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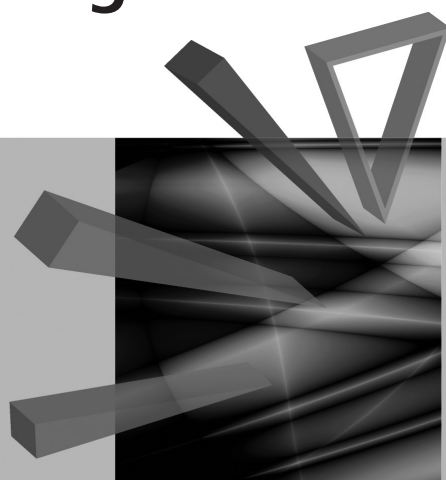
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# **Innovation as a Factor of the Development of the Asia-Pacific Region**



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## CHARACTERISTICS OF THE ASEAN+3 COOPERATION AND ITS INFLUENCE ON IMPROVING REGIONAL INNOVATION

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**Summary:** The main purpose of this article is to present ASEAN+3 as one of the most important organisations in Asia. This paper shows the main reasons why ASEAN+3 was created as well as the significant accomplishments, opportunities and goals that its participants want to achieve. The author focuses special attention on the science and technology area of cooperation, by presenting guidelines recommended in important ASEAN+3 documents. The author also analyses the value of expenditures on R&D spent by ASEAN+3 economies and the number of patent applications filed annually by members since 1997.

**Keywords:** ASEAN+3 cooperation, innovation, science and technology transfer.

### 1. Introduction

Over the past several years the Asia-Pacific region has become more and more important in the processes of internationalisation and globalisation of international economic relations. One of the symptoms of this phenomenon is the increasing cooperation within the ASEAN+3 framework. Economic integration and an increased amount of international trade are conducive to maintain rapid economic growth. The foundation of ASEAN+3 was ASEAN – Association of South-East Asian Nations – an organisation created in 1967 in Bangkok, currently uniting ten countries: Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Burma-Myanmar and Cambodia. The mechanism of ASEAN+3 cooperation was created in 1997 as a response to the financial crisis in Asia and it establishes cooperation between the ten aforementioned countries and such economies as China, Japan and the Republic of Korea. Since that time, these countries have developed a network of cooperation in cultural, economic, functional, technological, political, security and social areas. Another reason for stimulating this partnership was a positive example of the European integration, which shows that the liberalisation of trade, the increase in mutual investments and cooperation in technology bring measurable results. ASEAN+3 countries clearly have a dominant economic position in Asia. However, it should be noticed that there is a gap in the economic development between some of

the cooperating countries. In a quite different situation from the poor and economic underdeveloped ASEAN countries there are China, Japan and Korea, the economic giants. Therefore, the East Asian economies that are actively working towards an East Asian regional cooperation are Japan, China, Korea and the five founding ASEAN members: Indonesia, Malaysia, the Philippines, Singapore and Thailand (this cooperation is called: ASEAN-5+3).

## 2. The way from ASEAN to ASEAN+3

Analysing the last two decades of ASEAN activities and taking all circumstances into consideration, currently one can say that the organisation achieved a big success. During the Asian financial crisis in 1997, the market integration in AFTA (ASEAN Free Trade Area) was not sufficient enough to generate the high value of intraregional trade. But ASEAN economies noted a quick recovery because of the huge level of export to the “biggest” world economies, like the United States, the European Union and China. Another help (such as loans) came from the International Monetary Fund (IMF). ASEAN had to accept all of the conditions proposed by IMF because the swap agreements between ASEAN members turned out insufficient during the financial crisis.<sup>1</sup>

