# ВОСТОЧНОАЗИАТСКИЕ «ТИГРЫ»: ФАКТОРЫ И ТЕНДЕНЦИИ ЭКОНОМИЧЕСКОГО ЧУДА

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### EAST ASIAN TIGERS: FACTORS AND TRENDS OF THE ECONOMIC MIRACLE

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### **Summary**

Economic miracles mean countries which could achieve economic progress from poor countries till post-industrial countries. Countries who could register strong economic growth during the second half of the last century were called Asian Tigers: Singapore, South Korea, Hong Kong and Taiwan. These countries used to implement policies which are considerably different from recommended by west economic gurus.

The purpose of the research is considering the process of developing Asian Tigers and identifying factors that contributed to the success of their economic growth. The article identifies factors of four Asian Tigers' success, analyzes rising trends of important macroeconomic indicators, and defines similarities and differences between politics of these countries.

**Keywords**: East Asian Tigers, Republic of Korea, Singapore, Taiwan, Hong Kong, economic miracle, development factors, innovation factor.

## Factors and conditions for the economic growth of countries-«tigers»

From the beginning, it should be noted that in the last century only four countries did not have any mineral reserves, they only had a cheap labor [1]. During the second half of the last century governments used hard working low-cost labors for working in rice fields, thanks to the raising popularity of Confucianism, they could make people study hard, work hard and to be disciplined. That's why they could establish the Far East work ethic. Far East work ethic can be described, as a set of diligence, stress management, flexibility, result-focused mind, respect out for elders, and focus on families' values, educational culture and strong social dependency. Also all countries used post-Confucianism model which implies a lot of achievements such as: rapid population growth, high level of education and education outcomes of the students, national achievements in scientific, engineering, mathematics and IT, rapid growth of scientific research and etc. [2].

The most important factor affecting the unprecedented growth of the Asian tigers' economy was the innovation factor. At the second half of the last century following Japan and USA our Asian tigers countries have relied on the latest achievements of scientific progress, their industrial commerce and active export all over the world [3]. "Made in Korea", "Made in Singapore" — meant impeccable product quality, high standard of living and industrial style. The competitiveness of products exported by "tigers" were exceeded the quality of Chinese products and successfully competed with American and European products. Through the implementation of new technologies and qualitative changes in the structure of national production, giant corporations have emerged in East Asian countries. Then

these giant corporations have the status of transnational, producing a variety of high-tech products. As for the industry specifics of innovative production, priority is given to micro mechanical engineering, nanotechnology, medical and pharmacy industry, software development, robotics, electronics, biotechnology, renewable energy sources, etc. [4].

In addition to statistics and the wide popularity that these countries have acquired in the world economy due to their products and services, the innovative achievements of "tigers" are highly appreciated by the world expert agencies that publish ratings of the development of countries. Especially, the Bloomberg Agency published the Bloomberg Innovation Index 2018. For the first time in six years, the United States dropped out of the top 10. And South Korea and Singapore retained their places in the top three.

For the fifth year in a row, the Republic of Korea remains as a gold medalist in the Bloomberg ranking. Samsung Electronics, being the most expensive national company, for the 2000s received the second place in the number of patents in the US after IBM. According to Yeo Kiat Seng, a professor and assistant vice-rector at the Singapore University of Technology and Design, Singapore has always paid great attention to the education of its people, especially in STEM disciplines (STEM: Science, Technology, Engineering, and Mathematics). Singapore has a "strong commitment to funding R & D and innovation" [5].

As for Taiwan and Hong Kong, they also are included in the top-50 most innovative countries in the world. However, their role gradually decrease due to the presence of China in the ranking.

A fragment of the Ranking of the most innovative economies in the world is presented in table 1. For comparing the table shows not only Asian tigers' countries, but also a number of high developed countries of the world.

