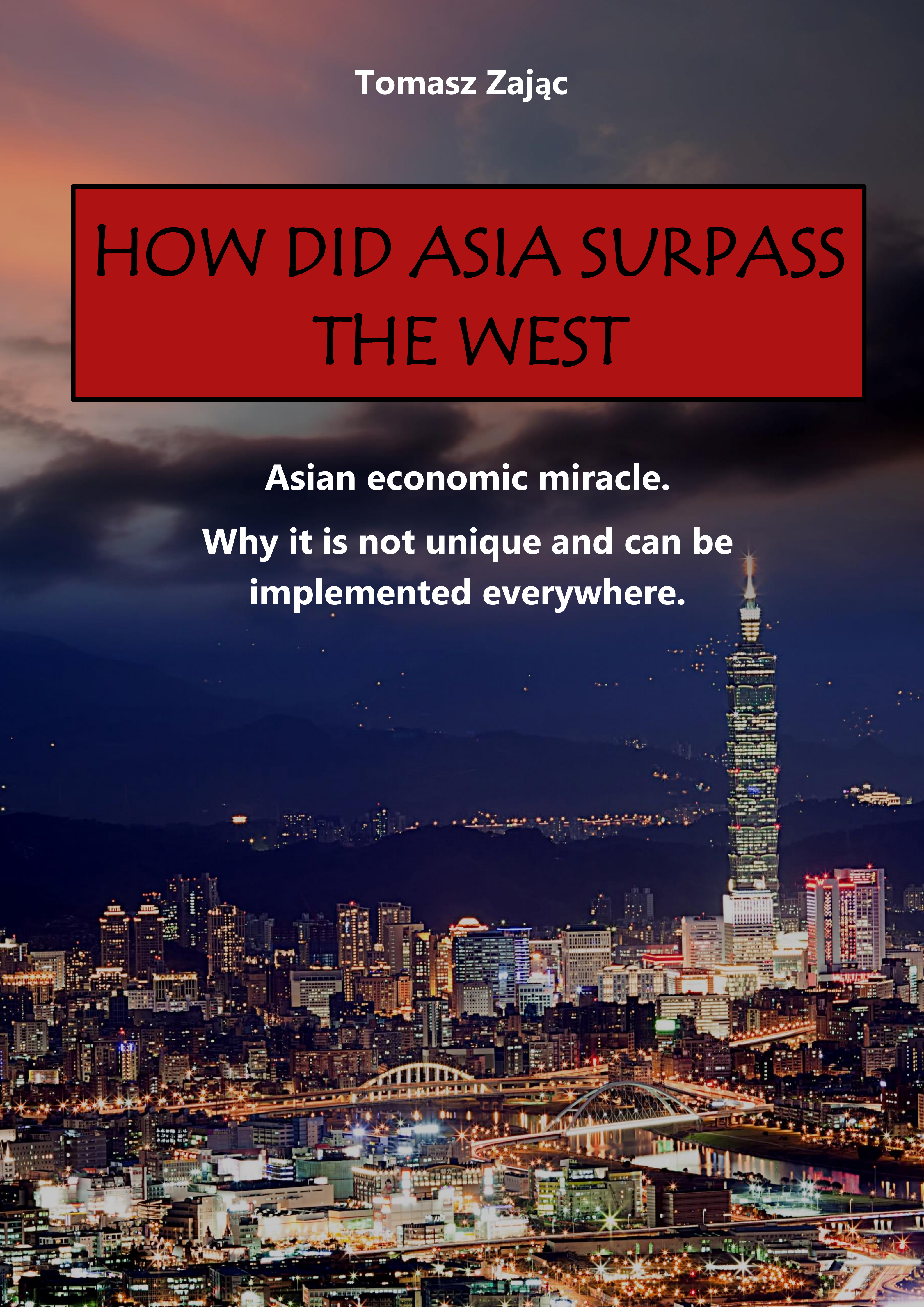
Tomasz Zając

HOW DID ASIA SURPASS THE WEST

Asian economic miracle.

Why it is not unique and can be implemented everywhere.



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Introduction

This book evolved from years of interest in the Asian model of management and development, yet the direct inspiration came from reading Robert Wade's book[1]. The main strength and uniqueness of Robert Wade's book are in the highly detailed description of the method employed in Taiwan, together with its spectacular economic results. Taiwan, from a poor and underdeveloped country, has been able, in the course of two generations, to catch up in the standard of living with countries such as Germany, Sweden and Kuwait, while having no natural resources. It has continued to develop for over 60 years and has become one of the world's technological leaders and the seventeenth-largest exporter worldwide on a par with India. This small island-country - nine times smaller than Poland - is twice as rich as it is in terms of per capita wealth.

While this is an impressive achievement in world economic history, it is not all that exceptional. Taiwan was followed, a decade late, by South Korea[2], and both countries, in turn, pursued the path of Japan, and now the same formula is implemented by China. In each case, it is extremely impressive, whereas the world analyses the factors by which it was possible to achieve such exceptional results. Unfortunately, usually not much comes of it.

The main objective guiding me in writing this book was to allow the European reader to examine the Asian economic model. The book does not aspire to be an academic work or an essay at most. I wished to popularise a different perspective on economic management. The problem of the European public debate is that in the search for examples and spur, it does not reach further than Western Europe, sometimes, the instance of the Scandinavian countries, but without faith in the possibility of applying their model in our conditions. However, we mainly tend to focus on the United States, while Asia is completely excluded from the circle of countries that could provide models to follow. With this book, I would like to change that, because, as I believe, there is something to study, and the lesson should be learnt, not only in Eastern Europe but also by the West mentioned above.

The purpose of this book is not to present in detail the nuances of the economic policies of our distant Asian partners - for that, I would refer you to the literature - but to break down

[1] Robert Wade, *Governing the Market. Economic Theory and the Role of Government in East Asian Industrialization*, New Jersey 2003.

[2] For the convenience of reading, from here on, I will only use the name Korea, always with South Korea in mind.

liberal stereotypes and to consider the economy and economics within the framework of a single, generally accepted dogma. I am not critical of the liberal economic model; it is quite an efficient way of governing a country - but it is not the most efficient. No idea is eternal and is bound to change. While feudalism was a pretty efficient economic and state system in the Middle Ages, it would be hard to see it the same way in the twenty-first century.