In 1997 an informal meeting was held between the representatives of ASEAN, China, Japan and Korea, convened by Malaysia. Since then, they have called regular, annual summits. Within the ASEAN+3 framework many regional initiatives have emerged.<sup>2</sup> One of the most important initiatives was related to the Asian economic crisis. East Asian countries decided to start regional currency cooperation. During the ASEAN+3 Finance Ministers Meeting in Chiang Mai in 2000 “The Chiang Mai Initiative” was agreed on. It was the continuation and extension of the ASEAN Swap Agreement (created in 1977). The cooperation within the CMI was supposed to focus on four areas: monitoring capital flows, regional surveillance, swap networks and training personnel. CMI provides a supply of immediate short-term swap facilities to ASEAN members with temporary international liquidity problems. Under the arrangements, the US dollar shall be exchanged against the domestic currency of a requesting participant. In theory within the ASEAN+3, there are 33 bilateral swap agreements. Thirty of them are between China, Japan and the Republic of Korea and each of the ASEAN members. While the remaining three between “+3 countries”.<sup>3</sup>

Since ASEAN+3 started to cooperate, the members of partnership have begun to create lots of documents that were significant to build an organisation structure

<sup>1</sup> S. Kraphol, A. Obermeier, *From ASEAN to ASEAN+3. A Two-Level Game of Regional Integration*, University of Bamberg, Stockholm 2010, p. 2.

<sup>2</sup> R. Greatrex (Ed.), *Is the World Ready for Coherent ASEAN+3?*, Centre for East and South-East Asian Studies, Lund University, Lund 2004, p. 2.

<sup>3</sup> C.R. Henning, *East Asian Financial Cooperation. Chapter 3. The Chiang Mai Initiative*, Institute for International Economics, Washington 2002, p. 12.

and regional community. The first important document was called “Joint Statement on East Asia Cooperation” and was released at the 3rd ASEAN+3 Summit in 1999 in Manila (Manila Statement). This document determined the main goals of ASEAN+3. It also comprised information about principles and directions of cooperation. The Manila Statement set eight areas of collaboration. The most significant one is economic cooperation. It includes trade facilitation, investments, narrowing the development gap, strengthening small and medium-sized enterprises (SMEs), labour movement, promoting tourism, etc. Besides that, ASEAN+3 participants agreed to cooperate in the areas of finance, social and human resources development, science and technology, information and culture, political security, development and transnational issues. These establishments started the first chapter in the history of the organisation of ASEAN +3.<sup>4</sup>

The second stage of ASEAN+3 history (that has existed until today) was initiated at the 11<sup>th</sup> Summit in Singapore in 2007 with the Second Joint Statement on East Asia Cooperation called: “Building on the Foundations of ASEAN Plus Three Cooperation”. Additionally, at the same meeting another document was announced and accepted: “ASEAN Plus Three Cooperation Work Plan (2007–2017)”. Both of them contain accomplishments, opportunities and challenges faced by ASEAN+3 and provide strategic and practical guidance for the future direction of collaboration.<sup>5</sup> ASEAN+3 Cooperation Work Plan was created as a master plan to realise goals set in the Second Joint Statement. It also added four new areas of cooperation: rural development and poverty eradication, disaster management, minerals and women issues.<sup>6</sup> These documents showed that the partnership between ASEAN+3 members had reached a new, higher level. They started to set their sights on much more important problems and implemented much more advanced solutions than ever before. ASEAN+3 Cooperation Work Plan demonstrated that countries were ready to deal with both intra-regional and external issues and to act during the decision-making process as a whole unit. During the second period of ASEAN+3 cooperation development, the individual relationships between ASEAN members and “+3 countries” were also improved. In 2009 the ASEAN–China and ASEAN–Korea agreements on comprehensive economic cooperation in investments and trade were signed. Moreover, in fifteen years of ASEAN+3 cooperation a lot of agreements between China, Japan, the Republic of Korea and ASEAN found their places in many declarations, joints and memorandums signed by representatives of their government.<sup>7</sup>

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<sup>4</sup> V.V. Gavrilov, *Framework of the ASEAN Plus Three Mechanisms Operating in the Sphere of Economic Cooperation*, Center for Asian Legal Exchange (CALE) Discussion Paper No. 7, Nagoya University, Nagoya 2011, pp. 6–7.