 $Tab.\ 1$  Asian Tigers countries in the Ranking of the most innovative countries in the world

Ranking	Country	Score (Max = 100)	Best performances
1	South Korea	89,3	R&D spending, number of granted patents, quantity of technology-intensive production
2	Sweden	84,7	Level of the development of information and communication technologies (ICT), quantity of technopoles and research centers.
3	Singapore	83,0	Development of education, development of financial services, attracting foreign investment to high-technology business environment.
4	Germany	82,5	Quality of products, quantity of Nobel Prize laureates at natural and technology sciences.
5	Switzerland	83,3	Amount of research and production in areas of micro mechanical engineering, nanotechnology, medical and pharmacy technologies and software development.
6	Japan	81,9	Development of robotics, electronics, micro mechanical engineering and machinery.
7	Finland	81,5	Public support for innovation, creation of a technology network, long-term investment in science, innovation and education.
11	USA	80,4	Development of the spectrum of innovative production.
37	HongKong	57,0	High-technology industrial production, higher technical education, technology-based services.

It should be pointed out that these countries had common resources and economic problems but it goes without saying that they used different solutions to the problems. For example, as to South Korea, government and business had close connection with each other, government encouraged import of raw materials and technologies for producing consumer goods, and they encouraged bank savings and investment. Thanks to conglomerates government could find way to increase GDP. On the other hand, Taiwan gave their preference to small companies, hoping it will helps to their economy to grow slowly but continually [1].

Therefore, it makes sense to consider each country individually.

### South Korea

At the beginning of the second part of the last century South Korea was one of the world's poorest countries with mostly rural economy. After Korea peninsula separation all steel, chemical, cement industries' factories were located in North part of peninsula, so only light industry and food industry were concentrated in South part. Government's only way out was to bet on industrial sector and strategy of export. A result of a new vision (strategy) was narrowing the gap between industrial and agrarian sectors of economy. Because of increases in the purchasing power of citizens demand for high-value goods had increased. Therefore, government had to change export aimed politic to self-reliance for reducing dependence from another countries. In those years services sector had grown rapidly [1]. As of 2018, South Korea was ranked on GDP (PPP) as 14<sup>th</sup> economy in the world, on GDP (nominal) as 12<sup>th</sup> place. As to GDP per capita, in 1963 it was about 100 USD, for almost 6 decades it grow till 31 000 USD (Fig. 1).

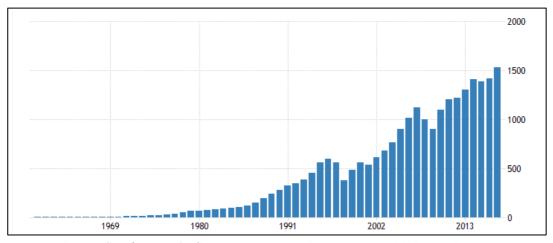


Fig. 1 – South Korea's GDP (PPP) growth in 1960-2017, billion dollars [6]

Nowadays South Korea's economy is based on producing consumer goods such as: electronics, cars, and textile and on heavy industry: shipbuilding and steel production. Republic of Korea is the world leader in producing consumer electronics. And service sector has emerged as the dominant in country's economy and is about two third of GDP [2].

In addition, let's consider the role played by Korean goods and technologies in Russia. In 1990s, during the period of transitional economic difficulties Korean trademarks determined Russian consumer preferences, especially those who lived in the Far East of Russia. Also, investment projects implemented with participation of the South Korean companies, firmly integrated into the economic history of Primorsky Region and its cities [7]. Indeed, let's even recall such popular and well-known South Korean products as cakes 'Choco-Pie', noodles 'Doshirak', 'Golden' mayonnaise, household

equipment and automotive parts of Korean industrial giants Samsung and LG. Some projects started in the 1990-2000s in Vladivostok are showing the Russian-Korean relations in the Primorsky Region in the field of business and investment, such as: construction of the Hyundai Vladivostok Business center, the establishment of a New Telephone Company, the rebirth of the 'Ocean' factory that works by South Korean technologies, sewing factories opened by Korean investors, the Russian-Korean industrial complex of the free economic zone 'Nakhodka', the construction of the 'Druzhba' village, the opening of the representation firm of the company "Mazda Sollers" in Vladivostok. It should be noted that Korean diaspora, which formed in Primorsky Region 140 years ago, is the most numerous and one of the most influential of the Asian national communities located in the territory of the region [8].

