

NYILATKOZAT

Alulírott *Kovács Tamás* büntetőjogi felelősségem tudatában nyilatkozom, hogy a szakdolgozatomban foglalt tények és adatok a valóságnak megfelelnek, és az abban leírtak a saját, önálló munkám eredményei.

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Tudomásul veszem, hogy a szakdolgozatomat az intézmény plágiumellenőrzésnek veti alá.

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hallgató aláírása

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Introduction

The focus of my dissertation is the study of foreign direct investment (FDI), especially with regard to the Hungarian economy and its promotion program.

The choice of topic was motivated by several factors. I was curious about how Hungary can attract foreign direct investments in the country and these investment how influence the economy, what kind of effects it has. It is useful to analyze these effects because they highlight the potential impact on the performance of the domestic economy.

In my dissertation I try to answer the following questions:

- How foreign direct investments can influence the economy of the host country?
- How Hungary's competitiveness changed from the regime change?
- **How can Hungary attract FDIs?**

During my research I present the basic concepts of FDI, which gives a literature overview about it and help to understand how foreign direct investments work. In this section the types of international capital flows and FDI transactions are introduced. After this chapters I observe the four different ways how companies enter to the foreign markets. In order to comprehend the motivation of the foreign direct investments I present some theories concerning the motivation of the investors.

The next chapters is about the different possible effects of foreign direct investments. In this section I introduce the effects of the investment on the host economy, the employment effects and the restructuring effects. I analyze how the FDIs strengthening the competition on the home market, what kind of effects it has on the suppliers, what are the implications of the technology, how can the host country benefit from the technical adaptation and last but not least the impact of these investments on services. These effects can have a significant impact on economic indicators.

In the third chapter I observe Hungary's competitiveness, how it is changed in the last three decade. In this part of my dissertation I show thee main investors of Hungary and the recent inflows of FDIs, what motivation factors the foreign investors have when they invest in Hungary, which is influenced by the investment climate in Hungary. In the last part of this

chapter, I present the strengths, weaknesses, opportunities and threats of Hungary's competitiveness with the help of a table.

In the last part of my dissertation I explain how Hungary attracts the foreign direct investments. The first part of this section the main objectives of the investment promotion program is introduced, how can be Hungary more attractive for foreign investors. One of the main competitive disadvantage for Hungary is the different level of regional development. This problem can be solved from the Economic Competitiveness Operational Program, which is an EU subsidy, this includes Community support for all Hungarian regions. Lat but not least Hungary can attract foreign investors with different kind of subsidies including financial, tax and other support.

The end of my thesis gives a comprehensive overview about foreign direct investments and its effect in Hungary and the challenges in attracting investments. The aim of my research was to prove that foreign direct investment (FDI) has a fundamentally positive effect on Hungary's economy and to show how Hungary can attract as many investors as possible to the country.

Literature review

The concept of foreign direct investment (FDI) can be interpreted broadly. Based on the definitions of the OECD (Organization for Economic Cooperation and Development), the IMF (International Monetary Fund) and the UNCTAD (United Nations Conference on Trade and Development), we can unanimously state: FDI is a category of investment in which a legal entity in a given economy (direct investor) creates a long-term interest in a company resident in another country (direct investment enterprise). Furthermore, this sub-relationship significantly influences the management of the company. An investor can be an individual, a registered or unregistered, state-owned or private company, or a group of individuals or companies. Furthermore, a trust or other social association and a combination thereof. The main criterion is that the investment company (parent company) holds at least 10% of the subscribed capital of a so-called subsidiary established in another country. It can be called the main criterion because the 10% shareholding already offers the possibility for the parent company to influence the decisions of the subsidiary's management after controlling a minimum of 10% of the votes. It is debatable whether this 10% ownership is actually enough for one company to

significantly influence another. With a smaller share, it is possible to have a big impact on the management and a small share of power can be associated with a larger share. Among other things, this is a significant problem in measuring the share of foreign investment, as investments below the 10% threshold are not included in FDI statistics, although it is clear that shares below 10% can already have a significant impact, especially on listed companies. where ownership is shared by many individuals. The official position is currently 10%, so this is used in the definitions. (Carson, 2003)

Types of international capital flows

International capital flows do not only include FDI, we distinguish 3 types: foreign direct investment, portfolio investment, international loans and aid. A portfolio investment (also known as a securities investment) is a purely financial investment in the form of the purchase of shares, bonds and other money market instruments. In this case, the investor will not have significant influence over the management of the investment company and his shareholding will not reach 10%. The portfolio only focuses on returns and profits, it does not aim to achieve a control and management role. It is usually a short - and medium - term investment. In the case of portfolio investment, capital can be easily moved. If circumstances change, it can be relocated to another country in a short period of time, where money market positions are just optimal. In my opinion, this is a major disadvantage of portfolio investment, as the greatest instability for a national economy is when foreign capital can be exported quickly. Obviously, an important factor nonetheless is that the financial support of many companies depends on the level of portfolio investment. International loans and aid have a balancing role in the economy. With the help of countries with "surplus" capital, capital shortages can be alleviated in capital-poor countries. In principle, these subsidies are free to be used by the lending country/organization to achieve a specific goal. Major international lenders: European Bank for Reconstruction and Development (EBRD), International Monetary Fund (IMF) and the World Bank. This type of international capital flow is the least beneficial, as it imposes a debt service burden on host countries. In addition, it is observed in many countries that this form of FDI is practically pushing borrowing countries into a debt spiral from which it is almost impossible to get out. Capital flows are bi-directional for all countries, with outward FDI and inward FDI investments. Obviously, the ratio between the two depends on the level of development of a given economy. (UNCTAD, 2022)

FDI transactions

Equity capital, reinvested earnings, and intra-company loans are the three components of FDI. All additional transactions between the two companies are therefore considered direct investments, so the purchase of share capital is the most basic transaction. Reinvested earnings are those parts of the profit generated by a subsidiary that it does not return to the parent and distribute to shareholders, but make additional investments to achieve the set objectives in order to further profit. Intra-corporate loans include cash flows when a parent disburses a short-term or long-term loan to a subsidiary or when the subsidiary repays it. Prior to 2004, reinvested earnings were not registered in Hungary, so they did not appear in balance of payments statistics. Only income paid as dividends was reported, which in turn severely distorted the value of foreign direct investment. According to UNCTAD statistics, in-house loans account for the smallest share of foreign direct investment, both in developing and developed countries. The level of equity outflows from developed countries has been steadily declining since the 2000s, but no similar trend can be observed in developing countries.

Observing the latter, the share capital ranged from 40 to 50% of the total value of OFDI. The rate of reinvested capital is inversely proportional to the decline in the outflow of equity from developed countries. In 2013, reinvested earnings accounted for 67% of total OFDI in developed countries. This can be explained by the multinational companies in developed countries have already reached the level of development when they are able to finance new investments from the profits of their subsidiaries and there is no need to use equity capital from the home country. Looking at foreign investment in developing countries, 35-45% of reinvested earnings account for total OFDI. Obviously, subsidiaries of multinational companies in developing countries are not yet able to finance new investments on their own. (Antalóczy, 2014)

Ways to enter the market

- a) Mergers and Acquisitions
- b) Greenfield investment (ex nihilo investment)
- c) Brownfield investment
- d) Joint-ventures

Mergers and acquisitions

In the case of mergers & acquisitions (M&A), at least one of the participating companies will be wound up and merged with the other company. A merger may take place by merger ($A + B = A$) or by merger ($A + B = C$). In the event of a merger, the merging company (assuming Company A) will cease to exist and its organizational and official successor will be the merging company (assuming Company B), while in the event of a merger both companies will cease to exist and its successor will be Company C. Acquisition is a qualified case of purchasing shares or assets, the acquisition means the purchasing of the majority of the shares, not always the majority part but not less than 25% of the shares in a company and in the case of a public limited company this percent is 33. An acquisition is best worth it for a company if it has effective leadership and management skills but does not want to make a direct, new investment in the host country. In a given host country purchasing successful brands, their sales channels and the market in order to take the place of the other company in the foreign market. (UNCTAD, 2022)

Greenfield investment

In the case of a greenfield investment, the investor establishes a completely new company abroad, which he owns 100%. The origin of the term is that in the past, greenfield investments were made mainly in 19 former agricultural areas. "The disadvantages of investment and its type are often that basic infrastructure is not built in greenfield areas, which requires additional investment, although this can be eliminated by local government support policies. Companies usually choose greenfield investment if they have specialized technological knowledge and do not want other to share with companies. Whether or not to make a greenfield investment depends on the company's activities, as it would be difficult to invest in a bamboo field in innovative industries, for example, a complete transformation is required in almost all cases. (Antalóczy, 2014)

Brownfield investment

In the case of brownfield investments, the investor buys and renovates and transforms disused industrial facilities (factory buildings, industrial sites, etc.) in poor condition. This is advantageous in that the area is likely to have infrastructure in the past and a skilled workforce. Brownfield investments are often confused with greenfield investments, as they are often buildings and factories in such poor condition that they require a complete renovation. (Antalóczy, 2014)

Joint ventures

In this case, the foreign investor forms a joint venture with domestic companies or government agencies. Occurs when the foreign party has the expertise, capital, while the domestic partner knows the country-specific tax factors, business environment, etc.