<sup>5</sup> *ASEAN Plus Three Cooperation*, the ASEAN Secretariat, Jakarta 16.04.2012, [www.aseansec.org/16580.htm](http://www.aseansec.org/16580.htm), (accessed: 25.04.2012).

<sup>6</sup> *ASEAN Plus Three Cooperation Work Plan 2007–2017*, published by the ASEAN Secretariat, [www.aseansec.org/21104.pdf](http://www.aseansec.org/21104.pdf) (accessed: 25.04.2012), p. 1.

<sup>7</sup> V.V. Gavrilov, *op. cit.*, pp. 8–18.

During the first stage of ASEAN+3 history (in 2001), an important document that set goals to build regional community was also published. It was the report of East Asian Vision Group, titled: “Towards an East Asian Community: Region of Peace, Prosperity and Progress”. This document recommended the establishment of the East Asia Summit and assumed execution of the following goals:

- “preventing conflict and promoting peace among the nations of East Asia;
- achieving closer economic cooperation in such areas as trade, investment, finance and development;
- advancing human security in particular by facilitating regional efforts for environmental protection and good governance;
- bolstering common prosperity by enhancing cooperation in education and human resources development;
- fostering the identity of an East Asian community”.<sup>8</sup>

After the report was released, some ASEAN countries suggested that the foundation for building a close cooperation of East Asian countries may be the extension of ASEAN+3 framework and the transformation from the ASEAN+3 Summit into the East Asia Summit. However, the rest of economically weaker countries of ASEAN believed that this solution would cause the reduction of their position in the organisation through the dilution of their votes. Finally, there was a decision to make both initiatives separate.<sup>9</sup>

The important part of ASEAN+3 cooperation is obviously ASEAN itself. ASEAN as an organisation had a significant impact on the development of collaboration with “+3 countries”. If ASEAN had not existed, it is unlikely that ASEAN members would have maintained relationships with China, Japan and the Republic of Korea separately at so many levels. It should be remembered that, besides the most developed country of ASEAN – Singapore – the rest of the members are relatively economically weak. But when ASEAN participants decided to unite, they became a very powerful organisation. Nowadays both, ASEAN members and “+3 countries” achieve mutual benefits from their cooperation. For China, Japan and the Republic of Korea, the cooperation with ASEAN is much more valuable than with every single country separately. For ASEAN participants, the cooperation with “+3 countries” gives additional economic profits.<sup>10</sup>

China, Japan and Korea play a crucial role in the development of ASEAN+3. Some authors emphasise their economic and political power by paraphrasing the name of the organisation from ASEAN+3 to 3+ASEAN. Certainly, when they were forming the cooperation, ASEAN members were aware of a high risk of losing con-

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<sup>8</sup> *ASEAN+3 Documents Series 1999–2004*, the ASEAN Secretariat, Jakarta 2005, [www.aseansec.org/ASEAN+3.pdf](http://www.aseansec.org/ASEAN+3.pdf) (accessed: 26.04.2012), p. 40.

<sup>9</sup> H. Tanaka, *The ASEAN+3 and East Asia Summit: A Two-Tiered Approach to Community Building*, East Asia Insights Toward Community Building No. 1, Japan Center for International Exchange, Japan 2006, p. 1.

