

THE MIDDLE-INCOME TRAP

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Abstract

Middle-income trap has become a very popular narrative to explain the fact, that while it is relatively “easy” to catch up from low to middle-income level, it has been very hard and rare to emerge from the middle-income status into a highly developed economy. The question is, how to escape this trap? why some countries have been successful although the great majority has failed?

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Introduction

The spectacular development of some emerging economies in East-Asia, including that of China, drew the general attention to the possibilities and difficulties to overcome underdevelopment. Two new narratives emerged in recent years for the explanation of successes and failures: the middle-income trap as a possible explication of difficulties and the developmental state as a variety of capitalism that may lead to success. In this paper we try to introduce the different concepts about the nature and characteristics of the middle-income trap and to elaborate how the developmental state can serve to escape the middle-income trap.

Middle Income Trap: Most recent Narrative on the Key Question of Development

The very term *middle-income trap (MIT)* is supposed to be used first by *Gill - Kharas et al. (2007)* in a World Bank study on East Asia and since then, *Middle-income trap* has become a very widespread category in the most recent narrative on development.² According to them, “of 101 middle-income economies in 1960, only 13 became high income ones by 2008 – Equatorial Guinea, Greece, Hong Kong SAR, China, Ireland, Israel, Japan, Mauritius, Portugal, Puerto Rico, Republic of Korea, Singapore, Spain and Taiwan, China.” (*World Bank, 2012: 12*)

This narrative of *MIT* became very popular as a theoretical drafting of the special growth/development problem of developing countries, as well as a useful groundwork for policymakers to outline their economic strategy and preoccupations in middle-income countries. This term became popular particularly in the fallout of the global financial crisis. Ever since, the nature and risks of the middle-income trap have been widely discussed by economists, business leaders and leading politicians.

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² “In May 2015, a search of Google Scholar returned more than 3,000 articles including the term and about 300 articles with the term in the title.” (*Ghill – Kharas, 2015. ii.*)

Middle-income trap is a frequently used term in development studies/economics in order to describe the phenomenon that a lot of developing countries that have made significant progress in reducing extreme poverty and experience structural change and growth, but later, after having become middle-income economy, they face insurmountable obstacles to graduate into a high-income, developed country status.

Among the most important reasons of the middle-income trap we can list the following:

- wages/unit labour costs in manufacturing are rising and the surplus supply of labour dwindles since the reserves of rural-urban migration had exhausted;
- productivity growth slow down and neither skilled labour nor technology are available to accelerate again;
- there are no more possibilities to develop manufacturing and increase productivity through copying/importing technologies.

In the background of the above mentioned factors, some important institutional weaknesses may be found such as the lack of the necessary support of an adoptive and creative economy: social capital does not promote sustainable growth and does not create a healthy environment for technological development. Therefore, the middle-income trap may prevent the emergence of a knowledge economy that is the first and foremost precondition for becoming high-income/developed economy in the current world economic situation.

“Middle-income countries, it is argued, are squeezed between the low-wage poor-country competitors that dominate in mature industries and the rich-country innovators that dominate in industries undergoing rapid technological change. This is the challenge that confronts East Asian countries today, especially those in Southeast Asia. There is reason for optimism. The newly industrializing economies in East Asia successfully made this transition from middle income to rich, showing that such a transition is possible under the proper circumstances and the correct policies. And, within Asia, experience suggests that there is not such a sharp distinction between the domination of low-income countries in manufacturing and the domination of rich countries in the knowledge economy.” (*Ibid.* 5.)

In the 1980s and 1990s an augmented Solow growth model was emphasized by mainstream growth theories and by international financial organisations (such as the IMF and the World Bank) as well. According to this theory efficient physical and human capital accumulation were the necessary drivers of dynamic growth. “At the World Bank, this was operationalized by prescribing a focus on export-led manufacturing to take advantage of comparatively cheap labour, coupled with health and education programs to improve skills. The outward orientation would ensure investment was allocated based on internationally-set market prices, and improved skills would create growth with equity.” (*Gill – Kharas, 2015: 1.*) In the first years of the 21st century it became clear that this theory might have fit well with the situation of the low-income countries but it did not provided any guidance for the middle-income countries: labour intensive growth models didn’t offered any feasible strategy to catch-up with high income countries, especially because the developed countries, in the meantime, had entered into the age of knowledge-based economies.