There is already quite a lot of critical literature on the liberal economic turn, the same approach to the economy or the shock therapy administered to the Polish economy in the 1990s. We can also hear more and more critical voices in the media. One of the main problems of this discourse is the lack of suggestions for any changes aimed at improving the state of affairs. Even when they appear, they are incomplete, incoherent, and tend to not go beyond the canon of solutions tested - with lamentable results - in Latin American countries or Africa in the post-war period. This book was not meant to be a source of criticism but a response to one. It will give specific examples of effectively implemented policies in prosperous countries. At the same time, I try to relate them to a medium-sized country in Central Europe – Poland.

The whole western world is now wondering what the future will look like when China would resume its rightful place on the geopolitical map once it has reached it economically. It is only a matter of time before this happens. It is a question of when not if. Their success depends mainly on whether or not there is a factor that prevents them from getting there. The West is also wondering how not to lose the technological gap with Asia. However, it has narrowed the search to answer this question to its backyard, seeing the Asian model as possible only under specific Confucian cultural conditions. Nevertheless, if it is true that their economic model is more efficient, then this is a dead end. Europe should look for inspiration in countries that are successfully chasing technological leaders, rather than in Western countries that lose ground.

The scientific world's attention to the Asian model, and the lack of it among decision-makers, is at best puzzling. Post-war Japan was so economically successful that it dismayed the West, especially the Americans and its impending dominance over the US. The crash of the Tokyo stock market, although it did not necessarily affect their economy, convinced the West that its liberal economic model was undoubtedly superior. Other countries began to join the peloton led by Japan. In the 1950s in Taiwan, and ten years later in Korea. Whilst learning from the Japanese, they avoided particular mistakes and managed to do even better. Taiwan was too small to attract attention, while Korea's success was explained by its diligence, education and opening up to world trade, rather than by exceptional planning. However, these were too minor countries to concern them. It was not until China embarked on the same path in the late 1970s that this confidence shook. China replaced Japan and became the resurgent dragon to be feared. However, nothing has changed in terms of looking at the Asian tigers as role models. The Western world still finds in this success some unique Asian condition that cannot be replicated anywhere else. Yet there is no basis for that, as we will argue in a moment. Even the famous World Bank[3] report of 1993 considers that the success of the Asian tigers - due to the efficient operation of the market and solid macroeconomic foundations. What it failed to notice, however, was that they interfered so profoundly in the market that they practically distorted it. The list of tools was long, from the blocking of imports to the manipulation of licences and taxes, the restriction of competition, to the state planning of entire industrial sectors and the artificial sustaining of high levels of investment in GDP.

So, it should not surprise us that we Westerners, brought up in the cult of economic liberalism, want to judge the Asian model from the same standpoints. Even Chinese professor Yusheng Huang[4] has not avoided this trap. He compared Chinese reforms with the liberal model and condemned all attempts to deviate from it. Yet China is pursuing a completely different economic agenda, and to understand it, one must first understand the logic of this particular model.

The proof that this model can work outside Asia is that it does not develop there. The Japanese were the first in this part of the world to put it into practice, but they did not invent it. It was German specialists who taught them. The Germans learned from the English, who, in turn, learned from the Italian merchant republics and the Hanseatic League. Almost every country that is currently rich came to its wealth through this method. Britain was protectionist when it wanted to catch up with Holland, while Germany wanted to catch up with Britain, and the United States when it was chasing Britain and Germany. Japan, following Germany's model, was protectionist for most of the twentieth century until the 1980s. Taiwan and Korea did no different.

So, there is no reason to think that another country cannot repeat - under local circumstances - the steps of those countries. There is one method, an infinite number of variations, and the opportunities are open to every country. Most European countries, like, Poland, for example, are already at a point in their economic development when they do not

[3] World Bank, *The East Asian Miracle. Economic Growth and Public Policy*, Washington-New York 1993.
[4] Yasheng Huang, *Capitalism with Chinese Characteristics: Entrepreneurship and the State*, Cambridge 2008.

have to (and even cannot) be so protectionist, but many of the mechanisms used in these countries to develop domestic potential are very much in place.

But why should we do anything at all? Haven't twenty-five years of fully free Poland given us enough evidence that we are on the right path? We are gradually getting richer, have outrun Ukraine, overtaken Hungary, and getting closer to the Czech Republic. Our next goal is to equalise our standard of living with Germany. Why should this not be possible? Well, there is a problem. Although the last twenty-five years have been a great success, and I have no intention of undermining it, the problem is different. Poland, the same as Hungary or the Czech Republic, is a peripheral country, while Germany is already an economic centre. What is the difference between the periphery and the centre? A peripheral country exports natural resources or minimally processed goods and buys high value-added processed and luxury products in return. Usually, this is accompanied by a trade deficit. Western car factories located in Poland do not help us much. We mainly supply the cheap labour force and gain additional workplaces plus some tax revenue, and Western concerns win more profit from sales in return. Although it must be said, that the structure of Polish exports has improved since the communist era, and we no longer mainly sell coal or grain. However, foreign concerns are responsible for the more advanced exports, such as cars or electronics. It is not the case that nothing has changed, but as far as peripherality is concerned, it can be said that, although on a different, slightly higher level, it has become established. We continue to import the most advanced industrial products, such as mobile phones or technology for manufacturing plants, while a large proportion of exports, especially the more complex ones, are re-exports of previously imported products, such as televisions, which we mainly assemble rather than manufacture. That is accompanied by the permanent trade deficit, and this is fatal for any country in the long term.

To catch up with the states of the centre, such as Germany, you cannot do so by being a peripheral country, unless you are of city size. One must achieve technological convergence first, and only then can consider equalising in terms of wealth. Poland has always been a peripheral country, and reforms after 1989 have not changed that our marginality has only perpetuated itself. We have not even begun to recover from this state of affairs. In the last century, only a few countries such as Japan, Korea, Taiwan and Israel (although it is a new state) have managed to do so. There were many attempts in the interwar period and immediately afterwards, from Russia through Eastern Europe to most South American countries and Africa. Most of them, unfortunately, failed.