<sup>10</sup> S. Kraphol, A. Obermeier, *op. cit.*, pp. 2–3.



trol over the organisation. The relations with China were the most difficult, because ASEAN countries compete with it for foreign direct investments. This mistrust for China was expressed by the exclusion of Hong Kong and Taiwan from ASEAN+3.<sup>11</sup>

### 3. Innovation, knowledge and technology transfer in ASEAN+3

Science and technology is one of the most important ASEAN+3 cooperation areas. ASEAN Plus Three Cooperation Work Plan (2007–2017) pursues the following five goals in this area:

- “broaden and expand exchanges and cooperation between the scientific and technological communities in ASEAN Plus Three countries,
- cooperate in the fields of technology transfer and technology management on issues covering R&D and IPR management, technology commercialization, public-private sector collaboration, and science, technology and innovation indicators,
- promote research and technology development in areas of having potential for commercial applications such as biotechnology, food technology, new materials, microelectronics and information technology, marine resources, new and renewable energy, and space technology,
- strengthen cooperation in meteorology addressing climate information and prediction services, weather observations and climate change,
- promote the awareness of specific elements of community such as private sector and youth in science and technology through the participation in various activities such as ASEAN Food Conference, ASEAN Science and Technology Week, S&T Youth Camp and other relevant events”.<sup>12</sup>

Science and technology cooperation was also a significant part of the East Asian Vision Group Report. Participants encourage joint development of technology and transfer of technologies between countries of the region. The Vision Group also recommends that governments of East Asian countries should promote FDI flows and stronger strategic alliances in the region. The development of new technologies (IT – information technology, biotechnology, nano-technology, etc.) affects the development of new industries. It also creates new trade opportunities. “The Vision Group recommends:

- common efforts for the realization of a knowledge based economy and the establishment of a future-oriented economic structure through cooperation in these new technologies;

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<sup>11</sup> I. Bołoz, *Znaczenie ASEAN+3 dla gospodarki światowej i Unii Europejskiej*, Portal Spraw Zagranicznych psz.pl, [www.psz.pl/tekst-3039/Znaczenie-ASEAN%2B3-dla-gospodarki-swiatowej-i-Unii-Europejskiej](http://www.psz.pl/tekst-3039/Znaczenie-ASEAN%2B3-dla-gospodarki-swiatowej-i-Unii-Europejskiej) (accessed: 26.04.2012).

<sup>12</sup> *ASEAN Plus Three Cooperation Work Plan 2007–2017*, op. cit., pp. 17–18.

- the creation of a large pool of well-educated, adaptable and innovative human resources in the New Economy,
- the joint development of information technology to build telecommunications infrastructure and to provide greater access to the Internet at reduced costs to users”.<sup>13</sup>

One of the most important entities responsible for the FDI flows and technology diffusion between countries is transnational corporations. The biggest benefits from technology transfer through FDI flows are definitely achieved by the host countries of transnational corporations. For less developed countries that do not possess advanced technological capabilities, like scientists, laboratories, technology parks, etc., foreign knowledge and technology play a significant role. Gaining technology gives them a chance for social and economic development. The second important entity that supports the development of knowledge and technology is government, which determines the size of expenditures on different sectors of the economy.

**Table 1.** Expenditures on R&D as a percentage of GDP in ASEAN+3 countries in 1997–2008\*

Country	% of GDP expenditures											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
South Korea	2.48	2.34	2.25	2.30	2.47	2.40	2.49	2.68	2.79	3.01	3.21	3.36
Japan	2.87	3.00	3.02	3.04	3.12	3.17	3.20	3.17	3.33	3.40	3.44	3.45
China	0.64	0.65	0.76	0.90	0.95	1.07	1.13	1.23	1.32	1.39	1.40	1.47
Singapore	1.43	1.75	1.85	1.85	2.06	2.10	2.05	2.13	2.19	2.17	2.37	2.66
Malaysia	–	0.40	–	0.47	0.65	–	0.60	–	0.63	–	–	–
Philippines	–	–	–	–	–	0.14	0.13	–	0.11	–	0.11	–
Indonesia	–	–	–	0.07	0.05	–	–	–	–	–	–	–
Thailand	0.10	–	0.26	0.25	0.25	0.24	0.26	0.26	0.23	0.25	0.21	–
Brunei	–	–	–	–	–	0.2	0.2	0.4	–	–	–	–
Laos	–	–	–	–	–	0.04	–	–	–	–	–	–
Cambodia	–	–	–	–	–	0.05	–	–	–	–	–	–
Myanmar	0.06	0.03	0.04	0.11	0.07	0.16	–	–	–	–	–	–
Vietnam	–	–	–	–	–	0.19	–	–	–	–	–	–

\* No data for the following years.