In *Acemoglu's* and *Robinson's* seminal work (*Acemoglu – Robinson, 2012*) the key factors behind development are *inclusive economic institutions*³ and countries with *extractive economic institutions* are necessary failing behind.⁴ In this perception, however, there is a limited opportunity for macroeconomic development, relatively dynamic growth. The first example is that of the Soviet Union between 1928 and the mid-seventies: „Political and economic institutions were highly extractive, and markets were heavily constrained. Nevertheless, the Soviet Union was able to achieve rapid economic growth because it could use the power of the state to move resources from agriculture, where they were very inefficiently used, into industry. The second type of growth under extractive political institutions arises when the institutions permit the development of somewhat, even if not completely, inclusive economic institutions. Many societies with extractive political institutions will shy away from inclusive economic institutions because of fear of creative destruction. But the degree to which the elite manage to monopolize power varies across societies. In some, the position of the elite could be sufficiently secure that they may permit some moves toward inclusive economic institutions when they are fairly certain that this will not threaten their political power. Alternatively, the historical situation could be such as to endow an extractive political regime with rather inclusive economic institutions, which they decide not to block. These provide the second way in which growth can take place under extractive political institutions.” (*Acemoglu – Robinson, 2012: 92*)

Eichengreen and his co-authors provide a very simple, and extremely interesting and instructive definition: first they emphasise that “The rapid economic growth of so-called emerging markets is one of the leading storylines of our age and arguably the most important economic development affecting the world’s population in the first decade of the 21st century. It has lifted millions of households out of poverty. It has accounted for the vast majority of global growth in a period when the advanced countries have been economically challenged and financially troubled.” (*Eichengreen et al., 2013: 3*) An later on, answering a very simple question, we arrive to the definition of the middle-income trap: “For some time now the question on everyone’s mind has been how long this rapid growth can continue, in emerging markets in general and the group’s largest and most economically dynamic member, China, in particular. Attempts to answer that question have given rise to a literature on what is referred to, alternatively, as “growth slowdowns” and “the middle-income trap.” (*Ibid.*)

Middle-income trap: some empirical evidences

“Middle-income countries⁵, accounted for less than a fifth of the global economy (17 percent) even at the beginning of the 20th century. However, by 2017, their share had doubled to 35 percent. The share for lower middle income countries doubled from 4 percent in 2002 to 8 percent in 2017 while the share for upper middle income countries increased from 13 to 27

³ “Inclusive economic institutions, such as those in South Korea or in the United States, are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and that enable individuals to make the choices they wish. To be inclusive, economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract; it also must permit the entry of new businesses and allow people to choose their careers.” (*Acemoglu – Robinson, 2012: 74*)

⁴ “We call such institutions, which have opposite properties to those we call inclusive, extractive economic institutions—extractive because such institutions are designed to extract incomes and wealth from one subset of society to benefit a different subset.” (*Op. cit. 76*)

⁵ For fiscal year 2019, income groups according to the WB are as follows: low-income economies are defined as those with a GNI per capita of 995 USD or less in 2017; lower middle-income economies are those with a GNI per capita between \$996 and 3,895 USD; upper middle-income economies are those with a GNI per capita between USD 3,896 and 12,055 and high-income economies are those having a higher per capita GNI than 2,056 USD.

percent. High-income countries, currently home to fewer than one in five of the world's people, saw their share of global GDP fall from 83 percent to 64 percent. Economic growth in high-income countries remains below that of the rest of the world, so this share is likely to fall further. Low-income countries, which account for just nine percent of the world's population, produce just over half a percent of global GDP." (*World Bank, 2019*)

According to the above classification by the World Bank, in fiscal year 2017 there were 47 lower middle-income countries and 56 upper middle-income one while 34 countries were classified as low-income countries and not less than 81 as high-income ones. Empirical works suggest that the growth rate generally slows substantially at per capita GDP of 10 to 15 thousand USD. Growth slowdowns can often be attributed to the disappearance of factors that generate high growth during an initial phase of rapid development. The first stage of growth from low to middle income is based upon cheap labour force that had streamed from agriculture to industry (and, therefore, from the villages to the cities) and high rates of investment. According to a comprehensive World Bank study, there were 101 middle-income countries in the world economy as of 1960, and "only 13 had become high income by 2008: Equatorial Guinea; Greece; Hong Kong; China; Ireland; Israel; Japan; Mauritius; Portugal; Puerto Rico; South Korea; Singapore; Spain; and Taiwan, China. By contrast, although many countries in Latin America and the Middle East reached middle-income status as early as the 1960s and 1970s, a great majority of them have remained there ever since. In Latin America, for instance, income per capita relative to the United States fell almost continuously from 1960 to 2005, especially after the debt crises of the early 1980s. Likewise, economic growth in many Middle Eastern and North African countries has waned and given way to high unemployment..." (*Agénor – Canuto - Jelenic, 2012*)

