have contributed to establishing formal ties of Asian firms with leaders in GPN.¹³ Growing distances and the pressure to speed-up decision-making processes are thinning out traditional Asian-style informal information networks.

For Westerners communication is the most mysterious attribute of Asian culture. The Asian-type informal communication networks and their lack of transparency

¹² O.E. Williamson, Calculativeness, trust and economic organization, *Journal of Law and Economics* 1993, vol. 36, pp. 453–486.

¹³ A.L. Saxenian, Transnational communities and the evolution of global production networks: The cases of Taiwan, China, India’, *Industry and Innovation* 2002, vol. 9, no. 3, pp. 183–202; H. Yeung, *op. cit.*

which results from selective social inclusion and exclusion are expected to lose their myth in times of electronic social networks and open digital communication. The switch from non-verbal communication to electronic social network communication may finally diffuse into the organizational structures behind production and innovation networks. So far, the literature provides rather cautious predictions regarding the convergence of Asia's high-contextual communication to Western-style low-contextual communication. But there are good reasons to argue that digital network systems function in the same way like interdependent cultures where the individual is defined by its social environment.¹⁴ The Chinese diaspora, especially in the US, contributes considerably to the technological development in China, no more relying predominantly on *guanxi* as communication network. Skill and technological competence dominate the Chinese diaspora – Mainland business communication networks.¹⁵

5. Innovation networks in East Asia

Innovation networks in East Asia are quite a new phenomenon that started at the end of the 1990s. They are dominated by MNCs from developed countries, mainly the United States, followed by Japan and the EU, and are part of their global innovation networks (GIN). MNCs are mainly attracted by fast growing markets of the region with leaders being China and India. Between 2002 and 2005, Asia-Pacific, especially China and India, attracted 50% of world's R&D foreign direct investment (FDI).¹⁶

The leaders in Asia in terms of percentage of attracted R&D investment projects of MNCs between 2002 and 2005 were: India (25.6%), China (17.2%), Singapore (3.8%), Taiwan (2.6%), Japan (1.8%), Malaysia (1.7%).¹⁷ These countries have a strategy of upgrading their economies through innovation. Their governments have invested large amounts in improvement of infrastructure (especially broadband communication), developing skilled human resources and in supporting leading R&D programs in a few high-priority areas.¹⁸ In fact, the determinants of establishing

¹⁴ M.-S. Kim, *Non-Western Perspectives on Human Communication: Implications for Theory and Practice*, Sage Publications, Thousand Oaks, CA, 2002.

¹⁵ M. Grossman, Business networks, 'brain circulation', and the American-Chinese diaspora, *The Journal of Information and Knowledge Management Systems* 2010, vol. 40, no. 3/4, pp. 295.

¹⁶ R. Huggins, M. Demirbag, Ratcheva V.I., Global knowledge and R&D foreign direct investment flows: Recent patterns in Asia Pacific, Europe, and North America, *International Review of Applied Economics* 2007, vol. 21, no. 3, pp. 437–451.

¹⁷ *Ibidem*, p. 444.

¹⁸ D. Ernst, *Innovation Offshoring. Asia's Emerging Role in Global Innovation Networks*, East-West Center Special Reports, Honolulu, HI, USA, 2006 <http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/12531/SR010.pdf?sequence=1> (retrieved 13.07.2013); A. Climent, T.D. Hoffman, M. Vaidya, T.H. Yu, Asia's Innovation Advance: Leadership Perspectives on a Growing Innovation Hub, 2009, http://content.spencerstuart.com/sswebsite/pdf/lib/asInnAdv_pov09.pdf (retrieved 10.07.2013).

R&D activities in East Asia, especially its emerging economies, are growth potential, quality of R&D talent, public research institutes, and collaboration with universities.¹⁹ In case of China additional attracting factors are low costs and growing government R&D expenditures. Moreover, China's ambitions to develop indigenous innovation are another reason for foreign MNCs, which want to absorb local sources of knowledge, to become part of the country's innovation system. However, Y.C. Chen et al. in their study argue that important reason for foreign MNCs to set up R&D centres in China are uncertainties such as "(1) the fierce competition from the local firms (market uncertainties), (2) the competition for the technological standards (technological uncertainties), and (3) the state intervention in controlling market access (political uncertainties)."²⁰ These uncertainties, the fear of technology theft and low protection of property rights result in foreign R&D focusing mainly on adaptive innovations. MNCs critical knowledge is kept at the headquarters. As a result Chinese government's goal of attracting frontier knowledge is unsuccessful. The above findings confirm that majority of Asian governments are promoters of inflow of innovative operations and are not directly engaged in cooperation with business in achieving economic goals.