Source: author’s own work based on *Research and Development Expenditure (% of GDP)*, the World Bank, <http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?page=1> (accessed: 28.04.2012).

From the figures published by the World Bank in the statement called “Research and Development Expenditure”, it follows that during 1997–2008 among the econ-

<sup>13</sup> ASEAN+3 Documents Series 1999–2004, *op. cit.*, pp. 48–49.

omies of ASEAN+3, the largest expenditures on R&D (as % of GDP) are incurred by Japan. The expenditures of each ASEAN+3 country are presented in Table 1. Because of the lack of data for most of the analysed countries during the whole period, only the results of the four most developed countries can be studied: China, Japan, the Republic of Korea and Singapore. At the same time, it can be assumed that the other countries of the ASEAN+3 do not allocate more in R&D than the economies already mentioned.<sup>14</sup>

The region of East Asia has a significant contribution to international R&D activities, which is demonstrated by the number of patent applications filed by each of the analysed countries. The total number of filed patents by countries of ASEAN+3 in 1997–2009 is presented in Table 2, which shows that the country with the largest share in the amount of reported patent applications during the whole period was Japan. In 2009, there were 19 993 patent applications filed in this country. The Republic of Korea was ranked the 2nd each year. In 2009 in the Republic of Korea 41 39 patents were applied. It was about ten times more than in 1997, when ASEAN+3 was created. The important role in this case was also played by China and Singapore. The value of the rest of the analysed countries in this period was marginal.<sup>15</sup>

Similar statistics are annually presented by WIPO (World Intellectual Property Organisation). This organisation provides data on patent applications in accordance with the international Patent Cooperation Treaty (PCT). The total number of patent applications filed in ASEAN+3 countries from 1997 to 2010 is presented in Table 3. As in the case of the data contained in Table 2, there is also a clear domination of Japan (32 149 patent applications filed in 2010 in accordance with the PCT system). Moreover, compared to other countries, China and the Republic of Korea achieved high results. Among the remaining countries, only Singapore and Malaysia counted in this statement. Cambodia was not included in the ranking.<sup>16</sup>

The statistics presented already confirm that associated countries improve their results in terms of innovation growth. It can be concluded that the ASEAN+3 cooperation gives measurable results. But it is worth considering its nature.

Asian cooperation is based on bilateral relations. This type of partnership allows members to keep high flexibility. An example of bilateral relations in Asia can be an increasing number of free trade agreements signed between two partners (countries), like between ASEAN and China in 2010. It can be expected that in the near future a bigger regional structure will be created – Free Trade Area including all ASEAN+3 members. Therefore, this type of regional integration is different from the processes taking places in Europe or Latin America, where important decisions and actions

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<sup>14</sup> *Research and Development Expenditure (% of GDP)*, the World Bank, <http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?page=1> (accessed: 28.04.2012).

<sup>15</sup> *EPO Annual Report*, European Patent Office, 1997–2010, [www.epo.org/service-support/publications/general-information/annual-reports.html](http://www.epo.org/service-support/publications/general-information/annual-reports.html) (accessed: 28.04.2012).

<sup>16</sup> *PCT Yearly Reviews*, World Intellectual Property Organisation (WIPO), 1997–2010, [www.wipo.int/ipstats/en/statistics/pct/](http://www.wipo.int/ipstats/en/statistics/pct/) (accessed: 28.04.2012).

