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## WHY ARE ASIAN ECONOMIES COMPETITIVE? EXAMPLE OF JAPAN AND CHINA

**Summary:** The article presents the results of evaluation of the competitiveness of the two economies: Japanese and Chinese, giving a list of common elements and differences deciding about the competitiveness of the two economies. It indicates which points are weak and which are strong in both cases, pointing at areas which decide that in case of the analysis of both economies there are long lasting potentials for keeping or increasing the position on international ranking lists. Both economies are considered to be open in limited way to trade and FDI inflows.

**Keywords:** stage of development, driving factors, competitiveness, current account, accumulation of reserves.

#### 1. Introduction

The two economies Japan and China are considered to be competitive. Japan leads the global competitiveness rankings with a high position among the first ten of the best states, while China is placed among the first thirty economies. Both economies enjoy a surplus on their current account and cumulate currency reserves. The article is aimed at answering the question: what are common elements in the economic strategies of these two economies? Is competitiveness in both cases shaped by the same or similar conditions? What are the differences between them?

The article is comprised of three merit points. The first states what decides about competitiveness in different stages of development and shows at which particular stages our two economies are, on which the research is focused on. The second presents closer the reasons explaining why the Japanese economy is competitive. The next part presents similar characteristics for China as those presented in the former section for Japan. Finally, there are summary and conclusions.

# 2. What decides about competitiveness in different stages of development?

Japan and China represent different stages of development. The analysis of features decisive of their competitiveness indicates the differences as well as common elements influencing enhancement of their competitiveness. Japan is a highly

developed economy. Its position in the group of the most developed economies of the world is leading. The 2007/2008+ crisis has changed the international ranking of competitiveness, though big changes did not reshuffle much the first ten group. This proves that those economies are strong enough to overcome such turbulences, but much better solution would be to eliminate downturns from the world economic cycles. At this stage of development, the downturns can be supportive in eliminating some of the weaknesses.

Returning to the position of Japan, its economy is placed in 6th position in the ranking made for 2010/2011, after Switzerland (1), Sweden (4), Singapore (3), US (2), and finally Germany (5). Figures in brackets indicate which position the countries enjoyed in the previous report. Switzerland did not change its position in ranking, Sweden is second and was fourth, Singapore was third and stayed with that position. The US lost from second position to fourth, Germany did not change its position.

The list of economies which are ranked before China is longer. China is in twenty seventh position, while it was the 29th position in the previous report. Both economies climbed up in the rankings by two countries. Is this trend temporary or it marks a long lasting perspective?

Contents	Global competitiveness Report	Freedom Index	Human Development Index	Innovativeness Index	Import of FDI <sup>x</sup>	Export of FDI <sup>y</sup>
Japan	6↑	20↓	11↑	1→	2.2/4.1↑	11.3/13.9↑
China	27 ↑	135↑	89↑	50/81↑	6.0/2.9↑	8.7/3.4↑

Table 1. Japan and China in international rankings

Sources: Reports: *Global Competitiveness Report 2010/2011*, World Economic Forum, Geneva 2011, p. 15; World Freedom Index 2011, [in:] *Freedom in the World Report*, Washington, DC, New York 2011; Human Development Index 2010, [in:] *Human Development Report 2010*, UNDP, Geneva 2011; A new ranking of world most innovative centers 2009. Economic intelligence service, *The Economist*, 29 April 2009.

Differences are relatively big between the two economies. China (PRC) is an emerging market, while Japan belongs to the group of advanced developed economies, being also a member of OECD. Japan enjoys a trade surplus of 84.4 bn of USD, while Chinese surplus is twice as big as Japanese and amounts to 169.3 bn USD. Japan has a surplus of 194 billion USD on its current account, while China has 331.1 bn USD on its current account. In the case of Japan, the current account surplus is +2.9% of Japanese GDP, while in the case of China it is +4.1%. This share also indicates the development gap between the two economies. Both economies are characterized, despite the difference in the level of development, by low share of

<sup>&</sup>lt;sup>x</sup> World Investment Report. Transnational Corporations, Agricultural Production and Development, UN, New York, Geneva 2009, p. 257 (<sup>x</sup> share of FDI in formation of gross fixed capital and <sup>y</sup> share of FDI in GDP).

services in their GDP as well as deficit on their current account in service turnover. Nevertheless, this deficit is easily covered by creating surplus of the current account turnover of goods. Chinese currency reserves are estimated at USD 3.045 bn, while Japanese currency reserves are estimated at USD 1.136 bn.