Japan's MNCs establish innovation networks in Asia rather cautiously when compared to the US ones. The latter's Asian R&D subsidiaries often engage in innovative research and are on equal level with R&D centres in the US. Japanese MNCs' Asian R&D subsidiaries are mainly located in South Korea and Taiwan (innovative research) followed by China and Malaysia (adaptive R&D).²¹ According to D.W. Edgington and R. Hayter Japanese firms keep frontier R&D activities in Japan to maintain hierarchical structure of their operations and maintain "flying geese model" of specialization in Asia.²² Another reason is that they fear technology leaks and "job hopping" of highly skilled personnel. Moreover, Japanese management needs closeness and "shared cultural values" to be able to transfer knowledge.²³ However, they are said to be threatened by technological progress, disconnected from Japan, which takes place in South Korea, and China. This evidence shows that social and cultural factors in case of Japan are important barriers to creating internationalized innovation networks.

¹⁹ R. Huggins et al., *op. cit.*; OECD, *Research and Development: Going Global*, 2008, <http://www.oecd.org/science/sci-tech/41090260.pdf>.

²⁰ Y.C. Chen., J. Vang, C. Chaminade, *Regional Innovation Systems and the Global Location of Innovation Activities: Lessons from China*, CIRCLE Lund University, Paper No 2008/18, Lund 2008, http://www.circle.lu.se/?wpfb_dl=87, pp. 14, 15 (retrieved 12.07.2013).

²¹ S. Shimizutani, Y. Todo, *What Determines Overseas R&D Activities? The Case of Japanese Multinational Firms*, 2006, <http://www.rieti.go.jp/jp/publications/dp/07e010.pdf>.

²² D.W. Edgington, R. Hayter, In situ dynamics of Japanese electronic subsidiaries in ASEAN countries: reflections from a development perspective, *Asia Pacific Viewpoint* 2013, vol. 54, no. 1, pp. 15–32.

²³ D.W. Edgington, R. Hayter, The in situ upgrading of Japanese electronics firms in Malaysian industrial clusters, *Economic Geography* 2013, vol. 89, no. 3, p. 234.

Japanese inflexibility is in striking contrast with fast adapting qualities of firms from China. New Asian players develop their own networks and unique (“hybrid”) networking strategies. For example, China Mobile sets strategic direction of the network and controls key resources. The network comprises eight levels of suppliers mostly from Asia (excluding Japan).²⁴ D. Ernst calls GIN established by Huawei a “highly sophisticated” one.²⁵ Huawei establishes linkages and partnerships/alliances (joint R&D labs) with leading companies and universities from its industry and at the same time develops its own global innovation network.

The competition for innovation and knowledge is fierce as they are long-term engines of economic growth. R. Huggins et al. suggest that new global innovation network emerges which comprises of only elite innovation systems and clusters in given regions instead of global network of national innovation systems. Thus, some countries and regions seem bound to be left behind in the race for progress.

6. New industrial and spatial organization: What is Asian, what is global?

Global players in many industries fragment their value chain and reorganize vertically specialized production and service blocks in Asian countries. Vertical outward FDI are often the visible and measurable sign of the production networks. There is evidence that a large number of local firms in Asia are coupled with large global firms not only in production blocks but also in knowledge and information flows. Typical characteristics of SMEs in East Asia such as high flexibility, fast learning, cost competitiveness open chances to participate in ever more sophisticated stages of the value chain. This strategic coupling is by far not a self-organizing process. Governments developed and implemented region-specific policies and supported the emergence of spaces where “global meets East Asia.” The path-creating catch-up approach of companies from supplier to global players (e.g. Lenovo, Samsung, LG) based on foreign knowledge, own innovation and supported – not regulated – by government policies suggest that boundaries between global and East Asian principles of industrial and spatial organization of networks are gradually blurring down.