**Table 2.** The number of patent applications filed by ASEAN+3 countries in 1997–2009\*

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Korea	487	493	582	959	1 165	1 408	2 075	2 871	3 853	4 595	4 934	4 346	4 139
Japan	12 856	13 813	14 617	17 124	19 845	15 912	18 534	20 584	21 461	22 144	22 887	23 081	19 993
China	39	49	65	130	156	203	334	406	538	719	1 145	1 510	1 631
Singapore	27	30	49	85	91	112	128	134	110	223	249	282	264
Malaysia	6	7	3	9	17	14	24	31	27	29	18	29	35
Philippines	2	3	–	1	1	–	3	2	3	2	1	6	3
Indonesia	1	1	–	5	–	9	2	3	3	3	2	–	1
Thailand	–	3	6	15	6	7	7	6	14	14	7	15	12
Brunei	–	–	–	–	–	–	–	–	2	–	3	6	5
Vietnam	–	–	–	–	–	–	–	–	–	–	–	2	1

\* No data for Laos, Cambodia and Myanmar.

Source: author's own work based on *EPO Annual Report*, European Patent Office, 1997–2010, [www.epo.org/service-support/publications/general-information/annual-reports.html](http://www.epo.org/service-support/publications/general-information/annual-reports.html) (accessed: 28.04.2012).

**Table 3.** The number of patent applications according to PCT system filed in the ASEAN+3 countries in 1997–2010\*

Country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
South Korea	306	510	871	1578	2 319	2 519	2 941	3 549	46 86	5 945	7 064	7 899	8 035	9 669
Japan	4966	6103	7473	9574	11 911	14 060	17 413	20 267	24 870	27 025	27 743	28 760	29 802	32 149
China	167	345	276	780	1 729	1 016	1 299	1 707	25 03	3 742	5 455	6 120	7 900	12 296
Singapore	81	125	168	222	289	330	283	433	450	474	519	586	593	641
Malaysia	2	4	5	5	18	18	31	45	34	61	110	206	224	350
Philippines	3	1	1	–	9	20	21	11	26	24	17	13	21	14
Indonesia	4	5	10	9	6	16	2	6	8	8	9	10	7	16
Thailand	2	4	3	8	3	9	9	12	10	11	6	17	20	72
Brunei	–	–	–	–	–	1	–	–	7	1	–	–	–	–
Laos	–	–	–	–	–	–	–	–	–	–	–	–	–	7
Myanmar	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Vietnam	–	4	–	1	–	2	7	2	–	11	6	6	5	9

\* No data for Cambodia.

Source: author's own work based on *PCT Yearly Reviews*, World Intellectual Property Organisation (WIPO), 1997–2010, [www.wipo.int/ipstats/en/statistics/pct/](http://www.wipo.int/ipstats/en/statistics/pct/) (accessed: 28.04.2012).

were dictated by the most powerful countries. The next members join them believing that integration provides an opportunity for a faster economic growth.<sup>17</sup>

The cooperation in improving the regional innovation in Asia has also a bilateral character. For instance, China–ASEAN Joint Science and Technology Committee was established in 1994. Under the guidance of the joint committee, the Chinese Ministry of Science and Technology and the ASEAN Committee on Science and Technology conducted a lot of cooperation programmes, including “international science and technology cooperation forum on new and renewable energy development and utilization; training course on solar system technology and product application; training course on hybrid rice technology; international science and technology cooperation forum on solar energy development and utilization”,<sup>18</sup> etc. One of the examples of the partnership between China and ASEAN is the Agriculture Cooperation Demonstration Zone, which was built in Guangxi Baise National Agricultural Science and Technology Park in 2006. Since then, Baise National Agricultural Science and Technology Park has been sponsoring ASEAN-oriented training courses on subtropical fruit trees, the China–ASEAN forum on modern agricultural development and other science and technology exchange programmes every year, and trained a group of agricultural technicians and administrators for ASEAN countries.<sup>19</sup> Similar agreements have been drawn up by Japan and Korea. In 2012 Japan signed with ASEAN an agreement on intellectual property in the fields of patents, trademarks, etc. There are a lot of activities planned to be implemented next year, for instance: “the conduct of a study on successful cases of Japanese SMEs in IP commercialization in the creative industry applicable to ASEAN, a workshop on the establishment of IT infrastructure to share dossier information on patent examination”.<sup>20</sup>