The choice between investment methods is influenced by the characteristics of the investing company and the host country. According to a survey conducted by UNCTAD in 2000, the following criteria are relevant for an investor's choice:

1. Table Investment considerations for different ways to enter the market

	Greenfield	M&A
R&D quality	High	Low
Degree of diversification	Low	High
Company size	Small	Large
Cultural/economic differences between host and investing countries	Large	Small
The development of the capital market of the host country	High	Low
Target company supply, market background	-	Significant
Growth rate of the host country	High	Low

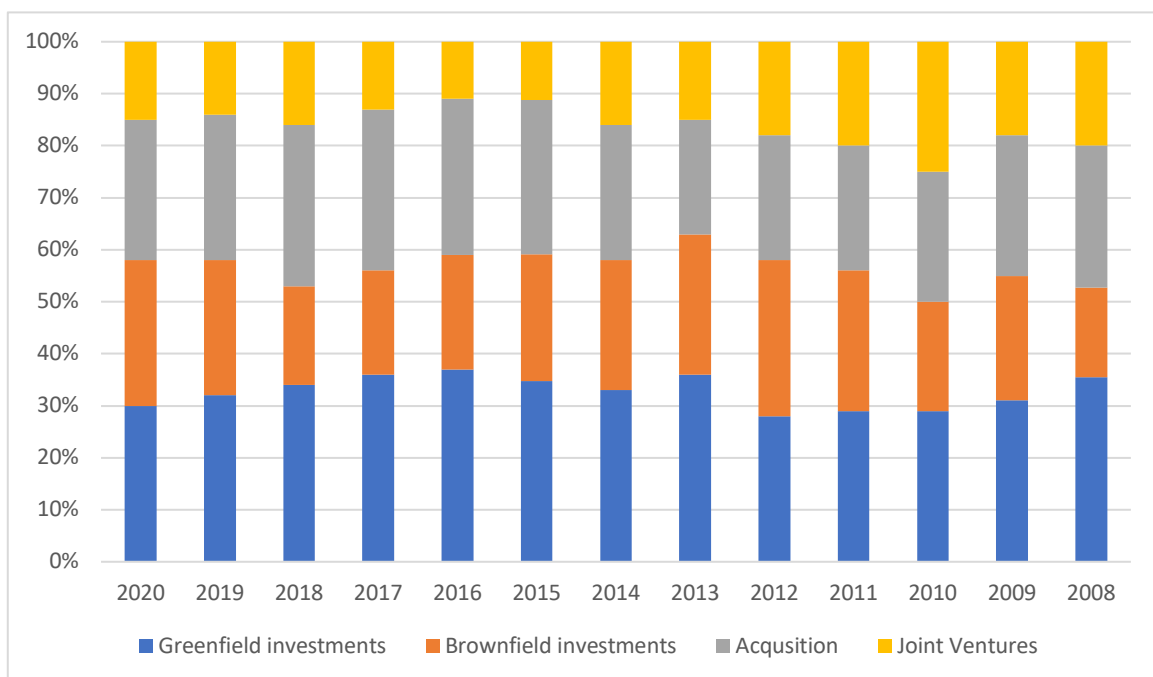
(Katona, 2007)

Trends

In 1972, the establishment of foreign-Hungarian joint ventures was made possible in Hungary, and from then on foreign companies had the opportunity to enter a closed economy in some way. Nevertheless, the establishment of joint ventures after the change of regime was more typical in Hungary, as this is when our markets actually opened up. As an external player in transition economies, it was difficult to keep up with the changes, so it proved beneficial for foreign companies to partner with a domestic company. In the early 1990s, the investment climate across Europe changed through transition countries. After the change of regime, most foreign capital flowed into Hungary in the region, and for a long time we were in the first place in terms of foreign capital per capita. Through privatization, takeovers and joint ventures were authoritative, with most of FDI coming from the privatization of state-owned enterprises. In 2000, Western Europe was the world's largest investor in terms of acquisitions. Greenfield investments gained more ground in the second half of the 1990s. Greenfield investments have greatly contributed to the development of various industries in the countries of Central and Eastern Europe and to the settlement of new sectors, as countries have virtually started from scratch after the abolition of communism. The value of greenfield investments has always exceeded the value of acquisitions, which is completely understandable since in most cases it is more expensive to build production from scratch than to buy an entire company. The peak was in 2007-2008, but in 2009, during the crisis, both forms of investment showed a huge decline, after all, during the economic recession, avoidable spending is suspended or postponed by companies. Around 2010, the global trend again reached its 2006 value. The value of greenfield investments has shown modest growth since 2012, until last year, showing a recovery from the crisis. Acquisitions have been declining since 2010, but increased again in 2014. In my opinion, the value of the two types of investment will converge in the future, as in recent years, so an increase in acquisitions will be observed, to the detriment of greenfield investments. I base my assumption that for a long time (especially in Hungary) greenfield investments were typical because there were no developed small and medium-sized companies that would have been worth acquiring as foreign investors. However, in addition to the big multinationals, smaller companies that are worth buying are becoming more and more successful. Moreover, large multinational companies are increasingly buying up other large companies as well. The timing of large-scale greenfield investments has slowed in the European region, and the willingness of companies already present here to invest is likely to be characterized by brownfield investments or acquisitions. Developed regions will, after a while, reach a level where foreign capital invests

in existing companies rather than setting up new ones, with only the ownership layer changing in the management of companies. In my opinion, the greenfield wave will shift towards India, but there is still room for the country to develop to attract more significant investors. Despite cultural and geographical distinctions, the level of infrastructural and economic growth is not yet sufficient for investors to relocate their subsidiaries there. As long as developing regions such as India or some countries in Africa do not catch up, a significant wave of greenfield investment is not expected in, say, Central European countries after the regime change. (Antalóczy, 2014), (UNCTAD, 2021)

1. Figure: The % distribution of FDI in Hungary based on the ways of entering the market



(MNB, 2022)

Theories concerning the motivations of foreign direct investment

a) Based on the assumption of a perfect capital market

- Theory of comparative advantage: This theory is based on the fact that factor supply and rate of return vary from country to country. Thus, capital moves until the return is the same in all countries. The problem with this is that it does not differentiate between portfolio investment and direct capital investment, nor does it take into account the risk factors that investing in different countries can cause.
- Diversification hypothesis: An important aspect in the case of a foreign investment is to take as little risk as possible, and this can be achieved through diversification. The

theory was developed by Tobin and Markowitz, but the validity of the theory has not been proven yet.

- The market size hypothesis: may be a potential FDI target. The size of the market is determined by the trade of the investing company in a given country and the value of GDP. Of the hypotheses assuming a perfect market, this is the only assumption that can be considered valid to this day.

b) Under the assumption of an imperfect capital market

- Hymer's organizational theory: The starting point in this case is that a foreign company is always at a competitive disadvantage vis-à-vis resident companies in another country's market (linguistic, legal cultural differences ...). If you nevertheless commit to investing, you are likely to have company-specific advantages that outweigh the disadvantages mentioned above, such as an innovation advantage or a research / development activity.
- Vernon's Life Cycle Theory Vernon's theory, published in 1966, explains where the product is placed on the life cycle curve. In the stage of innovation and product development, production and sales take place in the mainland. Here, novelty is still the competitive advantage. As the product becomes familiar, competitors catch up, new competitive advantages must be sought. One possibility for this is to relocate production to a country where the availability of factors of production is better and goods are lower.
- Internalization theory Market transactions are an additional cost for companies, and market barriers make it difficult to trade with other foreign companies. All of these effects are forcing companies to enter foreign markets through capital outsourcing rather than building partnerships with foreign companies.
- Global Strategic Management Theory: Multinational companies aim to increase market share. As a result, when a competitor, buyer or supplier invests capital abroad, it also generates the appearance of other market players. This process increases the concentration of each branch of production in each region.

Location theory: This theory traces the flow of capital back to the location of other factors of production. Since factors such as cheap labor or natural assets are often immovable, the company is “forced” to bring the production stage closer to them if it wants to reap the benefits. (Antalóczy, 2014)

John H. Dunning: The OLI Paradigm

J.H. In his eclectic theory, Dunning attempted to fuse certain parts of various theories that explained and described certain areas of working capital flow. It drew its key elements from the theory of transaction costs, the theory of internalization, and the strategic management approach. The main idea of the eclectic theory is that a corporation prefers working capital investment to exports if it offers lower ownership and transaction costs, as well as favorable local production conditions. (Csáki, 2011)

Dunning considers three factors to be decisive for working capital flows:

- O-ownership benefits for the investing company
- L-location advantages
- Internalization benefits.

Contrary to classical theory, company-specific, proprietary benefits can explain the existence of working capital flows within an industry. In this case, the localization advantages cannot explain the presence of foreign direct investment in a given sector in the host country, as this is why corporate strategy, as well as company- and industry-specific factors, are responsible.

Ownership benefits

It is important that other companies in the country do not have limited or limited access, as this is the only way to reap the benefits. The definition of property-specific benefits has changed over the last few decades, even more so in the 1970s, for example, when a company was able to organize its internal production well or adapt it to market requirements. Nowadays, however, owning knowledge-intensive assets provides the benefits.