### Singapore

More than 100 years Singapore was British colony. At those time city-state was weak and under-developed. Citizens' major occupation was fishing and natural rubber production. In 60ss of the last century Singapore resigned from The British Empire and could get its own independence. But it's resulted in economic problems such as: food shortage, lack of mineral resources, poorly developed manufacture and unemployment. Government fundamentally changed politics of the country for involvement foreign investment [9].

As a result nowadays Singapore has one of the world's most open and clear, corruption-free economy. Its economy depends on export of household equipment, information technologies, pharmacy and financial service. Also it should be noted that State is World's third oil refining center. That's why GDP rapidly increased. In 2018 Singapore was ranked on GDP (PPP) as 37<sup>th</sup> place, on GDP (nominal) as 34<sup>th</sup> place, but on GDP per capita as 3<sup>rd</sup> place with 100 345 USD for a person (Fig. 2).

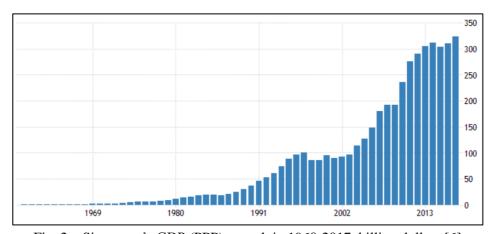


Fig. 2 – Singapore's GDP (PPP) growth in 1960-2017, billion dollars [6]

It turns out that transnational companies play an important role in country's economy. Success keys were geostrategic position on the crossroad of maritime routes from Europe, Asia, and liberal tax policies. Thanks to these factors, foreign direct investment also increased (Fig. 3).

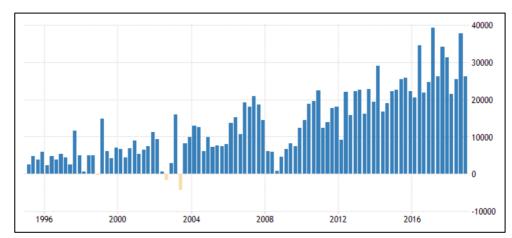


Fig. 3 – Singapore Foreign Direct Investment growth in 1960-2017, thousand dollars [6]

### Taiwan

In the last century Taiwan was ideal Japanese colony. Taiwan's government decided to raise productivity of economy for meet Japanese demand. Till 20ss development sugar industry has been pervasive in country's economy, later rice became largest export commodity. But after politics changes country started developing process: railways began to emerge, education system and mass media field developed rapidly. Economy had started to spring-up not fast but continually. After Japanese defeat in the World Second War Taiwan could get rid of Japan's dependence. Consequently, economy escalated from agrarian to industrial orientation. So by the beginning of 60ss Taiwan turned from world's poorest country into largest international investor. It is evident that good geopolitical conditions were very important [2].

These days inflation rate and unemployment level are low, balance of trade is positive, Taiwan was ranked on GDP (PPP) as 22<sup>nd</sup>, on GDP (nominal) as 20<sup>th</sup> place and its GDP per capita is about 53 000 USD. Taiwan is one of the largest capital-exporting countries (Fig. 4).

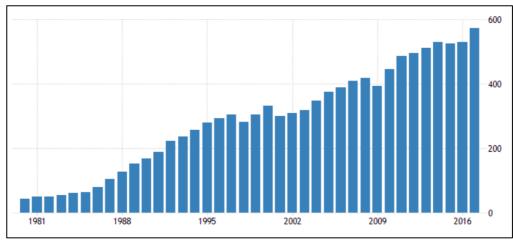


Fig. 4 – Taiwan's GDP (PPP) growth in 1960-2017, billion dollars [6]

Country maintains close investment relations with China, Thailand, Indonesia, Philippines, Malaysia and Vietnam. Taiwan is World's leader in producing yachts, shoes, sport clothes and equipment. Also tourism is well-developed so it plays an important role for country's economy. However, other than that, economy depends on imports of fuel, raw material and equipment.