Economic underdevelopment cannot be considered in isolation from the outside world. Peripheral states are such not only because of their economic system but also due to the industrial and export policies of advanced countries, making peripheral countries perpetuate their peripherality. Breaking out of this growth trap is quite a challenge, but not an impossible one. Paradoxically, when the first European ships arrived on China's shores, China was closer to joining the world's economic centre than it was a century later. Technologically, they were hardly lagging and sometimes surpassed the West. The main reason was the trade policy of the European powers, sucking up resources on the one hand and supplying their products to the Chinese market on the other while hindering the development of advanced local industries. However, it is never too late, and China has managed catching up with the centre for over three decades.

This book aims to answer two vital questions: what needs to change to catch up with the centre, and how to do it. The second is far more significant. The objectives have usually been defined quite well, but it has been the method that has caused problems. The first chapter demonstrates that the periphery chasing the centre is not a new issue and explains Taiwan's convoluted history. The second chapter discusses specific policies pursued in Taiwan and elsewhere and relates them to the European reality. The third outlines the key-institutions through which such an advanced economic model could be implemented. It also shows the most important goals that a country should set for itself if it wants to apply the Asian method. The final, fourth chapter debunks several myths in the public debate and suggests changes that the reader should consider.

I focus on a small number of Asian countries such as Japan, Korea and China, but mainly on Taiwan. Although these countries sometimes vary in terms of used tools or the policies they pursue, they have many things in common. It is not the only possible way for the periphery to catch up with the centre, but it is probably the most efficient and, most importantly, successful.

It is not a conflict between a planned economy, state intervention, institutions and liberalism or an opening up to private unfettered economic activity - often mistakenly identified with capitalism. It is rather the ability to find the most efficient balance between the two. Restricting the market in such a way that it encourages entrepreneurship, developing industry so that it supports income growth, and developing the country to reduce inequality rather than exacerbate it. Not everything was planned, and not everything worked out, but the whole effort was focused on technological catching up with the West, which was eventually successful.

In the pages of this book, I would like to inspire readers with the successful attempts made in East Asia and convince them that this is also possible in a medium-sized country in Central and Eastern Europe.

Chapter I

1.1 Peripheral countries catching up with the centre

Envy of others' wealth and success in life has always accompanied humanity. There is nothing strange about it, we understand it perfectly well at the level of interpersonal relations. It is no different at the state level. In ancient times, or even in the Middle Ages, a fairly common way of dealing with this problem was to attack the richer-neighbour in order to physically take some of their wealth, while today, the differences in the military potential of states can be so vast that this method has lost much of its former potential.

The differences in prosperity levels among countries have not always been as significant as they are these days. In the Malthusian[5] world, that is before the Industrial Revolution, there were no improvements in living standards. Most of the economy at that time consisted of agriculture. Any technical progress was, therefore, so slow that it translated only into population growth, not standards of living. A state's power and advancement were thus significantly determined by its population density. That is why conquering new territories was so valuable in these times. Each new land brought with it a particular human population, so precious at that time. Nowadays, the size of the population has much less influence on the importance of a country. What is more relevant is technological and military advancement, political power or solid military alliances. All of these things were relevant in the past as well, but the emphasis has shifted.

At present, the only real possibility of reducing the differences in living standards between countries is to try to catch up with them in terms of wealth. The greater the disparity, the stronger the pressure to find a way to reduce this gap. The problem became particularly evident after the Industrial Revolution started in the 18th century. Great Britain began to diverge from other countries to an extent not seen before. It resulted in a strong need to find a recipe for reducing the disparity or overtaking the leader. However, one would be wrong to think that such

[5] Malthusian trap - a theory formulated by Thomas Malthus, an economic situation of a country in which an increase in productivity and income does not lead to an increase in living standards, but only results in an expansion of the population. Such a state existed in all countries of the world until the Industrial Revolution.

formulas had not been created before. Adam Leszczyński gives examples of such publications as far back as 18th century Poland, and even Plato was no stranger to such considerations[6].

In different eras, the formulas have been surprisingly similar, and the immense distance in time does not particularly affect their nature. The weakness of peripheral economies is perceived in the fact that only some goods are produced locally, and a lot of more expensive and luxurious products imported. The change in these proportions tends to be seen as a prescription for contemporary maladies. It would be no different to what thinkers in the XVIII or mid-XX centuries would have concluded. The possible success of such a policy and the actual possibility of carrying it out depended on its effectiveness.

We have quite a few examples of countries that have succeeded in these efforts. Ha-Joon Chang claims that most of the currently prosperous countries have followed this method in the past. Generally speaking, the aim was to develop their advanced industries, such as textiles or watchmaking in the eighteenth century. To prevent external competition from destroying the fledgeling enterprises, it was necessary to protect its market. At this time, the exports had to be increased. Frederik List[7] argued that once a country had established itself as the undisputed leader, the most sensible thing it could do was prevent others from taking advantage of its method. If protectionism is the main tool, then once you have achieved your goal, you must become a staunch advocate of free trade and reject the ladder you have climbed to the top[8]. Adam Smith's thoughts extolling free trade have proved invaluable in achieving this goal.

Great Britain followed this path already during the reign of the Tudor monarchs, Henry VII and Elizabeth I, at the turn of the fifteenth and sixteenth centuries. Through protectionism, subsidies, the allocation of monopolies or the payment of industrial espionage, they were able to initiate textile production in their country. At that time, it was one of the most advanced and profitable branches of production, mastered by the Low Countries, historically called the Netherlands or Flanders (today's Belgium, the Netherlands and Luxembourg).

[6] Adam Leszczyński, *Skok w nowoczesność. Polityka wzrostu w krajach peryferyjnych 1943-1980*, Warszawa 2013, Jak dogonić zachód?

[7] Georg Friedrich List - a 19th-century German economist, a precursor of the German historical school in economics, supporter of protectionism. His views reached not only economists but were adopted by practitioners (including Bismarck), becoming the basis for building the economic power of Germany in the 19th and 20th centuries.

[8] Frederick List, *National System of Political Economy*, Philadelphia 1856, s. 440.