Location advantages

There are benefits that a company can only enjoy if they have already invested in that area. These include available natural resources, cheap labor, favorable business, political, economic, cultural environment, favorable tax conditions, government incentives for investment, and tariff restrictions. We can also get subsidies in cash and in kind (real estate, factory building, training organization) under government incentives. Also the advantages of the location include the geographical location, easy accessibility, developed infrastructure.

Internalization benefits

Benefits of internalization If a foreign investment has only ownership and / or location benefits, it is not yet a guarantee that it will be worthwhile for a multinational company to invest there. You can save significant costs if you only have a contractual relationship with a company in that country instead of maintaining an entire production department there. In addition to the two benefits detailed earlier, the investment should provide additional benefits. It is actually worth investing if this avoids significant transaction costs, for example, or allows the company to form strategic alliances. Even in the case of the international organization of production, it can be important that the different units are within reach of each other, so that production is as optimal as possible. Hungary is in a lucky position in this respect due to its central location. Instead of a license agreement, it is sometimes better to invest abroad if you cannot find a sufficiently reliable and demanding contractor for the job. In this way, it does not jeopardize its reputation and spares itself from any problems arising from the partnership. Obviously, the benefits of internalization outweigh the other benefits, as a foreign direct investment does not always save as much as choosing simpler versions of a foreign presence. Nevertheless, if a company finds itself in a decision-making position, it will choose the country where the benefits of internalization exist, in addition to the other two benefits. (corporatefinanceinstitute, 2017)

Possible effects of FDI

The effects of FDI on the host country are extremely complex and there is no uniform theoretical framework for their effects. Each segment of the question can be thoroughly examined, both theoretically and practically. Foreign direct investments (FDIs) benefit the host country in a variety of ways. It fosters economic development by increasing the productivity and exports of the host countries. Imitate, skill development, competition, and exports are four methods for increasing the host country's productivity. On the one hand, foreign direct investment can boost economic growth by increasing productivity through knowledge transfer, and on the other hand, it can have positive externalities through corporate connections (e.g., improved market access or financing conditions). The onset of these advantages, however, is not automatic. FDI also has a slew of negative implications that harm the country in a variety of ways. The extent of FDI's negative consequences is determined by the characteristics of multinational corporations, the host country, and the host country's policies. Its effects, whether positive or negative, depend mainly on the country concerned being able to make it compatible

with its own long-term economic goals. These FDI effects can influence the competition on the market, the suppliers and the modernization of technology and has an indisputable impact on the world economy. (Antalóczy, 2014)

Economic stimulus effect

The host countries expect economic growth and GDP growth from the investment, as GDP growth is either realized by domestic companies or, in the absence thereof, by foreign sources. The second case concerns the countries of Central and Eastern Europe, which are particularly poor in capital, as there are no external or internal sources, so there are two sources of economic growth: on the one hand, the production of established companies and, on the other, the increase in production of domestic companies. Companies are able to increase their production directly or indirectly. If only the first phenomenon materializes, i.e. only foreign investment produces extra GDP, then, in the absence of additive economic growth, there is a greater chance of the development of a dual economy. The host country has a great responsibility to avoid this and to take measures to help strengthen its integrity. Of course, it does not matter what percentage of GDP a given country produces by foreign direct investment. The composition of foreign direct investment is really lucky if, on the one hand, they are realized in several segments of the economy, so not only are there a few multinational companies in one sector, but also investment companies in several sectors, not just global giants. Large companies invest. (KSH, 2020)

In terms of sectoral distribution, large investments have been made in the manufacturing and vehicle manufacturing in Hungary, accounting for 57% of total foreign direct investment, but this is not excessive given the basic structure of the economy. On the other hand, the country's competitiveness is not only determined by the exceptionally good value of two - easily changing - factors of production, but also by the competitive advantage in terms of several factors, such as the qualifications of the labor force and the stability of the legal system. Hungary's labor force is highly educated and talented, with engineering, medicine, and economics receiving special attention. As of 2015, the literacy rate was 99.05 percent, the highest in the region. The country's labor supply is relatively cheap, allowing it to fit best into the European production chain and be called an efficient manufacturing workshop. Several foreign-owned companies started their production in Hungary from 1990 until nowadays. (KSH, 2022)

Hungary's attractiveness with international investors is growing, as evidenced by the fact that the HIPA (Hungarian Investment Promotion Agency) has successfully managed and negotiated an increasing number of projects year after year in recent years. Following an impressive 2015, Hungary's investment promotion successes increased in 2016: the 71 projects finalized with positive investor decisions represent a 6% year-on-year increase. In terms of country of origin, the majority of projects originated in Germany, the United States of America, the United Kingdom, and Switzerland, although Hungarian firms were also involved in seven good decisions. (HIPA, 2021)

These foreign investments carries many positive effects. For example increase market competition by encouraging local businesses to invest in physical or human capital to become more efficient. They help host countries enhance industrial efficiency and resource allocation by entering markets with high entry barriers. FDI affects the economy of the host country positively by raising tax revenues, strengthening the country's exchange rate, and encouraging the government to implement measures that will attract more MNCs to the country. (UKessays, 2017)

Employment impact

Different types of foreign direct investment can have different effects on employment. Greenfield investments can help to alleviate unemployment by providing new jobs. The nature of the investment should not be overlooked, as if it was settled in the country specifically because of cheap labor, the exploitation of a cheap factor of production, the competitive advantage of rising parallel wages, and rising wages in the long run may result in the plant being relocated and those employed there losing their jobs. Of course, the issue is far from simple, as if the increase in labor prices was not caused by artificial government intervention alone, it could be due to additional employment opportunities induced by other changes (for which the competitive advantages are higher). (Agarwal, 1996)

Employees were frequently laid off as part of rationalizations in the case of investments that mostly passed to foreign hands after privatization, resulting in a rise in the number of unemployed in the short term. These employees were largely "internally unemployed," which harmed the company's bottom line. In order for them not to become part of the long-term unemployed, government intervention is needed, which must be implemented in line with the

transformation of the economy. After a regime change, governments must take this into account in the long run, as sustainable development leads to permanent economic transformation, which prioritizes the establishment of lifelong learning programs. The present government's goal is to minimize unemployment as much as possible through creating more and more jobs. The attraction of FDIs can help attain this goal. The other goal is to close the pay difference between regions, which is possible. It should be noted that corporate positions are concentrated in areas with a reasonably big pool of working-age population. (Antalóczy, 2014)

The impact of FDI on the labor market looks to be good. If domestic firms' productivity grows as a result of adopting multinationals' production strategy, which is based on boosting labor productivity, they will not hesitate to pay higher wages to workers.

All in all more and more country and company invest in Hungary, this way more job opportunities are available for Hungarian employees. This leads to a decrease in the unemployment rate. These businesses raise the standard of living in the host Hungarian labor market by giving employees with training and preparing them to operate complex machinery while also boosting their productivity. This information can be used to other domestic businesses. This suggests that the indirect technology transfer between MNCs and Hungarian businesses favors Hungarian businesses in the host countries. By replicating multinationals' superior technology or management abilities, domestic businesses can compete more successfully in export markets.

Restructuring effect

The primary restructuring effect of FDI is determined by the developing industries' sectoral technical structure and the host country's initial status. The entire economic structure may change dramatically if the new structural pieces are integrated into the national economy, and macroeconomic indicators may improve. The investments of large multinational companies change the structure and the design of the export of Hungary. Products are manufactured and exported by foreign-owned multinationals that used to be a much smaller part of production. The predominance of automotive production and the high -tech industry have been steadily increasing. In these sectors, where foreigners (mainly multinationals) have invested heavily, their production and exports have increased rapidly, while other sectors have in many cases stagnated. (UKessays, 2017)

This has led to a change in the structure and increasing concentration of foreign trade. Thus, on the one hand, foreign investment has helped the industries of Central and Eastern European countries to integrate into Western production systems, and on the other hand, the product-level and geographical concentration they have caused has made them somewhat vulnerable. He draws attention to the danger that, if multinational companies lose their attractiveness in Central European countries, foreign capital could withdraw. The risk of this disinvestment can be reduced if the local supplier background industry is developed and if skilled labor is found not to be cheap. The danger can be further mitigated, in my opinion, if Hungarian suppliers diversify their manufacturing and services so that the withdrawal of a TNC does not directly bankrupt them.

Strengthening competition in the market

Emerging companies generate competition in the factor market on the one hand and in the product market on the other, which may lead to a decrease in profits primarily at the level of competitors.

For the incoming company sector, the input-generating market segment is also forced to intensify competition, which may lead to an increase in efficiency, which is not necessarily detrimental, as if domestic companies are able to increase efficiency and reduce costs, their international competitiveness will increase. Thus, in the face of increasing domestic competition and declining profits, companies that are already able to compete in the international market may become export-oriented, thus reducing the balance of payments deficit. Of course, this can only be a long-term prospect for companies and sectors that are fundamentally capable of development; otherwise, companies will face total backwardness and foreclosure, especially if their international competitors in the sector have the capital and efficiency that the domestic company lacks.

The company settling in can also promise new opportunities, as the inputs it requires may not be produced by anyone in the country yet, but there may be companies that would be able to produce this necessary input, and for them it has a market opportunity. Moreover, referring to the restructuring, I would like to point out that if production is directed in the right direction, the structure of the economy can be modernized. At the level of the company settling in, the

product range is expanding. Foreign experience can accept the new product with consumers and may even help innovation to pull forward in the medium term.