According to an empirically well based opinion "slowdowns are still most likely when per capita GDP in year-2005 constant dollars reaches the \$15,000 range, the distribution of slowdowns is no longer as obviously uni-model. In fact, the new data point to the existence of two modes, one around \$15,000 and another around \$11,000." (*Eichengreen – Park and Shin, 2013*) Others define four income groups in the world economy: low-income below USD 2 000; lower-middle-income between USD 2 000 and 7 250; upper-middle-income between USD 7250 and 11 750 and high income beyond USD 11 750 (in 1990 PPP dollar terms). a country that becomes upper-middle-income (reaching USD 7 250 per capita income) has to attain an average growth rate of at least 3.5 percent per annum to reach USD 11 750, the high-income level threshold. "Avoiding the middle-income trap is, therefore, a question of how to grow fast enough so as to cross the lower-middle-income segment in at most 28 years, and the upper-middle-income segment in at most 14 years." (*Felipe – Abdon – Kumar, 2012*)

According to a most recent analysis by the World Bank, "The world's Middle Income Countries (MICs) are a diverse group by size, population, and income level. They are defined as lower middle-income economies - those with a GNI per capita between \$1,006 and \$3,955; and upper middle-income economies - those with a GNI per capita between \$3,956 and \$12,235 (2018). Middle income countries are home to five of the world's seven billion people and 73 percent of the world's poor people. At the same time, middle income countries represent about one third of global GDP and are major engines of global growth." (*World Bank, 2018*)

For the current 2019 fiscal year, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of \$995 or less in 2017; lower middle-income economies are those with a GNI per capita between \$996 and \$3,95; upper middle-income economies are those with a GNI per capita between \$3,96 and \$12,375; high-income

economies are those with a GNI per capita of \$12,376 or more.⁶ According to this listing, there are 10 low-income economies and 47 lower-middle income economies in the world economy.⁷ The WB lists 60 of its members in the group of *upper-middle income economies* and records 80 high-income economies. This classification/listing does not provide a solid starting point to estimate the number of countries potentially affected by the medium income trap.

According to the classification provided by *Felipe – Abdon – Kumar, 2012*, based on income data from 2010,⁸ 37 countries were always among the low-income countries, while 9 countries⁹ emerged from lower-middle income status to the higher-middle income group and 23 countries graduated from the middle-income to high income status: 14 out of them are (West-)European and there are 5 East-Asian countries as well. It is very interesting to realise that the Republic of Korea and Taipei-China graduated in the covered sixty years from a low-middle income country to a high-income country.¹⁰ Because of historical reasons, we may consider four out of the five East-Asian countries (that is the *Republic of Korea, Taipei-China, Hong Kong* and *Singapore*) as those who avoided the middle-income trap.

The creators of the very concept of *middle-income trap* have summarized and affirmed the research experiences of ten years as follows:

- middle-income trap was not the expression of a generalised development theory, just the contrary: it was the expression of *the lack of an adequate category (and growth theory) for middle-income (developing) countries*. In fact, it was a “trap of ignorance”: the expression of inadequacy of the Solow growth model for addressing the development problems of the middle income (developing) countries
- the very term *trap* expressed the fact that past success/growth performance did not provide guarantee of future success, that is keeping extended growth dynamism for the future as well.
- “Third, the trap was a device to spark a discussion of policy choices in middle-income countries. It was not intended to be a statement of determinism that low growth rates were a matter of destiny for middle-income countries. (...) It was not a statement that middle-income countries are more likely to be trapped than other countries. In fact, we were silent on low-income countries and high-income countries because the focus of our attention was on policy making in middle-income countries. In retrospect, it would have been helpful to clarify this.” (*Gill – Kharas, 2015: 4.*)

How to escape the middle-income trap?