This method is called mercantilism. It assumes that the power of countries, stems from their wealth. That, in turn, can be achieved through a trade surplus. For this purpose, imported or own secondary raw materials must be processed within the country's borders into articles with a higher added value and only then exported. The same aims are to be served by restricting imports of foreign industrial products and only allowing the import of raw materials and foodstuffs, namely the low-processed products. After the leadership has been established, protection is not only unnecessary but actually counterproductive. It makes trade more complicated and takes away the incentive to carry on improving. That is the right time to promote free trade - at least concerning its trading partners. A developed country is sufficiently protected by its technological, commercial, financial as well as know-how advantages.

Barrier duties on the import of industrial products and the construction of its merchant fleet were supposed to help achieve such a position. Special trade agreements were also helpful, such as the Methuen Treaty signed in 1703. This was a trade agreement that gave privileges in Portugal for English woollen and textile products, and in return offered a duty equal to 2/3 of that imposed on French wines in England. At that time, textiles were a hi-tech product. Thus, English merchants bought Portuguese wool, made expensive clothes out of it in England and sold them back to Portugal at a decent profit. In return, they bought wine, which they were not able to produce locally anyway. Portugal, a country rich in gold imported from American colonies, saw no problem with a trading deficit, at least until it ran out.

This approach had significant consequences. To maximise wealth and increase national independence, the colonies had to be developed as sources of cheap raw materials and food, with subsidies to support industry and research at home and exports abroad. It was necessary to maximise the use of national resources, both human and raw materials, to promote maximum employment and limit wages and consumption.

Mercantilism became an invention of the epoch and found a widespread understanding. The next states to attempt to catch up with the leaders after applying the same method were Bismarck's Germany, which was already chasing industrialised Britain. The United States was setting protectionist world records in a bid to catch up with Britain and Germany. The Asian tigers' attempt to overtake the West, as described in the book, is nothing new or revelatory.

The twentieth century was a time when the world was enamoured by a new model of accelerated development. While mercantilism usually lived up to expectations, the new model of growth was not as successful. It was implemented in Stalin's Russia before the Second World

War and fulfilled its principal objective to industrialise the country. Before the system collapsed under its weight, it was for a long time the model for Mao's China, the states of South America, Africa or for countries behind the Iron Curtain.

The Soviet model was unique. Its main goal was to industrialise the nation as quickly as possible, usually at the cost of great sacrifices. In Soviet Russia or China, this ended in major famines. There were no such tragic consequences in Latin America or Africa, but the effects did not live up to expectations.

The accelerated growth model implied that not all income produced in society was consumed. A certain surplus, very low in underdeveloped countries, is spent on consumption or luxuries. What was accelerated growth supposed to consist of? If a country spends 5 per cent of its national income on the investment, it was assumed that its wealth would increase by that amount. However, if the birth rate is also close to 5 per cent, it will mean that the wealth level will remain at an identical level. It is a classic Malthusian trap. Therefore, to overcome poverty, it is necessary to increase the level of investment and, as it were, overtake the birth rate. Thus, in order to do this, capital had to be accumulated, consequently the level of savings had to be increased and allocated to investment. If this could be increased to 20 per cent, then there would be an increase in wealth. Of course, no one gave a thought to the efficiency or competitiveness of such a high-cost industry; they only counted the amounts spent on its construction or the tons of steel produced. Since everyone wanted to catch up with industrialised Britain then industrialisation was also the goal. The reasoning was quite simple and obvious, if Great Britain became rich through the industry, then building it at home should produce the same results. So, grain from farmers in Russia had been taken, sold abroad, and the hard currency raised was used to buy the technology to build steel mills, power stations or industrial plants.

The problem was to obtain additional funds for investment. The only group that possessed them was a privileged stratum, for example, the nobility or the clergy in countries with a feudal system. Unfortunately, they were scarce in number and had influence, while the resources they could acquire in this way were modest. The choice was, therefore, made for the poorest but most numerous class, the rural population.

The basic difference between the accelerated model and mercantilism was that the aim became industrialisation itself, rather than gaining a competitive advantage for own industry on international markets. The Soviet model achieved its goal, it industrialised the country at the astronomical rate of a few years. That allowed them to win the Second World War. The state's almost 100 per cent participation in the economy and its non-exposure to any market stimulus made it unable to compete in international markets. In its very form, the Soviet model of accelerated growth was programmed for collapse.

Drawing inspiration from the Soviet model has brought similar results to many countries. Mao's China did not industrialise as efficiently, but the famine under its conditions was even more appalling. At that time, 5.5-6.5 million people died of starvation in the Soviet Union, and 45 million in China. The different effects often resulted from the separate objectives set by individual countries. Latin America sought to escape the humiliation of US domination of the continent by restricting imports and developing its industry. Africa, following the Stalinist model, tried to escape from poverty and regain its independence from the policies of the former colonial states. The Asian tigers, on the other hand, have set themselves the goal of catching up with the West in the technological race and joining the world's top tier. These are examples of greater or lesser success. However, we should remember that this success ought to be measured by the goals that were set at the time. At present, development generally involves the desire to catch up with the mythical West in terms of GDP growth, per capita wealth level, social development, life expectancy, levelling of income disparities, education or even an increase in the sense of happiness. So, if we were to consider these remote examples of the centre being chased by the periphery from the current perspective, they would probably not look so great. Certainly, the huge acceleration in the development of heavy industry in Stalin's Russia, which was bought at a gigantic social cost and enormous human losses, cannot be considered a success. From the perspective of the Russia of those inter-war years, however, what was at stake was the country's survival and preparation for the approaching war, which was expected as early as the beginning of the 1930s. Haste was therefore justified, and the outcome - from the perspective of the time - should be regarded as a success.