Foreign direct investments, on the other hand, have the potential to hinder competition and upset the prevailing market equilibrium. In emerging countries, domestic businesses may not be able to compete with global corporations. They would lose business as a result. Domestic firms may not be able to absorb foreign firms' knowledge quickly enough, resulting in a loss of market share in the short term. Some of the foreign policies used by MNCs may be unpopular with workers in host countries. (DEVELOPMENT, 2002)

Effects on suppliers

The benefits for domestic suppliers are often and widely heard everywhere, so I would just highlight a few topics in this area.

This is the case, for example, where the supplier ratio is low or where suppliers can only provide products with a low degree of processing and low technical quality, or can provide them to foreign-owned companies. In such cases, the company may prefer to install its own foreign supplier in the country, the effect of which is quite complex, it is not possible to decide in black and white whether it is good or bad for the economy. For transnational companies that think in terms of international synergy and efficiency, it is logical that they operate in their own global supplier system.

The emergence of international suppliers and the emergence of international vertical corporate supplier systems are putting domestic companies on a constant “forced trajectory” in which innovation, the introduction of increasingly stringent quality assurance systems, is the only chance to stay competitive. In the wake of supply activity and FDI, the hunger for information and the transfer of knowledge and the development of research are inseparable, which I will discuss in more detail in a later chapter.

However, in the event that foreign companies and local firms develop strong relationships, become each other's suppliers, a kind of complementary role emerges, a balance can emerge between the two sectors. Moreover, in theory, it may even be the case that foreign investment gives the initial impetus to domestic companies and they crowd out foreigners.

Basically, it can be concluded that there are two types of connection between the companies: forward-looking connection effects have an effect on the companies further up the production chain, and downward connection effects affect the companies on the input side. Fortunately, both have a favorable impact on domestic businesses. The problem is that in the case of export orientation, forward-looking effects are realized in overseas markets and enterprises, whereas in the case of import orientation, backward connection effects are realized. (UKessays, 2017)

Impact of technology modernization

The sectoral makeup of investing businesses is critical, as the technical and technological level of foreign companies' production affects whether or not a development effect can be achieved. In terms of strength, it's also critical to consider if a greater level of technology is transferred to domestic enterprises in the given scenario, as well as the country's beginning level of technology. Of course, the relationship is influenced not only by imported technology and willingness to transfer, but also by absorption capacity, adaptability, learning ability, the size of the technological gap between the two sectors, culture, workers' intellectual capital, the educational system, and a variety of other additive factors.

However, it is important to consider not only the technical tools and systems, but also the transfer and spillover in a full innovation interpretation, which includes management methods as well as meeting deadlines, creating an optimal logistics chain, organizing production, and adhering to hygiene rules.

Optimally, the flow of knowledge, the spill-over two-way process, i.e., information flows from one innovator (and virtually any "knowledge owner") to the other, without compensation.

The type of investment can also influence knowledge flow. For example, in the case of a greenfield investment - primarily due to internalization - the company does not transfer company-specific technology because it would lose a competitive advantage, but it can play a significant role in knowledge access.

In addition to the foregoing, the impact of working capital trade on development should be emphasized. On the one hand, this is accomplished through the importation of advanced

products (for example, companies buy modern machines or may encourage development in the product market, they may try to copy, imitate the product, etc.) Export markets, on the other hand, might stimulate enterprises to produce at a higher level, as I described in the market effects section; this is known as the "learning by exporting" effect. (UKessays, 2017).

Impact on services

Services are inherently unavailable by their nature, and distance is great (reduced by the expansion of information technology, but still significant today), which has two key effects. For starters, working capital investment rather than exports is the greatest way to enter the market, because established companies' services cannot be exported. It is thus no coincidence that service sectors account for a large proportion of FDI inflows. If this percentage is unusually high, it may be a measure of how developed foreign capital is in a country's economy, with it considering it as a potential market for its services rather than just a source of raw materials or cheap labor. (UKessays, 2017)

Some services (such as finance, marketing, management consulting, information and engineering services; where the development of a market economy is not yet complete. As it relies primarily on a highly skilled domestic workforce, the spillover effect can occur quite strongly as an employee. Knowledge is flowing through the economy that, for example, is a missing but essential input in developing or post-socialist countries.

Economic introduction of Hungary

Hungary is a small country in Central-Eastern Europe. The population of Hungary is around 9,7 million. Hungary has an aging population like the most industrialized countries, the activity rate of 54% is particularly low, meaning that a smaller population doing high-value work supports many inactive people (students, retirees, the disadvantage people). (Comission, 2021)

Hungary is considered a medium power, in terms of nominal GDP, it will have the 57th largest economy in the world in 2018, while based on the 52nd purchasing power parity (2020), it is among the countries examined by the International Monetary Fund. The country is the 36th largest exporter in the world and also ranked 36th on the list of importers (based on estimated

2019 data). Hungary's economy is a high-income OECD economy and one of the most highly developed countries in the world (43rd in 2019). (OECD, 2021)

Historical overview

Hungary was in the process of transitioning from communism to a market economy from 1990 to 2004. The first and most important thing to know about the communist economy is that it was not created as a result of socioeconomic progress. It was actually a man-made creation. The philosophy was founded on the ultimate objective of achieving financial and social equality for all citizens of the country. The government has to employ multiple forms of authority to create and then maintain this false institution. It compels all actors in the market economy to compete, and it must result in those who can benefit from it and those who can be disadvantaged on the one hand. As a result, the planned economy structure began with the goal of eliminating the free market and competition, non-state output, and the economy, while ensuring full equality in society for all persons. Non-state property and the factors of production were abolished completely in the communist economy. The transition of these characteristics into public ownership, on the other hand, resulted in enterprises that had no genuine owner. With strong bureaucracy, economic groups were brought under the supervision of the government. This was the beginning of the planned economy. Hungary was largely recognized as the economic leader of the communist countries of Eastern Europe in the late 1980s. Introduced in the late 1960s, Kádár's "goulash communism" evolved into a hybrid kind of market socialism.

Another essential aspect of the system was that it was a dictatorship by definition. Individuals must be placed under central power since they are involved in production. Eastern and Central European countries followed the economic policies prescribed by Moscow. The communist economy's following characteristics were preserved: Strict adherence to the achievement of quantitative targets, establishment of a planned economy, a focus on heavy industries, a broadening of the variety of human resources employed, complete eradication of market impacts, and economic growth by force. Government-owned businesses were known for their low productivity and lack of drive. The quantitative approach was the prevailing norm in the economy. On the one hand, the communist economy's primary priority was to outperform expectations. Resources and manpower, on the other hand, have been squandered, and quality, efficiency, and research and development have all been severely ignored. The planned economy

has resulted in an ill-formed economic structure, resulting in a tight economic situation, and the country has fallen below the global norm. (Britannica, 2020)

A tight labor market is to blame for the disparity. Organizations that directly supply industrial productivity had a monopoly position in most cases. This is due in part to their bigger size and in part to the legal and economic regulatory framework and due to the bureaucratic constraints under which these organizations had to function. The manufacturing and heavy industries dominated the economics of communist countries (sometimes the defense industry). In these industries, raw materials and energy are in high demand. The employment rate in the service sector, on the other hand, was exceedingly low. All post-communist countries had to pay similar attention to the lack of basic infrastructure and low service quality at the start of the turnaround. It has been difficult to implement due to the poorly built economic structure.

"Despite all forecasts, Hungary's first years after communism's demise produced a deep and long-lasting recession". The economy shrank, and agricultural and industrial output stalled. On the plus side, the ownership structure has fundamentally changed; the number of private enterprises has increased dramatically, allowing the previous system's "second economy" to expand further. There was also the growth of illegal or hidden economies at the same time. One form of deal was illegal and could be related to the criminal underworld, while the other involved registered businesses actively evading taxes as a result of their operations. The effects of pricing and trade liberalization, as well as diminishing GDP, have had a significant inflationary impact. A broad collapse in the economy was linked to the abrupt and pulsing drop in employment. Historically, regional variances in standards, performance, and unemployment reflected the country's regional differences. The collapse of the CMEA (Council for Mutual Economic Assistance) and the accompanying financial crisis resulted in a major drop in communist countries' import and export activity with Soviet countries. Despite the fact that Hungary was looking for export and import partners, the country's total trade decline was not as severe. By 1994, Hungary was on the verge of economic collapse, owing in part to the transition depression and in part to the first elected government's disastrous economic policies. The Bokros package, an unpopular and stringent stabilization measure, was successful in averting the catastrophe. (Britannica, 2020)

Economic indicators

The volume of Hungarian gross domestic product increased by 4.0% in 2017 and by 4.9% in 2018 compared to the previous year, making it one of the leading companies in the EU. Growth continued in 2019. GDP growth was boosted by investment growth of 17% from a low a year earlier. The fact that the actual implementation of the projects launched in the 2014–2020 EU budget cycle also boosted real estate investment activity, as well as real estate investment activity, played a role in the expansion of investments. The performance of most branches of the national economy has increased. The driving force behind expansion has been market services, manufacturing and construction, while agricultural performance has dampened GDP growth. In addition to the improving external environment, the favorable financial situation of households contributed to the increase in performance: real wages jumped and the loan stock practically stagnated. The ratio of the central budget deficit to gross domestic product in each year from 2012 to 2017 was lower than the 3.0% Maastricht deficit threshold. The value of government debt in HUF terms was HUF 28.1 thousand billions at the end of 2017. (Comission, 2021)