7. Summary

The current state of research allows not more than a cautious provisional result. Production networks in East Asia are to an increasing degree institutionalized bridges that couple global with local firms. Traditional Asian values and global corporate

²⁴ D. Ernst, A new geography of knowledge in the electronics industry? Asia’s role in global innovation networks’, *Policy Studies* 2009, vol. 54, East-West Center, Honolulu, HI, USA, pp. 25, 26.

²⁵ *Ibidem*, p. 27.

governance strategies merge to hybrid institutional structures with respect to their organization and dynamics. The new institutional structures have to be carved out by further research. There are good reasons to consider the foreign lead firms in the production networks as driving network building forces in East Asia. A new research agenda has to explore whether the formerly strong role of the state regarding the guidance of East Asia's industrialization, especially in manufacturing, shifted to other state-led institutional anchors. The intensive engagement of governments in East Asia in developing regions and upgrading human resources points to the acceptance and even support of the global-local production networks. Innovation networks might be a critical point. Leading firms expect strict codification, East Asian firms rely on trust and informal agreements. The institutionalization and enforceability of new knowledge need more than regulations. The societal acceptance of innovation as a private and not public good cannot be enacted by law.

Following M. Storper's "holy trinity" of relational assets – technology, organizations, territories – the firm-based approach to Asian production, innovation and information networks suggests to search for other attributes which might better characterize Asian-style business than the developmental state model.²⁶

As already mentioned, the paper is "work in progress", and the problem sketched in it needs further research to show in more detail the impact of institutional setting for all three types of networks.

References

- Anukoonwattaka W., Driving forces of Asian international production networks: A brief history and theoretical perspectives, [in:] W. Anukoonwattaka, M. Mikic (Eds.), *India: A New Player in Asian Production Networks? Studies in Trade and Investment*, ESCAP, 2011, http://ideas.repec.org/h/unt/ecchap/tipub2624_chap1.html.
- Chen Y.C., Vang J., Chaminade C., *Regional Innovation Systems and the Global Location of Innovation Activities: Lessons from China*, CIRCLE Lund University, Paper No 2008/18, Lund 2008, http://www.circle.lu.se/?wpfb_dl=87 (retrieved 12.07.2013).
- Climent A., Hoffman T.D., Vaidya M., Yu T.H., *Asia's Innovation Advance: Leadership Perspectives on a Growing Innovation Hub*, 2009, http://content.spencerstuart.com/sswebsite/pdf/lib/asInnAdv_pov09.pdf (retrieved 10.07.2013).
- Dicken P., The multi-plant business enterprise and geographical space: Some issues in the study of external control and regional development, *Regional Studies* 1976, vol. 10, pp. 401–412.
- Edgington D.W., Hayter R., In situ dynamics of Japanese electronic subsidiaries in ASEAN countries: reflections from a development perspective, *Asia Pacific Viewpoint* 2013, vol. 54, no. 1, pp. 15–32.
- Edgington D.W., Hayter R., The in situ upgrading of Japanese electronics firms in Malaysian industrial clusters, *Economic Geography* 2013, vol. 89, no. 3, pp. 227–259.
- Ernst D., *Innovation Offshoring. Asia's Emerging Role in Global Innovation Networks*, East-West Center Special Reports, Honolulu, HI, USA, 2006 <http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/12531/SR010.pdf?sequence=1> (retrieved 13.07.2013).

²⁶ M. Storper, *The Regional World: Territorial Development in a Global Economy*, Guilford Press, New York 1997.