The leap to modernity made by communist countries, and those that modelled themselves on them, consisted of criticising capitalism and replacing it with a planner. However, despite its numerous flaws, capitalism, guided, to a large extent, by the „invisible hand of the market", turned out to be more efficient. Let us remember, though, that most capitalist countries reached their economic liberalism through severe protectionism - at an early stage of their development - while catching up with the centre when they were still peripheral. It was no different for the Asian tigers. Japan liberalised only in the 1980s, and Korea became a fairly liberal economy just before catching up with the centre. Therefore, when advising a peripheral country, we must point to examples of those that have successfully caught up, or are currently in the process, with the assumption, however, that we cannot show the outcome of this effort, but rather its beginnings. In other words, we can use the United States of the nineties as a model, albeit not of the 20th century, but the 19th century. That was when the Americans had the most protectionist policy, from the mid-19th century until the Second World War[9]. They only started to liberalise fully in the 1970s.

The model of development I have described is nothing new, it is well-recognised by academic writing and widely referred to as one of the models of economic management. It seems to be reserved only for Asian countries and is presented in opposition to the Western model of liberal economies. Nothing could be further from the truth. It is an imported paradigm in Asia, quite widely used in countries such as Russia, Germany, England and - now a symbol of neoliberalism - the United States. Nevertheless, that was so long ago that we, as well as the Americans, the British and the Germans themselves, have forgotten about it.

1.2 Where did Taiwan come from, and why is it (not) a state?

Taiwan, or officially the Republic of China, is a small island state off the southeast coast of China. Taiwan's status is quite complicated, and the events that caused it has been turbulent. Imagine that after World War II, the peninsula seceded from Poland and formulated a non-communist government. It recognised itself as the only legitimate authority in the whole country and regarded the government in Warsaw as usurpers. Such a situation takes place in China. Formally, the government of the Republic of China (with authority in Taiwan) is recognised as the legitimate authority of the whole of China. The same applies to the Polish Government-in-Exile in London during the Second World War, which was the legal continuation of the authorities of the Second Polish Republic. In the case of China, Taiwan is nothing more than a rebellious province that sooner or later must return to the motherland, just as happened with Hong Kong or Macao. The Republic of China, although de facto independent, is officially a state that is not recognised by most of the international community. However, this does not prevent them from dealing with other countries through their trade missions, which act as

[9] Ha-Joon Chang, Ilene Grabel, *Reclaiming Development: An Alternative Economic Policy Manual*, London & New York 2004, s.10.

2.2 Foreign and domestic investment management

Opening up to foreign investors

No country wishing to quickly catch up with technological leaders can afford not to take advantage of the opportunity offered by foreign investors. Foreign investments alone, however, do not automatically mean technology transfer, and certainly not the most advanced ones. We know something about this in Poland after their twenty-five-year presence. Korea also experienced this in the 1960s, inviting American companies to increase Korean exports, and indeed, as in Poland, they succeeded. Unfortunately, there was no transfer of technology. The Americans transferred to Korea only labour-intensive and peripheral stages of production. There was nothing to learn and no one to teach.

In Taiwan, to transfer technology, they signed cooperation agreements on specific terms with very stringent requirements for the investor, who, in return, received various concessions, guarantees of acceptance of production, financial incentives, etc. Taiwan mainly invited them to invest and signed cooperation agreements containing conditions for technology transfer to local firms, while Korea purchased mostly technology. A great example is the aforementioned invitation of Singer to open a sewing machine plant in Taiwan. Yet, one of the most thoughtful was Korea's encouragement of telecommunications leaders (ITT, AT&T, Northern Telecom) to invest in local infrastructure.

For their part, the Koreans restricted the local market, ceding it to a monopoly for their three most advanced in semiconductors *cheabols* (Samsung, Goldstar and Daewoo), while the other manufacturers were forced out of the market. Simultaneously, the government announced multi-billion-dollar investments and upgrades in telecommunications infrastructure, most of which were to benefit the three chosen *chaebols*. The monopolised and divided market was supposed to provide more opportunities for the selected companies on the one hand and become a lucrative morsel for foreign investors on the other. In return for their risk-free activity in telecommunications, however, they undertook to transfer certain telecommunications and semiconductor technologies to their Korean partners. In this way, the Koreans were also able to subsidise their efforts in semiconductors from their profits in telecommunications. The incredibly developed telecommunications market in Korea, in turn, has so far been a testing ground for the latest developments in telecommunications, such as the latest models of mobile phones tested on the extensive domestic market, to possibly find their way to foreign markets afterwards.

As we can see, this was not a cheap solution, yet it was not a price-driven one. Instead of seeking short-term profits, that is, the lowest possible offer, they consistently pursued a long-term strategic goal of acquiring technology on the one hand and building up their production capacity in promising sectors on the other. That is an example of a genuine long-term investment where the costs and risks are partly borne by the state.

The requirements for foreign investors were primarily aimed at technology transfer and filling gaps in the production chain. The obligation of local content played an important role here. The investor, induced to have a high share of them in his production, thus supporting the development of domestic companies and their production capacities. We should remember that foreign investors brought in advanced knowledge, which they inevitably passed on to local sub-suppliers. The latter was able to learn to use it later in their own production, as was the case with Singer machines, which resulted in an increase in quality and exports of local machine manufacturers. What is more, at times, they signed the contracts so that the foreign investor was somewhat forced to sponsor the sub-supplier to buy the technology needed to improve the quality of the components when it was too expensive for the local company. The more parts the company had to buy locally, the less it imported, which automatically improved its export balance. The development of a network of sub-suppliers also tied the investor to the country and discouraged them from moving elsewhere. On the scale of the whole economy, the country gained new companies, jobs and taxes.

On the other hand, they also took care to ensure that the foreign investor, thanks to his technological advantage, did not gain too strong a position in the domestic market. The agreements often obliged the investor to exclusively export its products without access to the local market, which in future was to be held by domestic producers thanks to the aforementioned, technology transfers.

Allow me to explain it using an example. Suppose that in a country, especially a small one like Taiwan, we have a steel plant, set up with state money, which supplies 80 per cent of the local steel demand. Production of this size gives it a scale economy effect and allows maintaining the prices at a globally competitive level. At this point, let us assume that a foreign investor comes along and wants to open a steelwork with a capacity of, say, only 30 per cent of domestic demand. That would mean that the output of this existing plant could shrink by that much, causing a loss of the scale economy effect, increasing production costs and affecting prices for internal customers. Finally, we would also have tangible losses for the state sponsoring the project and budget revenues. That is why the vital sectors of the economy, from the point of view of those in power, were handled that meticulously. Yet, they have not applied these restrictions to the vast majority of the economy at large.