2. Figure: General government deficit (% of GDP, 2002 – 2020)

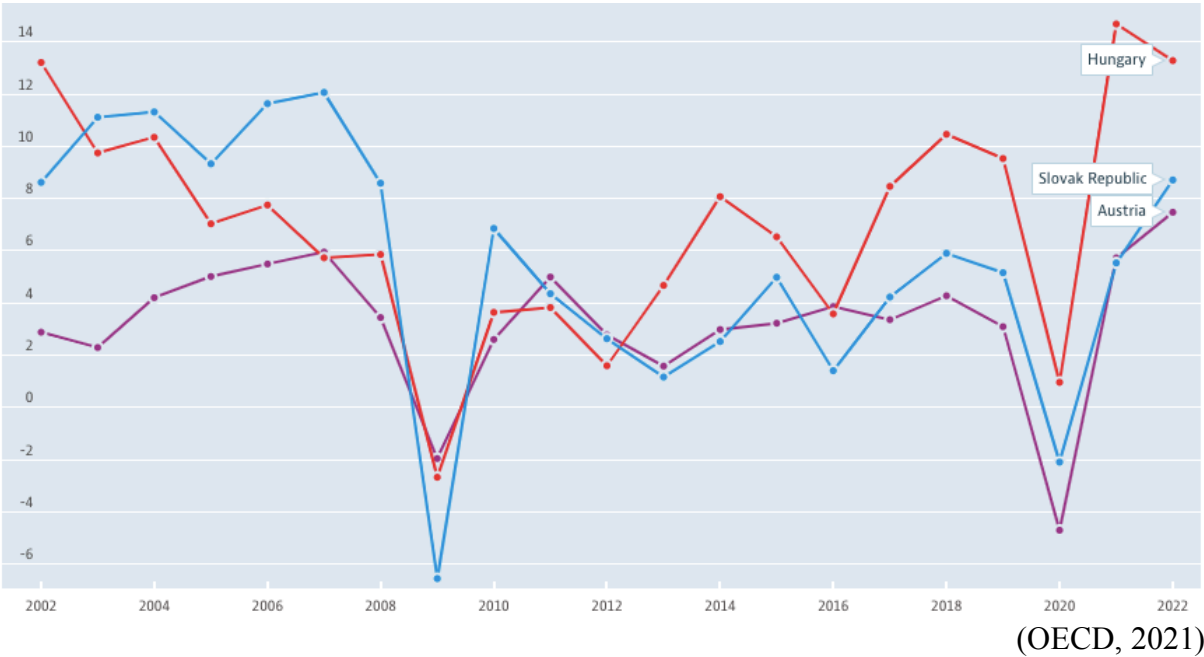


This chart shows the government deficits of Hungary, Austria and Slovak Republic. Until 2008 Hungary has much more larger deficit than the other two countries. The bottom of the Hungarian budget deficit was -9,2% in 2006. From that point Hungary shows strong increase

until 2019 until the pandemic and currently the budget deficit is -8%. More moderate decline can be observed in the case of the other countries in 2006. In 2008 the Global Financial Crisis also case a decline in the case of all the three countries. The largest drop after the Financial crisis can be seen in the budget deficit of Slovak Republic. From 2011 the budget deficit of all the three countries showing increasing tendency with smaller or larger changes until the Covid-19 pandemic.

The GDP is one of the most important metrics of economic progress. The gross domestic product (GDP) is the monetary value of all finished products and services produced inside a country during a given time period (GDP). GDP is significant because it provides information on the size and performance of an economy. The rate of real GDP growth is widely used as a gauge of the health of the economy. A growth in real GDP is seen to indicate that the economy is performing well in general.

3. Figure The GDP growth rate of Hungary, Slovak Republic and Austria



This chart observes the change in the growth rate of GDP of Austrian, Hungarian and Slovakian Republic in the last 20 years and also shows a prediction to 2022. This chart shows similar fluctuations in case of every country. The Hungarian values shows the largest changes, moves within wider boundaries. While in the case of Slovakian Republic moderate changes can be observed. A large drop can be seen in 2020 in the GDP of every country, which is the consequence of the covid-19 pandemic. The sharp drop in GDP was primarily due to the decline

in the automotive industry, manufacturing as a whole, and the hospitality sector. As a result of the stoppages in the automotive manufacturing industry, production plummeted in many manufacturing sectors in April 2020. Demand collapse, interruption of supply chains, and delayed investments also adversely affected the economy. The graph illustrates the post-epidemic economic recovery with a huge rise. In 2021 the value of the GDP returned to pre-covid-19 times and similar values are predicted for 2022. The country is constantly evolving and is rated better and better in all economic terms. This development also makes the country attractive for foreign investments. This is also evident from the fact that wages paid by foreign-owned companies are equivalent to 11% of Hungarian GDP, one of the highest in the OECD. (OECD, 2017)

Hungarian economic growth was nearly 5% in both 2018 and 2019, and forecasts for a 3 to 4% increase in 2020 had been made before the Corona outbreak became apparent. Similarly, the economy began 2020 with high hopes, but a favorable trend quickly became negative. On a year-over-year basis, the economy dropped by -5.1 percent. The Hungarian National Bank (MNB) currently forecasts that economic growth in 2021 will be between four and six percent.

The unemployment rate is also an important indicator in the view of economic development. Unemployment rate means the percentage of the labor force, who are without job. This includes the people, who are in working age, able to work and actively seeking job. The labor force can be defined as the total number of unemployed people plus those in employment. Labor force means the people who are in the working age (15+ 64-) and economically active.

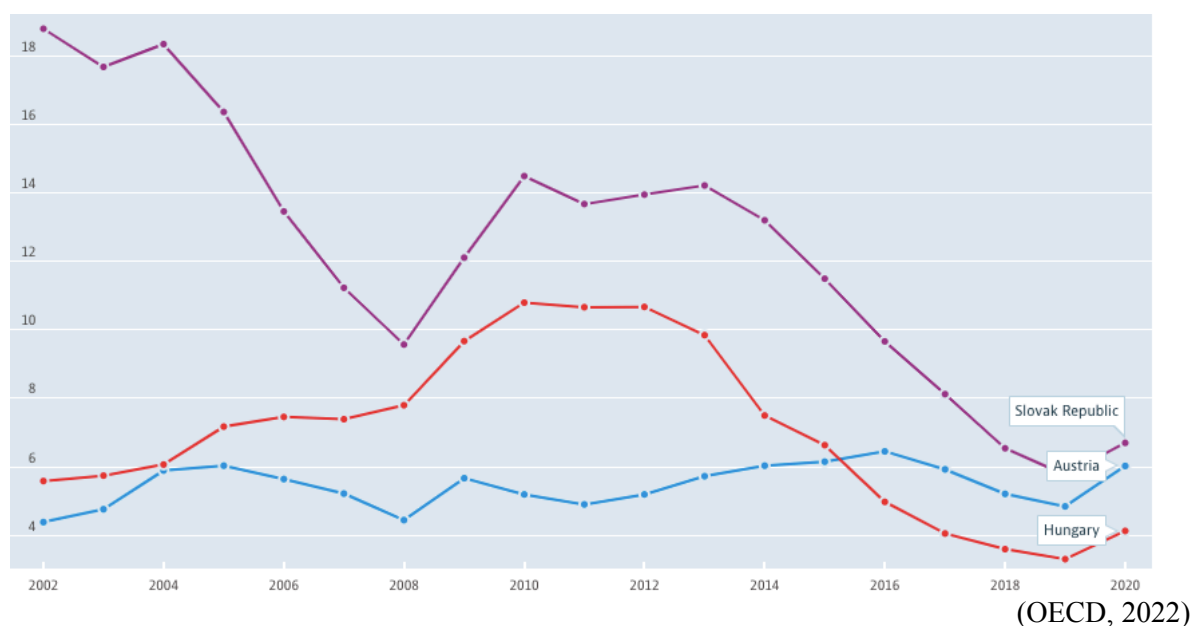
4. Table Hungarian unemployment an employment rate summary (observed period 2000-2022)

Unemployment rate		Employment rate	
Actual	3,7%	Actual	63,8%
Lowest	3,3%	Lowest	49,5%
Highest	11,8%	Highest	64%

(Office, 2022)

The Hungarian unemployment rate is also an important indicator in the view of economic development. The Hungarian unemployment rate is approximately 3,7%. This number is not the lowest number in the recent years, but it is due to the covid-19 pandemic. However this is not the lowest number it is still under the EU average, which is 4%. (OECD, 2022)

5. Figure Hungarian, Slovakian Republic and Austrian unemployment rate in the recent years



On this chart can be observed that the Hungarian unemployment rate is under the EU average currently and the lowest compared with the Slovak Republic and Austria. Currently Hungary has the lowest unemployment rate among the compared countries. The Hungarian unemployment rate increased until the 3rd quarter of 2012, the decline of Hungarian unemployment rate began in 2012. From that point continuous decline can be observed until the 2020, the beginning of the Covid-19 pandemic. According to the Hungarian Central Statistical Office the Hungarian unemployment rate will decline in 2022., from that point it started to decrease again until the Covid-19. Similar fluctuations can be observed in the case of Slovak Republic, it fluctuates in wider boundaries, while the unemployment rate of Austria moves between 4-7 %.