What is the main difference between the two economies? As it was mentioned, Japan is at the highest, third level of development, at which further development (rate of growth) is defined mainly by innovativeness, and to a minor extent by availability of the production factors or growth of effectiveness. The first stage of development is determined by basic requirements, which embrace: institutions, infrastructure, macroeconomic environment, health, and primary education. The salaries at this stage of development are below USD 2000. Basic requirements play an important role in increasing rate of growth, their weight is around 60%, while 40% is ascribed to efficiency driven factors and 20% to innovation driven ones. Both of the analyzed economies have surpassed that stage of growth.

At the second stage of growth, driven by efficiency, an increasing role is played by factors which have impact on the level of productivity. In practice, this increases the role of higher education and training, goods market efficiency, labor market efficiency, finance market development, technological readiness, market size. The size of the market is not limited to national borders but to markets accessible by producers and exporters as well as importers located on the particular market. In this stage of development 35% of the weight in dynamics of development is ascribed to availability of the production factors, while 50% is resulted by efficiency enhancers and still 50% to innovativeness. This stage of development is achieved after a transitional period between stage one and two. At the transitional stage the wages are growing in comparison to the first stage and are estimated at USD 2000-3000. At the second stage they increase even more and are estimated between USD 3000-9000. With consecutive stages of development not only the level of incomes grows but also the range of incomes increases. China is at this level of development. The discrepancies are relatively wide here, especially between the eastern and western part of the country. The Western part has to catch up with the eastern cost which represents relatively higher level of development. The second and third stage of development are linked by a transitional stage from phase 2nd to 3rd. Wages in this transitional period grow further and spread between USD 9000-17000.

Japan is at the highest stage of development, at which growth is determined by innovation and sophistication factors. The weight of availability of factors in growth

<sup>&</sup>lt;sup>1</sup> Economic and financial indicators, *The Economist*, 16 April 2011. p. 94; JETRO's official website, http://www.tradingeconomics.com/japan/trade-in-services-percent-of-gdp-wb-data.html (date of access: 23.04. 2011).

<sup>&</sup>lt;sup>2</sup> Gold & Foreign Exchange Reserves, People's Bank of China, http://www.pbc.gov.cn/publish/html/2011s09.htm (date of access: 13.05.2011).

<sup>&</sup>lt;sup>3</sup> International Reserves/Foreign Currency Liquidity, The Ministry of Finance of Japan, http://www.mof.go.jp/english/international\_policy/reference/official\_reserve\_assets/index.htm(date of access: 30.03.2011).

is limited to 5%, efficiency determines *ca* 10% of growth, while 30% of the growth is driven by innovation. Salaries at this stage of development reach their highest level, overpassing USD 17000. This phase of development is driven by business sophistication and innovations.

Difference in development phase have an impact on the rate of growth in the two economies: Japanese and PRC.<sup>4</sup> The first one has reached relatively high position in the productivity, which means that the rate of growth is determined by two other factors: efficiency and innovativeness. The first of the states has reached much higher level of development than the PRC. This can be illustrated by the presented statistics. Japan and its competitiveness are mainly built upon steady and permanent increases of productivity in the production sector, while relatively and unexpectedly low rates of growth of productivity in services.<sup>5</sup> Till 1985 the Japanese Yen was undervalued, but after that period it was significantly overvalued, which became a problem for the economy especially after 1995.<sup>6</sup> The analysis of Dekle and Fukao shows that the exchange rate between the USD and Yen came to equilibrium in the middle of the first decade of the twenty first century, namely in years 2003-2004. Things have changed dramatically again with the fall of the value of the USD exchange rate.