Sector monopolisation

Such ambitious conquest of markets inevitably leads to monopolisation or domination in the promoted sectors of the economy. Currently, China accounts for 19 per cent of the world's production. It is certainly an impressive figure. While we may think that everything in sight was made in China, try to imagine how Europeans felt in 1870, when Britain's share of the world' industrial trade amounted to 46 per cent[19]. That share quickly began to erode as more countries, such as Germany and the United States, came into the equation. The same happened after World War II when the field of the high-tech industry, swiftly invaded by the Japanese, who, thanks to their unparalleled efficiency and quality, took up a practically monopolistic position regarding particular products, such as cameras. Even nowadays, the leading camera manufacturers are Japanese companies such as Canon, Nikon, Pentax, Fujifilm, Olympus, Sigma, Kyocera, Lumix and Sony. However, Japan's supremacy did not last long, and its Asian neighbours were soon able to learn from the Japanese development model. As during the industrial era, ideas mainly permeate within similar cultural and geographical circles. Just as the first countries to threaten Britain's primacy were Germany, France or the United States, so now we can see a geographical and cultural proximity to Japan. It would seem that the current ease of idea transfer should favour a relatively faster spread of those ideas to more distant

[19] Ha-Joon Chang, *23 Things They Don't Tell You About Capitalism*, 2010, Penguin Books

regions, but this is not the case. The Japanese model has a very poor diffusion into the Western world.

As successors have cut out more and more pieces from the Japanese cake, they have not gained as a strong position in the most recent sectors as they used to have in cameras. Consider the example of smartphones, where the market divides between different countries within the region. Admittedly, the idea of the smartphone came to Asia from overseas, but its production is monopolised if no longer by one, then at least by a group of Asian countries. With all the differences, East Asia now looks a bit like Europe during the industrial revolution, where the industrial centre of the world was. Now it is relocating to Asia, and it does not look as if anyone is going to endanger them soon.

It's enough to have a look around us - every computer, monitor, phone, meaning consumer electronics in general, is imported from Asia. Sometimes they are assembled in Europe, for instance, monitors, but most of the components and patents come from Asia to see the scale of the world's dependence on Asian imports. The iPhone described earlier is a telling example here. We could complete the image with less advanced products like clothes or toys, or more generally by looking at trade balances with Asian countries, how much we buy from them, selling little in return. It is easy to give up ground in an area yet extremely expensive to regain it.

Under Eastern European conditions, it would be not impossible to engage in such advanced technologies as the production of mobile phones at such a point, when the competition is big but extremely expensive. If we wanted to do so, we should do it step by step, from less to more advanced technological stages. First, we should deal with their assembling and establish a solid domestic company operating in this segment, then produce under licence an increasing number of components comprising the phones. We should gradually become technologically independent and manufacture more and more components in-house, and only at the end of this path, we should seriously think about producing our own models. Creating new phones is not a problem nowadays, as one can also outsource the design, as the Canadian Blackberry did. The trick is to produce it from A to Z, as the Asians have taken over.

We should be targeting technologies at a less advanced stage, as the market is not yet saturated and there is less competition. For example, the manufacturing of drones, currently produced mainly for the army, but whose future is also in civilian use. As I write this, a fierce tender for the supply of these aircraft to the Polish army is in progress. As always, everyone from a small town in Poland producing tiny components for agricultural machinery. That is only an example, but it makes us aware that practically any entrepreneur, even those not thinking of entering foreign markets, may take part in this type of export promotion. Its size and lack of experience in international trade do not have to be of much importance here. It is also possible to enter many markets, even very distant ones, and not only those closest geographically, culturally or politically. However, such export promotion costs a great deal. TAITRA is a non-profit organisation maintained by the government, industry associations and trade institutions. It costs nearly $800,000 to open one office, and it usually consists of two officials and three local support staff. As I mentioned, they have 60 offices worldwide, but that's nothing compared to the Japan External Trade Organization (JETRO) has 73 or the Korea Trade-Investment Promotion Agency (KOTRA) with 124(!) out of 195 countries in the world.

2.4 Investment in research and development

Research and development centres

Taiwan was greatly affected by the two oil shocks of the 1970s due to a lack of its own natural resources. Thus, the Taiwanese authorities saw the need to reduce the economy's heavy dependence on raw materials, not only energy. So, they focused on new industries that do not require tremendous energy resources. The new orientations became metalworking machinery, semiconductors, computers, telecommunications equipment, robots and biotechnology. They also perceived that entering such advanced industries consumed massive amounts of capital for purchasing technology. Hence, they decided to become more independent from its import, so they started to open their research and development (R&D) centres for strategic industries.

The Industrial Technology Research Institute (ITRI), established in 1973, had a budget of 215 million dollars and a workforce of 4,500 employees by 1987. It was organised into six institutes (electronics, machinery, chemical engineering, energy and mining, industrial materials science, and standardisation and measurement). These were focused exclusively on civilian technologies. The equivalent institute, but dedicated to military technologies, had 20,000 employees! Besides, they co-founded private-public Taiwanese-foreign institutes that collaborated with ITRI, in which the state was willing to take up to 49% of the shares. Both projects intended to reduce Taiwan's dependence on technology transfer from abroad - after all, technology imports are imports like any other.

Official Taiwanese records display spending of 1.06% of GDP on civilian technology development centres in 1985, and approximately 60% came from the budget and the rest from private companies, both domestic and foreign. If these figures shock us, then in the same year Japan spent 2.51%, the USA 2.01%, France 1.87% and Korea 1.59%. On the other hand, in terms of researchers per 10 000 inhabitants, Taiwan had 14, Japan and the USA 33, France 18 and Korea 11[24].

Let us remember that the aforementioned figures refer only to the civilian budget; the military budget was more than four times larger. Taiwan's total expenditure could therefore amount to as much as 4% of the country's GDP on research and employed around 24 000 people. In comparison, the budget of the Polish Ministry of Defence in 2013 amounted at 1.95% of GDP. It also had its internal R&D budget, which tripled from the previous year to 78.4 million PLN (approximately 300 million of dollars)[25].