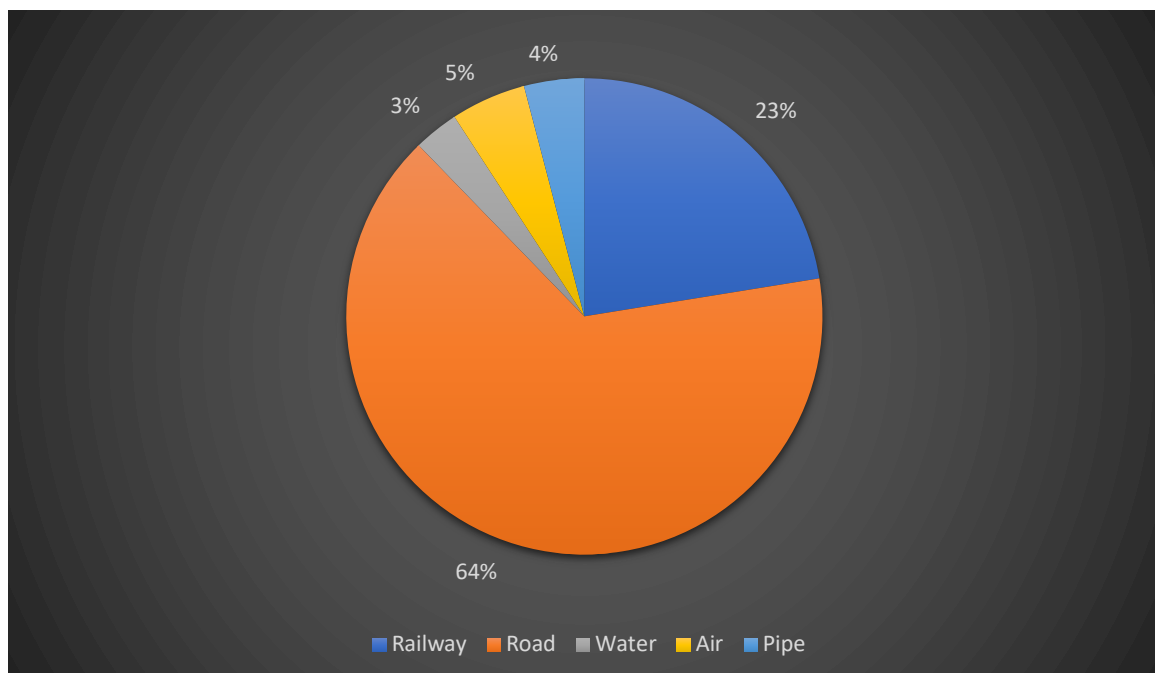
The number of employees increased slowly until 2007 and then reached its lowest point in 2009-2010 as a result of the crisis. After the crisis of 2012-2013, the number of employees started to increase significantly. In 2013, an average of 4 million people were employed in Hungary by definition. This figure is essentially close to the pre-crisis employment rate, but this is partly due to the public works program, but new jobs have also emerged in the private sector. Between 2001 and 2010, the number of unemployed increased steadily, with the exception of 2007. A significant decline in unemployment rates was observed in 2013, when there was a 5,8% decline. The regional differentiation of the labor market is not a new phenomenon, it started after the change of regime, and significant differences can still be seen today. The economic recovery cycle, employment policy moves and locally significant

economic events have affected the relative position of the regions, but the proportions of the most favorable and least favored regions in the region range from 10-13% last 20 years. (OECD, 2021)

Infrastructural and Territorial differences in Hungary

Due to its geographical location, Hungary can be a connecting point between the north-south-western part of the continent and an unavoidable intermediary region in terms of transcontinental and Asian product traffic. Improving the density of motorways and expressways is of paramount importance during this period, especially in the eastern part of the country. The development of infrastructure is also key in solving centralization and the rule of the capital. The figure below shows the dominance of road transport in Hungary. The volume of transported goods is around 280,000 tons per year, 66% of which is transported on Hungary's roads. This represents a total capacity of more than 80,000 million ton-kilometers, 67% of which is road transport. (KSH, 2022)

6. Figure: Performance of different transportation types



(KSH, 2022)

The evolving trend of road transport has been coupled with huge highway and motorway constructions. The length of national highways doubled between 2004 and 2008, which is closely related to the performance of road transport, and as many of these roads were built in

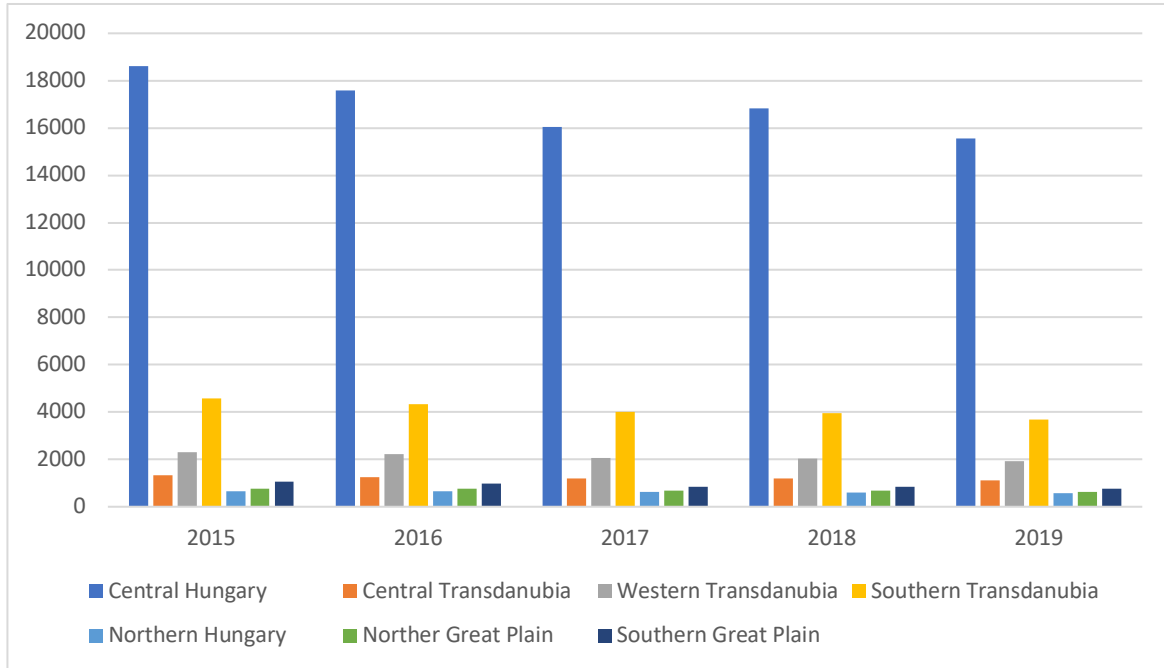
Eastern Hungary, it also helped to develop the infrastructure of the country's less developed regions. Infrastructure developments declined in 2008 due to the economic crisis. In 2013, investments in major infrastructure development were resumed, most of which are advertised with EU subsidies. These subsidies were used mainly for the development of the motorways and railways. In 2017, infrastructural changes will continue, but to a lesser extent. If we look at future plans for the construction of the motorway, we will see an additional 600 kilometers of new road ahead, which is likely to increase the weight of road transport and have a positive effect on the development of infrastructure in the eastern region. The latest section of the M4 motorway was handed over at the end of 2020 and is planned to be built all the way to the border crossing.

County capitals and cities with county status, such as Békéscsaba, Szombathely, Sopron, Szolnok, Salgótarján, Kaposvár and Eger, can expect high-quality transport. The sections of the M3, M6 and M2, M30 and M85 motorways will be built up to the national border. The continuation of the Northern Transylvania corridor will be built as part of the Debrecen-Oradea expressway. Together with the Danube Bridge in Komárom, the connection between Esztergom and the M1 motorway will be built. Bypasses are planned in the areas of Csorna, Hódmezővásárhely, Várpalota, Győr and Pápa. The total length of the road projects is close to 600 kilometers, the total resource requirement is around HUF 1,500 billion, of which the cost of expressway improvements reaches HUF 1,100 billion. (KSH, 2022)

The underdevelopment of the southern and eastern regions of Hungary is reflected not only in infrastructure but also in employment. This figure above perfectly shows how lagging less developed regions are in terms of employment conditions. Unemployment is closely linked to the infrastructure and educational attainment of those living in the region. This is the reason why multinational companies are looking for investment opportunities in Central Hungary and Central and Western Transdanubia. That is why the aim of the government is to get the investments to the less developed regions with the support of an individual government decision. Even less developed graduates find it more difficult to find employment in less developed areas than more developed areas. This is, of course, related to the dominant investment situation in the said western part of the country. In addition, the proximity of the Western European labor market is another issue that generates more jobs in developed regions. The proportion of unemployed graduates in 2013 was the lowest in Central Transdanubia and Hungary. (KSH, 2020)

7. Figure Foreign direct investment enterprises in Hungary by region

(Number of foreign direct investment enterprises)



(Office, 2020)