In the case of China the situation is different. The rate of growth in an emerging economy is stimulated strongly in first phases of development by increases of the productivity in the manufacturing sector. In this economy we can find the best practical illustration to the Balassa-Samuelson effect, where the value of the exchange rate goes true a process of strong appreciation, caused by increases of productivity. At the same time, the Chinese currency exchange rate is strongly undervalued. Chinese economy grows faster than the Japanese economy as the stage of development in Japan is stimulated by quality changes of the structure of the economy as well as quality changes in the production factors and their use. In China the economic growth is still strongly stimulated by quantity factors, which continuously in this stage of development gives high rates of growth.<sup>7</sup> The replacement of quantitative elements of growth stimulus by qualitative ones will result in lowering the rate of growth and will bring the economy in question to the sustainable conditions of growth.<sup>8</sup>

The reserves and potential to increase the productivity rate in the case of Chinese economy are relatively big in comparison with Japan. The Chinese economy is making use of the simple productivity reserves, while Japan with a higher stage of

<sup>&</sup>lt;sup>4</sup> P. Krugman, The myth of Asia's miracle 3, Foreign Affairs 1994, Nov./Dec.

<sup>&</sup>lt;sup>5</sup> R. Dekle, K. Fukao, *The Japan-US Exchange Rate Productivity, and Competitiveness of Japanese Industries*, Institute of Economic Research, Hitotsubashi University, Global COE Hi-Stat Discussion Paper Series No 08-047.

<sup>&</sup>lt;sup>6</sup> Ibidem.

<sup>&</sup>lt;sup>7</sup> J. Mauldin, China productivity miracle, *New York Times*, 17 July 2004.

<sup>&</sup>lt;sup>8</sup> China's Productivity Performance and Its Impact on Poverty in Transition Period, 2003, Background Paper prepared for 2004 World Employment Report of ILO, by Center for the Study of Living Standards, CSLS, Ottawa, Ontario 2004.

development is making use of compound productivity reserves. In both cases the rate of growth can be still increased by use of mentioned earlier factors. Jump from one stage to another, the higher one is possible but it leaves the existing reserves unutilized and creates conditions to utilize reserves available at higher levels of development. This finding shows that acceleration of growth is always possible but skipping some of the consecutive stages of development slows down the use of reserves available at each stage. The use of these reserves is necessary as otherwise the economy will face productivity losses and in general more costly and less productive growth rates.

Currently part of the competitiveness of the two economies (similarly as in the rest of the world) has been achieved by low values of the dollar, towards which the value of each currency is weighed. This results from the fact that in most cases the appreciation of national currencies is slower in comparison with the real value changes of the exchange rates. Such a situation takes place especially in conditions when devaluation of the "basic" currency has a strong impact on sales of the exporter whose currency should be accordingly appreciated.

#### 3. Japan and its competitiveness

Japan is ranked as the sixth competitive world economy and shows improvement in the ranking lists in comparison to the last two reports on Global Competitiveness. This position is achieved in the total of 133, which additionally increases the value of such international comparisons which are prepared according to the same methodology. Japan has 127.2 million population. The Japanese GDP in the USD is 5,068.1 bn, while the GDP *per capita* is relatively high and reaches USD 39,731. The share of Japanese market in the world consumer market is also relatively high as for a single economy, reaching 6.0% in PPP.

The rate of growth of GDP in the Japanese economy is growing, nevertheless the rate of growth since 1997/1998 is lower than in remaining advanced economies. This is resulted by three relatively big turbulences causing serious slowdowns in the Japanese economy. This was the slowdown caused by the Asian currency crisis in 1997/1998, a depression on the turn of centuries, depression caused by the financial crisis 2007/2008. There are also some signs that the Japanese economy is approaching a new slowdown in 2011. Japanese economy is strongly burdened by huge budget deficit (–7.9% of GDP). Continuous budget deficit results in huge public debt which reaches 180% of GDP. At the same time, the Japanese interest rate is one of the

<sup>&</sup>lt;sup>9</sup> D. Sourie, *Productivity in China Twice as Good as India*, PTI, New York 2006.