The Taiwanese in 1992 had reached a total commitment of $3.6 billion or 1.79 per cent of GDP and already had nearly 78,000 employees, 48,000 of whom were engineers and scientists. That gave a ratio of over 23 researchers for every 10 000 inhabitants[26].

In Polish conditions, to match the percentage level of Taiwan's expenditure, even if only in 1985, we would have to allocate around PLN 16 billion (from public and private funds) for this purpose, that is around 1% of GDP[27], and the Institute should employ around 52 000 staff, mainly engineers. If, on the other hand, we wanted to catch up with Japan, it would be PLN 40 billion, or about 2.5% of GDP, and 122 000 employees. How, on the other hand, do Polish research expenditures look? In 2012 we, unfortunately, spent 0.9% of GDP[28] while the structure of the expenditures was not that well thought out. These funds are mainly used for the evaluation of submitted projects and their co-financing. They are supposed to increase the general innovativeness of the economy but not directed at achieving some specific, restricted goals. They reach many places, which disperses them to an aggregation of projects rather than a few

[24] R. Wade. *Governing…*, *op. cit*., p. 98.
[25] Data: Ministry of Finance of Poland.
[26] Chung-Shing Lee, Michael Pecht, *Electronics Industry in Taiwan*, Florida 1997 p. 17.
[27] As a basis for comparison, I used the size of Poland's 2013 GDP - 1,642.9 billion PLN.
[28] Source: http://www.worldbank.org

Chapter III

3.1 Institutions

Agencies - the key to development

What made such an intricately planned economic mechanism work? It is a beautiful theory, and similar plans took place in many countries around the world. From Poland in communist period through the USSR to Latin American countries. Was it a human factor, a cultural one or some unique combination of the two?

Well, to a large extent, it was a consciously and consistently built economic strategy, with appropriately constructed institutions being the primary tool for its implementation. Institutions that ensured the continuity of the once chosen economical strategy. They also accumulated knowledge and were not subject to „reset" after political shifts following elections. In such a system, it is mostly not ministries that come up with detailed solutions, but government agencies working for them. This is where they come up with analyses of the country's current situation, its prospects, developments on world markets and opportunities for the country in these changing conditions. Politicians select and approve suggested pathways for growth, and agencies devise detailed solutions to implement them. That is where all the complicated, antsy work is done. Ministers may change, but knowledge and experience reside in the agencies, which are more stable and less prone to criticism than the politicians themselves.

The assumption is that the state requires several agencies with significant competencies to create economic policy in line with national objectives. It is not so important how many of them there will be as this is entirely conventional. Although there may be many agencies, they should still be hierarchical, and at the top, there should be as few as possible, with one leading agency coordinating the work of the others. The most important thing is their structure and working practices for them to function efficiently because the centralised bureaucracy is more effective. Whereas the employees of such agencies should be recruited from among the most talented university graduates, working there should be an ennoblement. Such agencies fulfil the function of think tanks directly at the service of the government. They decide on the directions of development to increase the competitiveness of domestic industry on international markets, develop consensus among private enterprises, act as a gatekeeper to contacts with global markets or foreign investors and provide government support to the private sector. A typical example is Japan's Ministry of International Trade and Industry (MITI). The pilot agency is the elite of the economic bureaucracy - and staffed by the most talented representatives of the national establishment.

The basis of the system was the separation of decisions made by the authorities from the objects of regulation, like interest groups such as entrepreneurs, farmers or citizens. In Korea, the links with entrepreneurs were closer, yet they still tried to ensure that decisions were taken in the public interest and not just for entrepreneurs. Both countries followed the model of Japan, which was the least restrictive in this respect, and decided collegially in an attempt to build consensus. Even in Japan, however, independence from regulatory objects was a fundamental principle, although Taiwan was the most restrictive in this respect.

The number of agencies responsible for managing the economy was significant but hierarchized, with only a few such agencies at the top, with one coordinating the work of the others. In Taiwan, the three key agencies were the Council for Economic Planning and Development (CEPD; now the National Development Council - NDC), the Industrial Development Bureau (IDB) and the Council for Agricultural Planning and Development (currently: Council of Agriculture – COA). For the purposes of this book, following Robert Wade, I will describe the first two.

The elite of the elite

The CEPD had over three hundred employees, including 250 with university degrees and we should remember that this is the state of employment described by Robert Wade in the late 1980s, where 20 per cent were engineers, economists were 40 per cent, and most of the rest were graduates in finance, accounting or statistics. That was by far the highest concentration of economists in government service, and even a decade earlier, they had been almost unrepresented in state institutions. The staff was divided into seven divisions - comprehensive planning, sectoral planning, economic research, urban development, performance appraisal, financial management, human resource management and a manpower planning subdivision. Their tasks included formulating one-, four- and ten-year macroeconomic development plans.

results of the processes taking place in it, not of a preconceived plan. Nobody is doomed to failure. There are simply no bad states, only poorly governed states. Fine, but there are also external constraints, such as the organisations we belong to like the WHO or the European Union. Opting out of them would probably cost a lot more, in the form of impeded market access for their members, than the benefits of a more independent economic policy. Nevertheless, human creativity remains essential to overcome these limitations. Taiwan is an excellent example of how well you can manage to promote your industry while also being a member of the WTO. Indeed, even in the final moments before the end of the accession negotiations, banking experts were devising ways of circumventing the organisation's restrictions to maintain effective control over the financial system.

It is not necessary to have an exceptional class of politicians or economists could to achieve such ambitious goals; economists are not even very necessary. We have more opportunities now than Chiang Kai-shek could have dreamed of in the 1950s, but what we do not have is the vision for transformation, the determination to make it happen and the organisations to implement it. It was not individual politicians who came up with these extremely sophisticated and detailed policies, but hundreds of specialists in state agencies specialised in their fields.