“To avoid middle-income trap” has become the adequate expression of being a successful developing country and being able to catch up with developed economies. “The “middle-income trap” is the phenomenon of hitherto rapidly growing economies stagnating at middle-income levels and failing to graduate into the ranks of high-income countries. (...) several East Asian economies have in recent decades provided a template for »success«: continuing to grow rapidly after attaining middle-income status, and thereby attaining per capita income levels

⁶ See: *World Bank (2019): World Bank Country and Lending Groups – Country Classification*. Source: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>. Downloaded: 18/07/2019

⁷ The World Bank has 189 member countries.

⁸ The sample covered 124 countries having continuous data sets from 1950 to 2010.

⁹ China, Malaysia, Republic of Korea, Taipei–China, Thailand, Bulgaria, Turkey, Costa Rica and Oman.

¹⁰ *Singapore* and *Hong Kong, China* have certainly realised the same spectacular development (that is, they also graduated two levels in the given period), but Malaysia did not exist in 1950 and Hong Kong was not considered as an independent entity.

comparable to advanced countries.” (Aiyar, Duval, Puy, Wu, and Zhang, 2013) Developing countries, after having achieved a middle-income level, find themselves in an extremely difficult situation: there are “squeezed between low-wage producers and highly skilled and fast-moving innovators. Cost advantages in manufactured exports that once drove growth start to decline in comparison with other lower-wage countries. Caught between these two groups, many middle-income countries are without a viable high-growth strategy. They are faced with new challenges, including social cohesion, a large pool of young people in search of jobs, as well as millions who still live in misery and poverty, particularly in lagging regions.” (Ghani, 2013)

The above idea corresponds to traditional growth theories: countries in the middle-income status tend to face an important productivity slowdown because of the loss of previous competitive advantages in basic manufacturing that had been based on low wages. “In other words, cost advantages in manufactured exports that once propelled growth start to decline compared to other lower-wage economies. Dividends in terms of economic growth originating from a sectoral shift from agriculture to manufacturing (...) and gains from technology adjustment and adoption start to wane. Wages increase and consequently, competitiveness is undermined against a backdrop of a slow rise in productivity.” (Rachman – Bari, 2016:4) All of this is in line with *Lewis development model*. Since most of the middle-income developing economies had realised the previous rapid growth performance basically on low-wage and low-skilled labour force, therefore, this development was based on the extended production of low value added manufacturing. When labour reserves are exhausted, the loose of momentum is inevitable since wage increases reduce productivity and competitiveness. Middle-income countries have been caught up in between low-wage poor-country competitors that successful and competitive in old fashioned manufacturing industries and the rich-country that are innovators and, therefore dominate those industries in which rapid technological changes are undergoing.

Although quite many countries are unfortunately captured in a *low-income trap* (especially in Sub-Saharan Africa), it is relatively easy to reach the middle income level while countries can rely on cheap labour force allocated from agriculture towards manufacturing and run an export led macroeconomic strategy. In the *Solow growth model*, efficient physical and human capital accumulation are the main sources of dynamic growth, and in quite many developing countries “this was operationalized by prescribing a focus on export-led manufacturing to take advantage of comparatively cheap labour, coupled with health and education programs to improve skills. The outward orientation would ensure investment was allocated based on internationally-set market prices, and improved skills would create growth with equity.” (Gill – Kharas, 2015: 1)

In the first period of development, when the country emerges from low-income to medium-income one, *the main technological requirement is to copy and adapt internationally available basic technologies*. A low level of skills promotes labour intensive growth of manufacturing. At a more developed stage, that is in order to graduate from middle-income level into high-income country. *genuine innovation requires advanced skills, in a wider spectrum of industries*. This development from low-technology to advanced industrial activities could become the main driving force for productivity change in the economy. At the end of the day, this technological changes lead to the knowledge-based economy and transform the given country into a developed, high-income one.