A different strategy is realised by the European Union, where nowadays EU budget transfers play a significant role in promoting innovation. Moreover, in 2010 “Europe 2020 strategy: Flagship Initiative. Innovation Union” was adopted. With over thirty action points, the Innovation Union aims to improve conditions and access to finance for research and innovation in Europe, to ensure that innovative ideas can be turned into products and services that create growth and jobs.<sup>21</sup>

We need to wait a couple of years to see which strategy is more efficient. One thing is certain: nowadays the main goal for each country is to develop economy by improving innovation. It allows increasing the amount of international trade and capital flows.

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<sup>17</sup> B. Skulska, Proces integracji gospodarczej Chin z krajami ASEAN, *Studia Ekonomiczne* 2010, nr 4 (LXVII) 2010, pp. 387–388.

<sup>18</sup> H. Shan, *China–ASEAN Cooperation: 1991–2011*, [http://cn-ph.china.org.cn/2012-02/27/content\\_4837848.htm](http://cn-ph.china.org.cn/2012-02/27/content_4837848.htm) (accessed: 02.08.2012).

<sup>19</sup> *Ibidem*.

<sup>20</sup> *ASEAN–Japan Signed Agreement to Further Cooperate on Intellectual Property*, [www.asean-sec.org/27064.php](http://www.asean-sec.org/27064.php) (accessed: 03.08.2012).

<sup>21</sup> *Innovation Union, Turning Ideas into Jobs, Green Growth and Social Progress*, the European Commission, [http://ec.europa.eu/research/innovation-union/index\\_en.cfm](http://ec.europa.eu/research/innovation-union/index_en.cfm) (accessed: 04.08.2012).

## 4. Conclusions

One of the most important reasons for ASEAN's success in the last decade was the cooperation with the most powerful economies in Asia: China, Japan and the Republic of Korea. Without their support, ASEAN mechanisms would have been insufficient during the Asian financial crisis in 1997. Besides, the regional integration makes ASEAN participants much more attractive for economic partners and now, it is much more profitable to be a member of ASEAN than to be alone.

During the two stages of ASEAN+3 collaboration, lots of documents that set strategic goals which members want to achieve in various areas were created. The most important areas, which have a significant contribution to the development of each economy, are science, technology and innovation. ASEAN+3 countries decided to cooperate in the fields of technology transfer and technology management and also to promote R&D development. For now the only ASEAN country that makes an attempt to be an equal partner for "+3 countries" is Singapore. Other ASEAN members have not been economically strong enough yet to cooperate effectively in this area.

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## CHARAKTERYSTYKA WSPÓŁPRACY W RAMACH ASEAN+3 I JEJ WPŁYW NA POPRAWĘ KONKURENCYJNOŚCI REGIONU

**Streszczenie:** Głównym celem niniejszej pracy jest przedstawienie ASEAN+3 jako jednego z najważniejszych ugrupowań w regionie Azji. W artykule wskazane zostały główne przyczyny powołania ASEAN+3, a także jego największe dokonania, szanse oraz cele, jakie chcą osiągnąć jego członkowie w przyszłości. Autorka skupia szczególną uwagę na zagadnieniu współpracy w obszarze szeroko rozumianej nauki i technologii, prezentuje wytyczne zalecane w najważniejszych dokumentach opublikowanych na szczytach ASEAN+3. Autorka przedstawia także analizę wielkości wydatków na B+R w krajach członkowskich oraz porównanie ilości zgłaszanych w nich corocznie patentów od 1997 roku.

**Słowa kluczowe:** ASEAN+3, innowacje, transfer wiedzy i technologii.