3.2 Prescription

What lessons can we draw for Eastern Europe from the Asian experience? Surely their method cannot simply be rewritten and applied on domestic ground. We are not currently at the low level of national income, social or economic development from which they started in the 1950s or 1960s. We also have, and this is especially important, a democratic system of government and we are a member not only of the World Trade Organization but also of the European Union. The world is also different, and the power of the neoliberal trend in economics, although perhaps no longer at its apogee - after the crisis of 2008 - continues to have a profound influence on social discourse and the behaviour of politicians, voters and entrepreneurs.

It is by no means reproducing their methods as closely as possible rather applying everything good about them and possible on our ground. We are not the Taiwan of the 1950s, but rather somewhere between the 1970s and the early 1980s. At this point, we need to set our sights on modernising our economy, and there is a lot of talk about that, but no coherent, efficient method of doing so. The Asian lesson tells us something else. It is that we have not yet exhausted much of the potential that lies in less advanced industrial production, in other words, in the upper levels, and the inadequate level of exports, even by today's opportunities.

So, paradoxically, we have lessons to learn from the early stages of modernisation and their later, more advanced stages. We lack well-paid jobs in less advanced industries, nor have we been able to create modern sectors. The foreign investments that have come to us do not meet this condition because, for example, monitors are not manufactured but only assembled in Poland. Their most advanced components are not only not manufactured in Poland, but they are also not built by Polish companies. Investors have moved the less developed, more labour-intensive stages of production to Poland, and we are unable to learn anything from them.

Robert Wade provides ten prescriptions for countries wishing to emulate the path of the Asian tigers. I will take the liberty of quoting only those I believe apply to Poland.

Foreign investment

The primary purpose of inviting foreign investors should not be workplaces - these can disappear at any time since foreign capital is not tied to our country, and usually to none. We want them for the restructuring of our economy. If we aim quickly catch up with our economy concerning world leaders, it is impossible not to use the technology, management methods or marketing of multinational corporations. They should, therefore, be invited and encouraged by various available means, from subsidies to tax breaks, with the preferred forms of cooperation being joint ventures or as licence providers. The point is that in this way it is easier to control investors and to learn or acquire technology from them.

Regardless, there should be constant pressure on them to direct their production towards exports using local, domestic companies. When signing operation agreements, we should pay close attention to both of these factors and allow a lower export regime in exchange for a higher level of sourcing from local sub-suppliers or vice versa. The most favourable form, of course, is when the company is highly sourced locally and exports the majority of its production. In general, a high share of exports in production is essential in the early stages of development when the country badly needs hard currency to buy foreign technology; over time, as domestic exports increase, this becomes less relevant and sourcing from domestic companies becomes

The described countries were able to develop without a significant increase in social inequality. In Taiwan, they achieved this by redirecting entrepreneurial activity towards productive and export activities. By limiting the accumulation of wealth in unproductive activities they indirectly stimulated wealth creation.

Labour productivity

Labour productivity can be a very misleading indicator[58]. Its very name gives a false impression as if it depends on the worker. The employee's productivity is of some importance, but in the overall index it is negligible at best.

The measure indicates the value of products or services produced in a given time by a worker, but not necessarily how hard they worked. To explain this, let us use the example of two taxi drivers, one of whom works in Casablanca, Morocco, let's call him Ali, and the other is John driving around Dublin in Ireland. The fare will vary between 10 and 17 euro cents within Casablanca, in Dublin, it will cost between 10 and 15 euro. Even if we accept that the cost of living and maintaining a car in Dublin is higher (fuel costs virtually the same), a Dublin driver is not going to be ten times more efficient than his Moroccan colleague. In fact, if anyone has had a chance to drive on the streets of the two cities, they will have to conclude that driving in Morocco is many times more difficult and dangerous, so productivity and earnings should be rather the opposite.

So why are there such big differences in income and hence in productivity? If we refer to the index and economic theories, we find that it must be because of the difference of competence, that the two drivers have, how sophisticated the vehicles they drive are, or what technology they use. Even if the Irish taxi driver is better educated, drives a newer car and uses GPS, there is nothing in that difference. After all, a university degree or even a professorship, a course in safe driving or a certificate in Casablanca topography will not give Ali a 10-fold increase in income. No one will get into a more expensive taxi because they cannot afford it. Similar educational endeavours will not help increase John's income, and their absence will not reduce

[58] Labour productivity or labour efficiency - the value of production generated in a given period by one worker. Most often calculated as real GDP divided by the number of employees or hours worked. There are three main groups of factors influencing labour productivity: physical capital (machinery, means of production), human capital (education, competences) and technologies used.

count on the support of their national institutions, whereas Polish entrepreneurs can forget about such assistance. In part, that is due to the lack of institutions offering such assistance, but mostly to the very restrictive separation of the political sphere from the economic one. We have become so entrenched in the fight against corruption that companies cannot get through with their - often rightful - demands for state support. The cider industry, which is in its infancy in Poland, can serve as an example. Poland is the first in Europe and the third in the world to produce high-quality apples. The production and export of cider would give us a chance to move up the production chain and earn more than on the export of apples or juices alone. We thus have enormous potential to become a serious producer of this drink. Yet producers are just starting, and state support at this early stage would help speed up the process of increasing production and winning foreign markets. Such support need have nothing to do with corruption. Every politician, however, is afraid of such measures, out of fear of being accused of acting at the interface of business and politics or simply because of a lack of ideas or resources for such support.

4.6 Foreign investment

Foreign investment is certainly one of the reasons for Poland's success in times of change. However, the mere fact that they bring certain benefits to the host country does not mean that we should look at them completely uncritically. After almost twenty-five years of their presence in Poland, the time has come to look at them more critically. They are not just benefitting. As I wrote earlier, one of the costs of their existence on the local market is that they make it difficult for local players to enter it. When a global corporation enters a peripheral country's market with the latest technology and know-how, it is a player from another world. On top of that, there are incomparable financial resources and the use of transfer pricing, or preferential cost accounting between subsidiaries scattered in different markets. It may serve to avoid taxation in the local market. They often obtain subsidies for the creation of workplaces, tax relief in special economic zones. They also have the opportunity to borrow on lower interest markets. All this means that dominating the local market is not a major problem for them. The most frequently occupied sectors are those aimed mainly at the local market where thanks to these advantages, they operate practically free of competition, namely banking, construction, processing industry and large-format trade.