The above technological development, and the knowledge based economy in itself, requires an important *development of education and training*. The development of *Taiwanese vocational education system has followed and served the overall economic development*, having

pragmatically reformed itself according to the *changing structural needs of economic development*. Even in the 1960s, 56 percent of the labour force was employed in agriculture and only 17 percent in industry, therefore, in the early period vocational training focused mainly on agriculture.¹¹ In order to provide the necessary amount of manpower for agriculture and basic manufacturing, the then Taiwanese government started to create an extensive *vocational training system* consisting mainly of *agricultural and industrial vocational schools*. After the evolution of manufacturing based export-led development, in the second half of the 1960s and in the 1970s, the *Ministry of Education* began dynamically developing vocational education in technics. After educating the necessary amount of basic and higher level technicians, *since the late 1970s* there was a constantly growing demand for commercial training, therefore, the number of *commercial vocational schools* expanded quickly and an important part of industrial vocational schools was transformed into *medium-level schools of business and technology*. In the 1980s, vocational educational system started to adapt to the growing demand of the service sector. In the 1990s, the emergence of informatics challenged very much the Taiwanese educational system: both in higher education and in vocational training an immediate reaction became indispensable.

Since the very early 1990s, the structure of Taiwanese manufacturing shifted towards information and communication technologies (ICT) and the main economic policy goal was to provide interim goods for global ICT giants. This economic policy modification transformed the demand of labour force. Since students become more motivated to study in higher education, the government allowed technical colleges to transform themselves into institutes of technology as well as universities were allowed to establish two-year technology programs. In the same time, Taiwanese government began to encourage the establishment of community colleges.

Well performing vocational training can be based on solid a basic education system. A widely accepted international measurement/comparison is *Pisa ranking* by the *OECD* that quantifies and compare the skills and abilities of fifteen years old population in terms of mathematics, sciences and reading. As *Table 1*. shows well Singapore, South Korea and Taiwan do perform fairly well, that is well over the OECD average. A maybe even more important result of the *Pisa ranking* is that in these three countries the share of top performers is well over the OECD average while the share of low performers is much lower than the average.

In parallel, South-east Asian emerging economies which avoided the middle-income trap (Singapore, South Korea and Taiwan) had focused increasingly, and more and more successfully on higher education as well. It has been reflected in global university rankings let's take a look only at the most recent issue of *The Times' World University Ranking*.¹² *Singapore* has two universities in the global top 50.¹³ *Taiwan* has one university among the first 200, two Taiwanese universities are ranked between the 401-500 best ones, while five universities are ranked between 501 – 660 and three between 601 – 800, and further ten universities are ranked among the first 1000. *South Korea* is the most successful in the region: South Korean universities are ranked on 63rd, 82nd, 102nd, 142nd and 198th places in the global university ranking. Furthermore, the country has two universities between 201 – 250, and on ranked

¹¹ See an informative paper of the *International Cooperation and Development Fund (ISDF)*: http://www.icdf.org.tw/web_pub/20020726112915centamspecial.pdf

¹² https://www.timeshighereducation.com/world-university-rankings/2019/world-ranking#!/page/0/length/25/locations/SG/sort_by/rank/sort_order/asc/cols/stats Downloaded: 18/08/2019

¹³ *National University of Singapore* is ranked 23rd and *Nanyang Technological University, Singapore* is ranked 51st.

between 351 – 400 and 401 – 500, three South Korean universities are ranked between 501 – 600 and five ones between 601 – 800 and 801 – 1000.¹⁴

Table 1. PISA rankings of Singapore, South Korea and Taiwan, 2009, 2012 and 2015

		OECD average	Singapore	South Korea	Taiwan
2015	Science	493	556	516	532
	Reading	493	535	517	497
	Mathematics	490	564	524	542
	Top performers	15,3%	39,1%	25,6%	29,9%
	Low performers	13,0%	4,8%	7,7%	8,3%
2012	Science	501	551	538	523
	Reading	496	542	536	523
	Mathematics	494	573	554	560
	Top performers maths	12,6%	40,0%	30,9%	37,2%
	Low performers maths	25,1%	8,3%	9,1%	12,8%
2009	Science	501	542	538	520
	Reading	493	526	539	495
	Mathematics	496	562	546	543

Source: OECD, <http://www.oecd.org/pisa/> Downloaded: 18/08/2019

Another recent international university ranking provides quite similar results. According to the *Academic Ranking of World Universities* (“Shanghai Ranking” in other words)¹⁵ two universities from Singapore are ranked in the first 100 universities¹⁶, one Taiwanese university is ranked between 101 - 200, two between 201 - 500 and nine between 501 – 1000. Two South Korean universities are ranked between 101 – 200, nine is ranked between 201 – 500 while 21 (!) further universities from South Korea are ranked between 501 – 1000.¹⁷

These excellent performances in education and training provide a solid basis (among other elements) for an equally excellent performance in *innovation*.