<sup>&</sup>lt;sup>10</sup> P. Krugman, *The Great Unraveling Loosing our Way in the New Century*, WW. Northon & Company, 2003.

<sup>&</sup>lt;sup>11</sup> C.A. Holz, *Measuring Chinese Productivity Growth 1952-2005*, Hong Kong University of Sciences & Technology, 2006.

lowest in the OECD economies. Practice shows that low interest rate stimulates the growth of budget deficit. This was so in all the cases in the European economies, when they were preparing to create EMU in the late 1990s. Low interest makes credit costs attractive but this does not mean that investors drawing credits invest at the same time in the national economy, which offers credits with low interest.

## GDP (PPP) per capita (int'l \$), 1980-2009

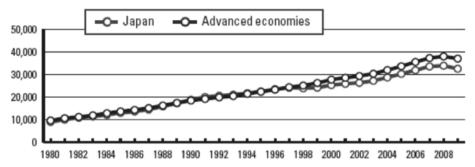


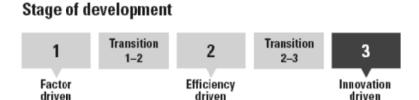
Figure 1. GDP per capita in Japan on the background of advanced economies

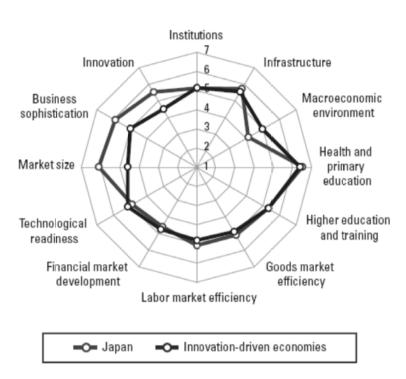
Source: Global Competitiveness Report 2010/2011, World Economic Forum, Geneva 2011, p. 196.

Comparison of the Japanese economy with remaining advanced economies shows that the macroeconomic environment in Japan departs from the average level in countries representing a similar level of development. This is caused by a lack of application of the convergence criteria mainly for fiscal policy, which are applied in Europe and also in Canadian as well as US policies. Slightly below the average there is development of financial markets in Japan as compared with other economies. Institutions as well as higher education and training are equally developed in the Japanese and remaining economies which are at third stage of development. Japan stays slightly below the average in the case of labor market development, technological readiness. Three consecutive features: labor market efficiency, goods efficiency, and health are slightly above the average. Big differences in favor of Japan can be found in the case of innovation, business sophistication, and market size. 12 Some of the opinions born doubts as Japan having relatively low external customs tariffs does not participate in numerous agreements on regional free trade, except the ASEAN+3, ASEAN+6, while other countries representing the same stage of development form free trade agreements within EU, EFTA, EEA and NAFTA. Japan at top of the ASEAN economies has signed free trade agreements with Switzerland, Mexico, Chile, and India.13

<sup>&</sup>lt;sup>12</sup> Global Competitiveness Report 2010/2011, World Economic Forum, Geneva 2011, p. 197.

<sup>&</sup>lt;sup>13</sup> Ministry of Foreign Affairs of Japan, official website, http://www.mofa.go.jp/policy/economy/fta/index.html (date of access: 23.04.2011).





**Figure 2.** Stage of development in Japan on the background of innovation driven economies Source: *Global Competitiveness Report 2010/2011*, World Economic Forum, Geneva 2011, p. 196.

The Japanese economy seems to be doing well in comparison with the remaining economies of this group, except for macrostabilization. Inflation is not high but the evaluation is taking into account the size of the budget deficit as well as the public debt. This field becomes also problematic for a number of developed economies like Greece, Spain, Ireland, Portugal, Italy. The stimulation policies applied in most of the developed economies have revealed the fragility of the budget consolidation policies, which were practiced earlier. Japan suffers from a relatively small inflow of FDI.