With this graph, I would like to show the uneven distribution of the number of FDI enterprises arriving in Hungary. However, this is not a big surprise. Investments are traditionally directed to the Central Hungarian region, followed by Central and Western Transdanubia. The large differences among regions is due to infrastructural and educational reasons. FDI requires the supply of well-educated graduates who speak the language to integrate into companies from abroad. The other important thing is the density of roads and infrastructure. If a factory is possible but difficult to access, investors will simply choose another location with better infrastructure and better labor supply, even with less government support. A slight decrease in the dominance of the Central Hungarian region has been observed over the years, but its significance is undeniable. Of course, we cannot expect all regions to receive the same amount of FDI. Western and Central Transdanubia has maintained its favorable position in terms of receiving investments from abroad, and their share has even increased over the years. In this respect, Southern Transdanubia and Central Hungary are in the most favorable position compared to Northern Hungary. The favorable position of Southern Transdanubia is interesting because a lot of investments are coming to this area, but the amount invested is not as high as in the case of Central Hungary, so many small companies invest in Southern Transdanubia. The share of the Great Plain has shown some improvement, but in my opinion, state aid in this

region alone will not solve the problem of the integration of less developed regions. This process must be accompanied by the development of education and infrastructure. Given these data, it is difficult to determine whether the government is working or not. There are improvements, but I think more time is needed to make a decision. (KSH, 2022)

International capital movements and Hungary

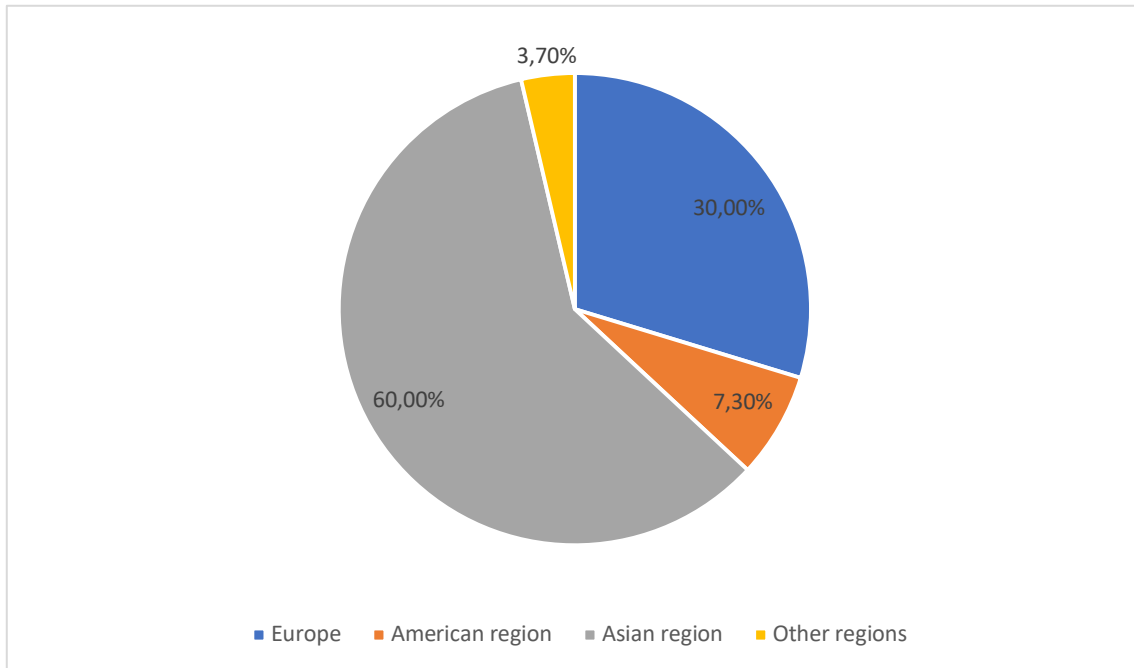
According to the 28/1972. (X. 3.) PM decree, the establishment of foreign-Hungarian joint ventures was made possible in Hungary, and from then on, foreign companies had the opportunity to enter a closed economy in some way. Nevertheless, the establishment of joint ventures was more typical in Hungary after the change of regime, as this is when our markets actually opened up. As an external player in transition economies, it was difficult to keep up with the changes, so it proved beneficial for foreign companies to partner with a domestic company. In the early 1990s, the investment climate across Europe changed through transition countries. After the change of regime, most foreign capital flowed into Hungary in the region, and for a long time we were in the first place in terms of foreign capital per capita. Through privatization, takeovers and joint ventures were authoritative, with most of FDI coming from the privatization of state-owned enterprises. In 2000, Western Europe was the world's largest investor in terms of acquisitions. Greenfield investments gained more ground in the second half of the 1990s. Greenfield investments have greatly contributed to the development of various industries in the countries of Central and Eastern Europe and to the settlement of new sectors, as countries have virtually started from scratch after the abolition of communism. The value of greenfield investments has always exceeded the value of acquisitions, which is perfectly understandable, since in most cases it is more expensive to build production abroad from scratch than to buy an entire company. 2007-2008 was the culmination, but in 2009, during the crisis, both forms of investment showed a huge decline, after all, during the economic recession, avoidable spending is suspended or postponed by companies. Around 2010, the global trend again reached its 2006 value. The value of greenfield investments has shown modest growth since 2012, until last year, showing a recovery from the crisis. Acquisitions have been declining since 2010, but increased again in 2014. ²² In my view, the value of the two types of investment will converge in the future, as in recent years, so that an increase in acquisitions will be observed, to the detriment of greenfield investments. I base my assumption that for a long time (especially in Hungary) greenfield investments were typical because there were no developed

small and medium-sized companies that would have been worth acquiring as foreign investors. However, in addition to the big multis, smaller companies that are worth buying are becoming more and more successful. Moreover, large multinational companies are increasingly buying up other large companies as well. The timing of large-scale greenfield investments (such as Audi's investment) has slowed in the European region, and the willingness of companies already present here to invest is likely to be characterized by brownfield investments or acquisitions. After a while, developed regions reach a level where foreign capital invests in existing companies rather than setting up new ones, with only the ownership layer changing in the management of companies. In my opinion, the greenfield wave will shift towards India, China and other Asian countries, because these countries started to develop their infrastructure and the most important is the cheap labor force, but there is still room for the country to develop in order to attract significant investors. The level of infrastructure and economic development is not yet within the range where investors, despite their cultural and geographical differences, are relocating their subsidiaries. As long as developing regions such as India or some countries in Africa do catch up, a significant wave of greenfield investment is expected in, say, Central European countries after the regime change. (Artner, 2018)

Main investing countries

Foreign investors from Asian countries will have considerable share investments in CEE countries in 2021. A quarter of the domestic FDI portfolio comes from Korea, with China accounting for about 10 per cent and India for more than 4 per cent. The high share of Indonesia (around 3 per cent) can in many cases be attributed to the fact that many companies make their investments in Hungary through their subsidiaries. Overall, almost one third of the domestic stock of foreign direct investment comes from the European Union. (More and more FDI is also coming from the United States, accounting for about 7,3 percent of the stock.) The United States is the second largest non-EU investor.

8. Figure FDI inflow of Hungary by origin in 2021



(HIPA, 2021)

This graph shows where we get the most significant share of our foreign direct investment. Surprisingly it comes from Asia, 5 years ago, 20% of investments in Hungary came from Asia, but in 2021 they were responsible for about 60%. This brings us to the importance of geographical diversification. Asian countries have not suffered as much of the disadvantage that underlies the government's policy of opening up in the East. This numbers may continue to grow based on trends and with the help of Hungarian government's eastern policy. Of course, the second most investments still comes from Europe, it is interesting that investments coming from the Europe felt back to the second position. The investments I present demonstrate the growing presence and importance of Asian investments. These were new companies investing or reinvesting in Hungary. However, we can see that the developing automotive industry can strengthen our efforts to diversify geographically, and in the long run, Asia could become a more and more important investor in Hungary. (OECD, 2017)

Analysis of changes in competitiveness in case of Hungary

The macroeconomic conditions required for a turnaround in competitiveness have formed in Hungary during the last decade, thus the foundations of the Hungarian economy were stable in 2020, when the coronavirus epidemic came out. The fiscal and monetary policy turnarounds, which began in 2010, set the environment for balanced growth. As a result, Hungary's economic growth consistently outperformed the European Union's average by 2 percentage points on average between 2013 and 2019, putting Hungary on a path of balanced catching up. In the extreme crisis produced by the coronavirus pandemic, the Hungarian economy continued to catch up with the European Union in 2020 as a result of the firm foundations developed in the preceding decade and crisis management measures. However, long-term convergence also necessitates a full shift in competitiveness. (MNB, 2022)

In recent years, the Hungarian financial system's stability, lending activity, and profitability have bolstered capital market diversification and increased the involvement of domestic households in government debt. The ratio of non-performing loans has reduced dramatically in recent years, and by the autumn of 2019, the MNB's desired level has gone below 5%, despite the banking sector's capital adequacy continuing to improve. Since 2017, the outstanding loan portfolio has grown significantly in a stable structure, with corporate lending largely driven by central bank schemes (low interest rate environment, growth support programs), while household lending has improved thanks to the introduction of family support schemes (e.g., family housing support, prenatal baby support loans) and consumer-friendly products. Based on the efficient operation of previous years and the steps taken by the government, the loan portfolio of the Hungarian banking industry grew in a stable structure and had substantial capital reserves in 2020, when the coronavirus epidemic broke out. The credit portfolio of the private sector had already topped 35 percent of GDP by the end of 2020 as a result of central bank and government loan schemes, as well as the payment moratorium. (MNB, 2022)