In *Agénor’s* and *Canuto’s* analysis, “there is a two-way causality between education and innovation. Countries may remain caught in a low or moderate growth equilibrium because they are unable to get enough high potential workers into innovation activities; and because wages are low as a result, a fewer number of individuals with high potential are willing to make the investment needed to acquire the skills needed to seek employment in the innovation sector. The composition of the labour force depends therefore on the interaction between supply and demand factors, and a middle-income growth trap can also be characterized by a misallocation of talent.” (*Agénor – Canuto, 2012: 25*) They argue that advanced infrastructure, especially in

¹⁴ *Memorandum items: Hungary* has one university between 401 500, two between 601-800 and another two between 801 – 1000. *Poland* has two universities ranked between 301 – 800 and further three between 801 – 1000.

¹⁵ The most recent ranking has been published in late August of 2019. See: <http://www.shanghairanking.com/ARWU2019.html> Downloaded: 21/08/2019

¹⁶ *National University of Singapore* is ranked 67th and *Nanyang Technological University* is ranked 73rd.

¹⁷ As memorandum items, one may remark that Hungary has five universities between 501 – 1000, while China has 4 universities in the first 100, fourteen between 101 – 200, 39 between 201 – 500 and not less than 74 (!) between 501 – 1000.

the design sector, also plays a critical role in preventing the country from getting stuck in low income: the provision of advanced research infrastructure may be more effective than direct subsidies. *Agénor* and *Canuto* argue that “the lack of advanced infrastructure, which is particularly productive in the design sector (in part because it promotes knowledge networks), plays a critical role in helping a country escape from a lower-growth trap, not only because of its direct effect on productivity but also because of its effect on the supply of high-skilled labour. In turn, a growing skill base facilitates a shift in production from labour-intensive to skill-intensive activities and an increase in the pace of innovation. Somewhat paradoxically, a reallocation of (limited) government resources from direct subsidies to research and innovation activities toward the provision of advanced infrastructure may actually be more effective at promoting these activities and magnifying their impact on economic growth.” (*Ibid.*) *Agénor*’s and *Canuto*’s third finding is that “in addition to advanced infrastructure, improving the enforcement of property rights (in particular the administration of patents), and removing (some types of) labour market rigidities may help to accelerate the pace of innovation and be quite effective at helping a country avoid a middle-income growth trap.” (*Ibid.*)

Rankings in *Global Competitiveness Report ‘2018*¹⁸ provides a fairly deepened description of the role and importance of innovation in the given countries relative/global competitiveness positions.

Singapore was the *second* most competitive economy in 2018, achieving 90 percent of the best performer in *infrastructure* and *macroeconomic stability* and 75% of the best in terms of *innovation ecosystem*. The 11th and 12th pillar of competitiveness in the GCR ranking are *business sophistication* and *innovation*, respectively, which are the key factors for *innovation-driven economy*. In terms of the 11th pillar, Singapore is ranked 16th, but have better position in *time to start a business* (5th), *insolvency recovery rate* (4th) and the *cost of starting business* (11th). In terms of the 12th pillar, Singapore is ranked 14th, inside this pillar the country is ranked 2nd diversity of workforce, 7th in institutions and inventions, 11th in buyer satisfaction and 14th in patent application.

Taiwan is the 13th most competitive economy of the World, *first in macrostability*¹⁹ and has a 90 percent performance in the development of *human capital*. The country is ranked 21st in terms of *business dynamism* (11th pillar) and 4th in *innovation capability* (12nd pillar). The country is especially well placed in patent application (2nd), in the state of cluster development, international co-invention and R&D expenditures (compared to the GDP, in percentage) Taiwan is ranked 5th, it is 6th in diversity of workforce and 10th in buyer sophistication.

South-Korea is the 15th most competitive economy in the World – *the first in macroeconomic stability* and *ICT adoption*, it has a 96% position in the development of human capital and performed 6th in the development of infrastructure. As far as the 11th pillar is concerned, South Korea is ranked 22nd and has a particularly preferred position in insolvency regulatory framework (8th), as well as in terms of insolvency recovery rate and the time to start business (12nd in each).²⁰ South Korea’s innovation capability (12nd pillar) is the 8th best among the ranked countries and in this pillar the country achieved especially good rankings in R&D

¹⁸ <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf>

¹⁹ That is, Taiwan has 100 percent and every other country is compared to Taiwan’s performance.