- Ernst D., Beyond the global factory model: Innovative capabilities for upgrading China's IT industry, *International Journal of Technology and Globalization* 2007, vol. 3, no. 4, pp. 437–460.
- Ernst D., A new geography of knowledge in the electronics industry? Asia's role in global innovation networks', *Policy Studies* 2009, vol. 54, East-West Center, Honolulu, HI, USA.
- Gorden I.R., McCann P., Industrial clusters: Complexes, agglomeration, and/or social networks, *Urban Studies* 2000, vol. 37, pp. 513–532.
- Grossman M., Business networks, 'brain circulation', and the American-Chinese diaspora, *The Journal of Information and Knowledge Management Systems* 2010, vol. 40, no. 3/4, pp. 287–300.
- Hudson R., Cultural political economy meets global production networks: A productive meeting?, *Journal of Economic Geography* 2008, vol. 8, pp. 421–440.
- Hudson R., Region and place: Devolved regional government and regional economic success?, *Progress in Human Geography* 2005, vol. 29, no. 5, pp. 618–625.
- Huggins R., Thompson G., A network-based view on regional growth, *Journal of Economic Geography* 2013, vol. 13, no. 4, pp. 1–35.
- Huggins R., Demirbag M., Ratcheva V.I., Global knowledge and R&D foreign direct investment flows: Recent patterns in Asia Pacific, Europe, and North America, *International Review of Applied Economics* 2007, vol. 21, no. 3, pp. 437–451.
- Johnson C., *MITI and the Japanese Miracle*, Stanford University Press, Stanford 1982.
- Kim M.-S., *Non-Western Perspectives on Human Communication: Implications for Theory and Practice*, Sage Publications, Thousand Oaks, CA, 2002.
- OECD, *Research and Development: Going Global*, 2008, <http://www.oecd.org/science/sci-tech/41090260.pdf>.
- Saxenian A.L., *Regional Production Networks and the Resurgence of Silicon Valley*, Working Paper 508, Institute of Urban and Regional Development, University of California, Berkeley 1989.
- Saxenian A.L., *The Origins and Dynamics of Production Networks in Silicon Valley*, Working Paper 516, Institute of Urban and Regional Development, University of California, Berkeley 1990.
- Saxenian A.L., Transnational communities and the evolution of global production networks: The cases of Taiwan, China, India', *Industry and Innovation* 2002, vol. 9, no. 3, pp. 183–202.
- Shimizutani S., Todo Y., *What Determines Overseas R&D Activities? The Case of Japanese Multinational Firms*, 2006, <http://www.rieti.go.jp/jp/publications/dp/07e010.pdf>.
- Stiglitz J., Yusuf S. (Eds.), *Rethinking the East Asian Miracle*, Oxford University Press, New York 2001.
- Storper M., *The Regional World: Territorial Development in a Global Economy*, Guilford Press, New York 1997.
- Williamson O.E., Calculativeness, trust and economic organization', *Journal of Law and Economics* 1993, vol. 36, pp. 453–486.
- Woo-Cumings M., *The Developmental State*, Cornell University Press, Ithaca, NY, 1999.
- Yeung H., Situating regional development in the competitive dynamics of global production networks: An East Asian perspective, *Regional Studies* 2009, vol. 43, no. 3, pp. 325–341.

SIECI PRODUKCJI, INNOWACJI I INFORMACJI W AZJI: ROLA INSTYTUCJI

Streszczenie: Globalizacja jest kluczowym słowem XXI w. W latach 80. XX w. Kenichi Ohmae wysunął hipotezę o istnieniu „trzech mocarstw” (*triad power*), co zmusza korporacje międzynarodowe do konkurencji na globalną skalę, a jest napędzane ich sukcesami na rynkach USA, Europy i Japonii, obecnie – NAFTA, EU-28 i Azji Wschodniej. Globalne sieci

produkcji, wyrafinowane przywłaszczanie innowacji, globalna digitalizacja informacji wydają się dewaluować regionalne atrybuty, takie jak azjatycka kultura, biznes, formalne i nieformalne sieci społeczne. Jednak istnieje obszerna literatura dotycząca silnych i odpornych na zmiany azjatyckich struktur politycznych, ekonomicznych i społecznych wynikających z ich zinstytucjonalizowanego charakteru. Celem artykułu jest próba odpowiedzi na pytanie, czy tradycyjne instytucje, które kształtują azjatycki model państwa rozwojowego (*Asian developmental state model*), są osłabiane przez globalizację, czy dostosowują się do globalizacji poprzez modernizację lub rozszerzenie systemu instytucjonalnego. Ponadto ma na celu znalezienie dowodów na istnienie instytucjonalnych mechanizmów, które opierają się azjatyckiej spójności lub ją zmieniają. Niniejszy artykuł jest punktem wyjścia do dalszych badań i powinien być traktowany jako *work in progress*.

Słowa kluczowe: sieci produkcji, sieci innowacji, sieci społeczne, Azja Wschodnia.