### Hong Kong

Hong Kong started development from cotton spinning field and textile industry. Industrialization

was made possible thanks to small and medium-sized enterprises. In contrast to another Asian tigers who could make an unbelievable economic growth thanks to government, Hong Kong has accomplished the miracle thanks to local entrepreneurs, low taxes, free trading and weak labor regulations. Because of favorable economic climate and free commerce GDP rapidly grow and helped Hong Kong become one of the Asian Financial and Trade center [9].

Hong Kong does not have much fertile soil and does not have much resource so autonomy has to import most foods and commodities. Export is well developed, especially, export of electric cars, textile, clothes, shoes, watches, plastic, gemstones and others. On indicators of GDP Hong Kong is the richest city in China. Hong Kong's GDP per capita is more than 64 000 USD. This is important International financial and trade center (Fig. 5).

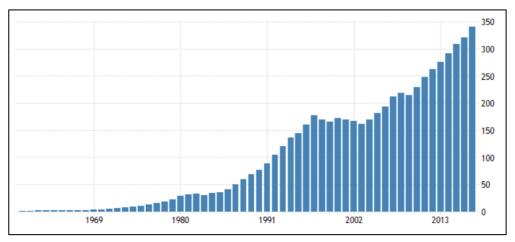


Fig. 5 – Hong Kong's GDP (PPP) growth in 1960-2017, billion dollars [6]

### Conclusion

Asian tigers are economic miracle in World's history. Undoubtedly, Asian tigers are great countries who could achieve such an amazing performances. Moreover, nobody would deny the fact that political, geography factors were one of success keys.

Tigers' development is characterized by number of common social-economics and cultural features and factors. However, each country has its own unique points, which contributed to rise competitiveness.

#### References

- 1. *Mischenko A.S.* Asian tigers and new challengers for theirs role. Creative Society Views. 2015. № 4. P. 39.
- 2. Asian "Tigers" [Electronic Resource]. Novosibirsk State University Website. Available at: http://old.nsu.ru/education/genecon/work/appendix/tigers.htm.
- 3. *Lazarev*, *G.I.*, *Krasova*, *E.V*. Research and development in China: scope and specifics of innovation process. Amazonia Investiga. 2018. № 7 (14), pp. 73-83.
- 4. Ranking of the most innovative countries in the world [Electronic Resource]. The World Only Website. Available at: https://theworldonly.org/rejting-innovatsionnyh-ekonomik-2018/.
- 5. Bloomberg 2018 Innovation Index [Electronic Resource]. The Bloomberg L.P. Website. Available at: https://www.bloomberg.com/news/articles/2018-01-22/south-korea-tops-global-innovation-ranking-again-as-u-s-falls.
- 6. Indicators of macroeconomics [Electronic Resource]. Trading Economics Website. Available at: https://tradingeconomics.com/south-korea/gdp.

- 7. *Сапунов А.В., Красова Е.В.* Историко-экономический обзор важнейших инвестиционных проектов между Россией и Республикой Кореей в Приморском крае // Территория новых возможностей. Вестник Владивостокского государственного университета экономики и сервиса. 2012. № 1 (14). С. 74-83.
- 8. Латкин A.П., Горбенкова E.В. Российско-южнокорейское деловое сотрудничество в приморском крае: из 1990-х в 2000-е. Владивосток, изд-во ВГУЭС, 2010. 228 с.
- 9. Урюпина Ю.О. Модель ускоренного экономического развития азиатских стран (экономическое чудо) // Территория инноваций. 2017. № 10 (14). С. 97-102.