²⁰ Its performance in this pillar is extremely deteriorated by its poor performance in the cost of *starting business (93rd) and the willingness to delegate authority (88th).

expenditures (compared to the GDP) and buyer sophistication (2nd) and in terms of patent application (3rd ranking).

High performances in education and training, as well as in terms of innovation obviously have a key importance in escaping/avoiding the middle-income trap.

While talking on the middle-income trap, it is inevitable to mention *China*. “The rapid economic growth of so-called emerging markets is one of the leading storylines of our age and arguably the most important economic development affecting the world’s population in the first decade of the 21st century. It has lifted millions of households out of poverty. It has accounted for the vast majority of global growth in a period when the advanced countries have been economically challenged and financially troubled. For some time now the question on everyone’s mind has been how long this rapid growth can continue, in emerging markets in general and the group’s largest and most economically dynamic member, China, in particular.” (*Eichengreen et al., 2013: 3.*)

Many Chinese experts assess that the theory of middle-income trap is relevant to the current macroeconomic situation of China and think the China is likely to avoid this trap. (See for example: *Cai, 2012, Woo, 2012* and *Zhang et al. 2012*) *Ágnes Szunomár*, an acclaimed Hungarian China watcher, after having analysed the structural changes, demographic tendencies and the role of education and innovation, concluded that China may avoid the middle-income trap and is likely to become a highly developed economy in the coming 7-8 years. (*Szunomár, 2019: 104*) Other reviews are more cautious: according to *Glawe and Wagner, 2017*, China might improve human capital accumulation and total factor productivity in order to escape the middle-income trap. *Woo, 2012* does emphasise that China, because of its several different development traps, requires new governance principles and methods in order to avoid the middle-income trap. Anyway, the future development in China will be decisive for the fate of the world economy, and will provide new theoretical conclusions about the middle-income trap.

Several researchers are sceptical about the question itself: *is there a middle-income trap?* (*Bulman et al., 2017*) Others refer to the fact that similar cases had occurred in the global economic history much earlier, and the topic has not been discussed with the necessary theoretical depth and sophistication, therefore, the term is “unduly overused”. (*Benczes, 2019*) Other are challenging the universal relevance of the term middle-income trap: the experiences of Japan and South-Korea are nor generally relevant because their development path is so deeply rooted in Asian culture that it cannot be transferred to other cultures. It is useless to discuss the development of, for example, China, Brazil, Russia, Romani and Lebanon, in the same theoretical framework. (*Muraközy, 2019*)

“The middle-income trap is a narrative of growth stagnation that reflects (and exacerbates) current and long-standing anxieties about slow economic growth. This anxiety is perhaps only growing more acute amid the prevailing notion of a global growth slowdown. This includes even China, the growth star in recent decades. Historical experience and empirical evidence show that the transition from middle-income to high-income levels takes time, and requires countries to pursue consistently sound but evolving policies to maintain the fundamental drivers of economic growth. Different stages of growth call for different strategies and policies, and the right reforms often take time to impact economic growth. Ultimately, each country’s growth story is unique but the general prescription remains the same. Policymakers should critically examine their growth strategies to find the most effective ways to boost productivity

improvement, which is the key to supporting, nourishing, and preserving long-run economic growth.” (Larson – Loayza – Woolcock, 2016: 4)

Even if the middle-income trap is a myth or a well-sounding title of a long-known and banal phenomenon, “*it provides impetus for policymakers to reassess their strategies based on productivity improvement once the traditional sources of economic growth have lost their strength.*” (Op. cit. 1. – italics mine: Gy. Cs.)

References:

1. Acemoglu, D. – Robinson, J. A. (2012): Why Nations fail? The origins of power, prosperity, and poverty. Crown Publishers, New York.
2. Agénor, P-R. - Canuto, O. – Jelenic, M. (2012): “Middle-Income Growth Traps,” World Bank Policy Research Working Paper 6210, World Bank, Washington D.C. See: <http://documents.worldbank.org/curated/en/422121468155111398/pdf/NonAsciiFileName0.pdf> Downloaded: 12/01/2019
3. Benczes, I. (2019): A közepes jövedelem csapdája: régi dilemmák újragondolva. (Middle-income trap: old dilemmas rethought – in Hungarian) In: Szanyi – Török, 2019. pp. 108-121.
4. Berend, I. T. (1996): Central and Eastern Europe, 1944-1993: Detour from the periphery to the periphery. CAMBRIDGE UNIVERSITY PRESS.
5. Cai, F. (2012): Is There a “Middle-income Trap”? Theories, Experiences and Relevance to China. China & World Economy Vol. 20, No. 1, pp. 49–61. See: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1749-124X.2012.01272.x> Downloaded: 27/09/2019
6. Eichengreen, B. – Park, D. - Shin, K. (2013): Growth Slowdowns Redux: New Evidence on the Middle-Income Trap. NBER Working Paper 18673. Source: <https://www.nber.org/papers/w18673> Downloaded: 24/09/2019
7. Ghani, E. (2013): How to Avoid Middle Income Traps? World Bank, Let’s Talk Development. 13 August. See: <http://blogs.worldbank.org/developmenttalk/how-avoid-middle-income-traps> Downloaded: 15/01/2019
8. Gill, I. - Kharas, H. (2007): An East Asian Renaissance: Ideas for Economic Growth, Washington D.C.: World Bank. See: http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/226262-1158536715202/EA_Renaissance_full.pdf Downloaded: 12/04/2018
9. Gill, I. – Kharas, H. (2015): The Middle-Income Trap Turns Ten. Policy Research Working Paper 7403, World Bank Group, Washington D.C. See: <http://documents.worldbank.org/curated/en/291521468179640202/pdf/WPS7403.pdf> Downloaded: 18/01/2019
10. Glawe, L. – Wagner, H. (2017): China Caught in the “Middle-Income Trap”? VoxChina, Nov 22. See: <http://vochina.org/show-3-55.html> Downloaded: 27/09/2019
11. Larson, G. – Loayza, N. – Woolcock, M. (2016): The Middle-Income Trap. Myth or Reality? Research and Policy Briefs, No 1. World Bank Group. March. See: <http://documents.worldbank.org/curated/en/965511468194956837/pdf/104230-BRI-Policy-1.pdf> Downloaded: 12/04/2018
12. Muraközy, L. (2019): Japan, Korea és Kína: Útkövetés vagy útteremtés? (Japan, Korea and China: path creating or path dependence? – in Hungarian) In: Szanyi – Török, 2019. pp. 122-146.

13. Szanyi, M. – Török, Á. (editors, 2019) *Trendek és töréspontok. (Trends and breakpoints – in Hungarian)* Akadémiai Kiadó, Budapest. 277 pages
14. Szunomár, Á. (2019): *Gazdasági csodák/gazdasági csapdák – kínai növekedési kilátások a japán és dél-koreai példa tükrében. (Economic miracles/economic traps – Chinese perspectives in the light of the Japanes and South-Korean examples – in Hungarian).* In: Szanyi – Török, 2019)
15. Woo, W. Th. (2012): *China meets the middle-income trap: the large potholes in the road to catching-up.* *Journal of Chinese Economic and Business Studies*, Vol. 10, No. 4, November See: <http://faculty.econ.ucdavis.edu/faculty/woo/Woo-Articles%20from%202012/Woo.China-Middle%20Income%20Trap.JCEBS%202012.pdf> Downloaded: 27/09/2019
16. World Bank (2012): *China 2030: Building a Modern, Harmonious, and Creative High-Income Society.* Washington, D.C. See: <http://documents.worldbank.org/curated/en/781101468239669951/pdf/762990PUB0china0Box374372B00PUBLIC0.pdf> Downloaded: 15/01/2019.
17. World Bank (2018): *The World Bank in Middle Income Countries.* See: <http://www.worldbank.org/en/country/mic/overview> Downloaded: 15/01/2019
18. World Bank (2019): *Middle-income countries taking greater share of global economy.* Feb, 22. See: <http://datatopics.worldbank.org/world-development-indicators/stories/middle-income-countries-taking-greater-share-of-global-economy.html> Downloaded: 28/03/2019
19. Zhang, L. - Yi, H. - Luo, R. – Liu, Ch. (2012): *The Human Capital Roots of the Middle Income Trap: The Case of China.* *Agricultural economics* 44(1s) See: https://www.researchgate.net/publication/241751304_The_Human_Capital_Roots_of_the_Middle_Income_Trapping_The_Case_of_China Downloaded: 27/09/2019