The ten features of the Japanese economy, which are mentioned by business as discouraging their activities embrace: policy instability, tax rates, tax regulations,

inefficient government bureaucracy, government instability, restrictive labor regulations, access to financing, inadequate supply of infrastructure, inflation, poor work ethic.<sup>14</sup> Japanese investments were financed from forced savings.

### 4. China and its competitiveness

China is expected to catch up with the biggest economic powers of the world: the US, EU, and Japan. Most of the prognoses for coming decades indicate such vision. Prospects of this type are possible but difficult to achieve. The Chinese economy has the potential although there are numerous areas which have to change, upgrade, become more effective and innovative. The Chinese potential can be ascribed to the availability of labor force. Nevertheless, this labor force is inadequately supplied all over the Chinese market. Moreover, the quality of labor differs, which is followed by productivity and low ethics. Part of the Chinese competitivess comes from the underpayment for labor as well as from savings on socials costs of the labor (insurance, pension system, health expenses, etc.). Such sources of competitiveness are not long-lasting but very temporary. Well qualified and effective labor has to be paid well and requires all social expenditures. This feature of competitiveness has its end.

China has 1,345.8 million population. GDP of this country is USD 4,909.0 billion. GDP *per capita* in China is USD 3,678, which matches the indicators shown for consecutive stages of development. The GDP measured in purchasing power parity (PPP) deducted as share of the world total is 12.52%. All of those figures show the potential of the Chinese economy. Moreover, those figures seen in the longer perspective, retrospectively and prospectively, indicate that the role of the Chinese economy in the world is on the increase.

The figure indicated the dynamics of GDP in purchasing power parity, which is viewed against the group of Asian developing economies. The accelerated rate of growth is being achieved by China after 1996. The 2007/2008+ crisis has indicated that China, similarly to remaining emerging markets spread all over the world, became an important consumption market, which had a positive impact on both length as well as depth of the crisis. In other words, the crisis would have been deeper and longer if not the potential of consumption in emerging world. China with its GDP in PPP creates more than 1/10 of the world consumption capacity.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup> Global Competitiveness Report 2010/2011, op. cit., p. 197.

<sup>&</sup>lt;sup>15</sup> Does it matter if China catches up to the US?, http://www.businessweek.com/magazine/content/04 49/b3911413.htm (date of access: 23.04.2011).

<sup>&</sup>lt;sup>16</sup> Global Competitiveness Report 2010/2011, op. cit., p. 128.

<sup>&</sup>lt;sup>17</sup> K. Kłosiński (ed.), Chiny – Indie. Ekonomiczne skutki rozwoju, KUL, Lublin 2008, pp. 151-162.

## GDP (PPP) per capita (int'l \$), 1980-2009

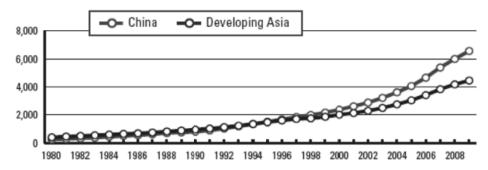


Figure 3. GDP per capita in China on the background of developing Asian economies

Source: Global Competitiveness Report 2010/2011, Geneva 2010, p. 128.

How does the Chinese economy look like in details? Where can its advantages and disadvantages be found? *The Global Competitiveness Report* indicates that in numerous cases the Chinese economy is performing better than the remaining economies belonging to the group of emerging markets and those economies which are considered to be at the second stage of development. All the characteristics of China are studied against the average for the group of states in this phase of development. There is only one feature which is represented at the same level as the average for the whole group, which is: higher education and training. Again one feature is below the group average, which is technological readiness. Still one feature, financial market development, is only slightly above the average for the group. The remaining nine are above the average. Nevertheless, if one compares them with the results given for Japan, the needs to change and upgrade are still big.

Ten the most problematic areas in the Chinese economy embrace the following: access to financing, policy instability, corruption, inefficient government, inflation, tax regulations, inadequate supply of infrastructure, inadequately educated workforce, tax rates, poor work ethic in national labor.<sup>18</sup>

The presented data shows that China has a potential and there are areas the changing of which according to the world economy requirements will stimulate growth in the nearest future. The economy seems to be still strongly protective as far as external economic relations are concerned. <sup>19</sup> It takes a long time to start the business in China and the procedures are complicated. The market is protected against the FDI inflows. <sup>20</sup>

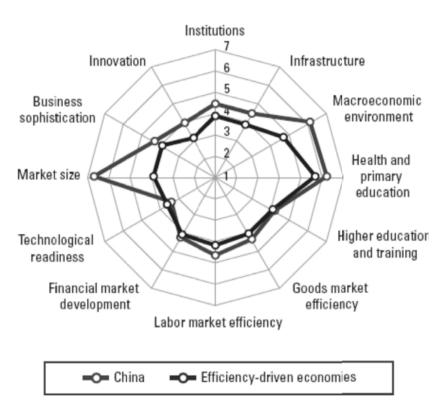
<sup>&</sup>lt;sup>18</sup> Global Competitiveness Report 2010/2011, op. cit., p. 129.

<sup>&</sup>lt;sup>19</sup> B.J. Naughton, *The Chinese Economy: Transition and Growth*, MIT Press, 2007, pp. 104, 375.

<sup>&</sup>lt;sup>20</sup> R. Guo, *The Introduction to the Chinese Economy. The Driving Forces Behind Modern Day China*, John Wiley & Sons (Asia), Singapore 2010, p. 133.

## Stage of development





**Figure 4.** Stage of development in China on the background of efficiency driven economies Source: *Global Competitiveness Report 2010/2011*, Geneva 2010, p. 128.

The availability of latest technologies is scarce, number of internet users is relatively small, which is followed by narrow band internet and low level of high technology absorption by the companies. Chinese investments are financed from the surpluses of the current account (exports of goods) and FDI.

#### 5. Conclusions

Chinese and Japanese economies are both competitive, although there are certain differences in the reasons why they perform well on the "open market" conducting at the same time specific type of protectionists policies. The article shows which factors decide in the case of the two economies about their competitiveness. It indicates some common elements in this area (like manufacturing specialization and high efficiency in this field) or low effectiveness and competitiveness of banking systems and remaining services functioning on the two markets. At the same time, it also points at some differences among the two markets (like sources to finance development of manufacturing, different levels of development). Crucial finding of this article can be ascribed to stimulation of competitiveness of the two economies resulted from low value of the dollar exchange rate, which makes remaining currencies less valued in comparison to the US dollar, when they do not appreciate accordingly to the loss value of their central currency benchmark.

Both economies have big reserves of completion enhancers, which can be used to create their competitiveness potentials. In Japan those enhancers embrace efficiency measures in services and actions to consolidate the budget and reduce the public debt. The economy should work more on increasing competitiveness in services and their effectiveness. In China, which represents a lower level of development than Japan, the reserves are much greater, which means that the period of their exploitation will be longer. Both states have to stimulate their economies wisely, using the hints from experience deriving from other economies. In both cases the economies seem to be protective towards external relations, which concerns trade in goods and services as well as FDI flows. Both of the economies (the same as the German economy) enjoy a surplus in goods turnover, which is confronted with a deficit in services turnover. Services in both of the economies are not only supplied domestically in limited quantities but also the imports are limited and they do not stimulate competition of the service market.

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#### DLACZEGO GOSPODARKI AZJI SĄ KONKURENCYJNE? PRZYKŁAD JAPONII I CHIN

**Streszczenie:** Artykuł przedstawia efekty ocen konkurencyjności dwóch gospodarek: japońskiej i chińskiej, podając listę wspólnych elementów i różnic, decydujących o konkurencyjności obu gospodarek, które znajdują się na różnych etapach swojego rozwoju. Wylicza się tu słabości i zalety obu gospodarek. Obie gospodarki ocenia się jako otwarte tylko w ograniczonym stopniu na wymianę handlową i transfery BIZ.