The banking sector's operating income is dropping as a result of the epidemic, while risk costs have grown; yet, the sector's profitability remains among the highest in Europe. Aside from the financial sector's favorite tendencies, Hungary's macro-financial susceptibility has diminished dramatically in recent years as a result of the deliberate strengthening of domestic financing after 2011. Since 2010, household holdings of government securities have surged by more than tenfold. The introduction of MP+ (Magyar Államampapír Plusz) in June 2019 made a

significant contribution. The fact that there was still a considerable demand for MP + during the coronavirus pandemic demonstrates its success, and by the end of 2020, the outstanding stock had surpassed HUF 5,200 billion. (MNB, 2022)

In recent years, corporate dualism has weakened dramatically, making Hungarian economic growth more sustainable. Between 2010 and 2018, Hungarian SMEs caught up significantly, and their relative productivity neared that of large enterprises by 12 percentage points, resulting in one of the highest levels of convergence in the world. Favorable lending circumstances, corporate tax cuts, central bank Growth Loan Programs, the usage of EU funds, second-round effects of foreign direct investment inflows, and the loan repayment moratorium have all played a role in the sector's preferred trends developing. The capitalization of capital, or the persistent high level of investment, contributes to the relative convergence process of SMEs. After Ireland and the Czech Republic, Hungary's corporate investment rate was the third highest in the EU in 2019.

Hungary has achieved nearly full employment in recent years as a result of its effective economic policy, with only a tiny shift in the labor market during the corona virus epidemic. In Hungary, between 2010 and 2019, At the same time, the employment rate among 15–64-year-olds in the European Union attained its third large increase, with a significant decline in unemployment and a substantial gain in salaries. As a result, Hungary has approached full employment, and the labor market has aided economic growth significantly.

International examinations of educational system effectiveness demonstrate that Hungarian students absorb the curriculum as predicted, but they are less able to apply what they have learned in practice. According to the most recent PISA tests, which measure how students apply what they've learned in class in real life, the downward trend seen in prior years has reversed, and Hungarian students' average score has gotten closer to the EU average. In 2017, Hungary spent 3.9 percent of GDP on education, which is in line with the Visegrád average of 3.8 percent, but is lower than the EU average (4.3 per cent). In Hungary, as in the rest of the region, the financial salary of teachers lags behind that of other occupations needing a higher education. Hungary has a higher rate of early school leaving without a vocational qualification (12%) than the other Visegrád countries. In 2020, the proportion of persons aged 25-34 having a tertiary degree was 31%, the third lowest in the European Union. (MNB, 2022)

In recent years, a competitive digital infrastructure has arisen in government, which has aided in the reduction of the hidden economy's size as well as the bureaucratic burden on businesses. The share of unpaid VAT (VAT gap) among EU Member States reduced to the third greatest rate between 2010 and 2019, from 21.7 percent to 6.6 percent in Hungary, thanks to the adoption of the online cash register, the Electronic Road Trade Control System (EKER), and online invoicing. The upward trend is expected to continue, as the proposed VAT return system was implemented in 2021. Estimates for the hidden economy indicate a similar pattern; nonetheless, Hungary's estimated 20% in 2017 was still higher than the EU average of 16%. Wage costs and employment in the public sector remain higher than V3 and the EU average. In the field of infrastructure development, significant progress has been made, but more has to be done. The density of Hungary's railway and road networks is acceptable, although their quality may be better. Hungary's telecommunications infrastructure is of comparable quality. Hungary is in the forefront of the EU in terms of broadband internet speed and penetration. The Hungarian economy's energy consumption remains high, as does the ratio of net energy imports. In 2019, compared to the average of previous years, the dynamic economic expansion has resulted in increased energy consumption, resulting in a net energy import rise of around 20 percentage points (70 percent). Between 2014 and 2018, Hungary's share of renewable energy sources fell to 15% from 21%, and the country fell short of the EU's 2020 target. (MNB, 2022)

Recent inflows of foreign direct investments

The revenue balance of foreign-owned firms shrank by nearly 7 percent of GDP in 2018, which remains historically high. In addition to the declining result, the amount of dividends paid to owners remained unchanged, so the decline in earnings was mainly reflected in the decline in reinvestment: despite the decline, the rate of reinvestment remained high. In the post-crisis years, the profits of foreign firms as a share of GDP fell below 4 per cent from the previously typical 5-6 per cent, which is largely due to a slowdown in domestic and external demand. Dividends paid to foreign firms remained close to 4 percent of GDP despite declining profits, so almost all earned income was paid out as dividends. This may have been due to the sharp deterioration in the post-crisis growth outlook and the liquidity needs of parent companies. Since 2014, in line with faster economic growth, the value of labor income of foreign companies has also risen. However, higher income continued to be accompanied by moderate dividend payments, which substantially increased the value of reinvestments. In addition to EU funding, high levels of reinvestment may have played a major role in the dynamic growth of corporate

investment in recent years. External demand, which also supported the dynamic expansion of exports, may have supported the increase in the profitability of foreign-owned enterprises.

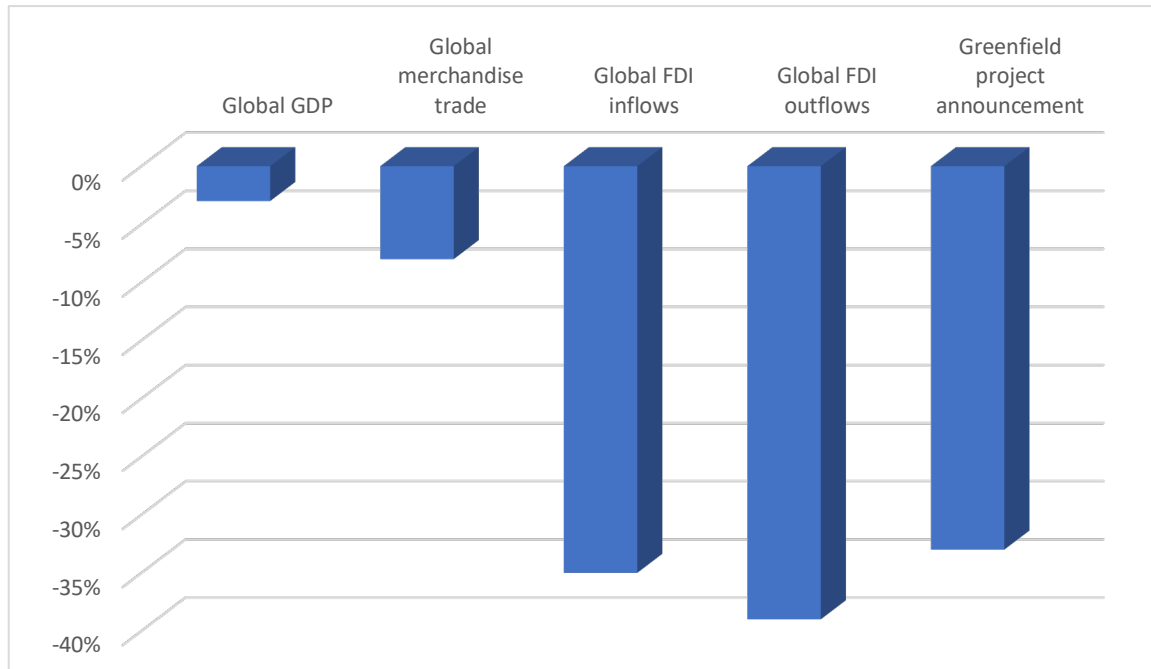
According to the United Nations Conference on Trade and Development (UNCTAD), Hungary received \$ 4.2 billion in foreign direct investment in 2020, up from \$ 3.9 billion in 2019. Since 2017, the value of greenfield projects launched in Hungary has continuously increased. Greenfield projects were worth \$ 7.5 billion in 2019, according to UNCTAD data, up from \$ 4.5 billion in 2018 and \$ 3 billion in 2017. In terms of project numbers, however, the picture is mixed. Hungary welcomed 102 projects in 2019, up from 114 projects in 2018 and 83 projects in 2017. Manufacturing, financial and insurance services, wholesale and retail trade, and professional, scientific, and technological activities were among the industries that drew the most foreign direct investment into Hungary in 2018. (OECD, 2022)

The international economy, particularly the Hungarian economy, was startled by Covid-19, and global investment plunged as a result. As a result of the issues posed by Covid-19, Hungary has responded by establishing a new due diligence procedure for foreign direct investment (FDI), a move that some critics have characterized as protectionist. The Government Decree No. 227/2020, which went into effect in 2020, applies to both EU and non-EU investors. The screening procedures are still in effect today. The new legislation required the Minister of Innovation and Technology to be notified and recognized as the implementation of foreign investment in defense and health care, among other things.

Not only did Hungarian FDI inflows fall by over 35% in 2020, virtually the entire year of the epidemic, but global FDI inflows also fell by about 35%, the greatest yearly decline since the dotcom bubble burst in 2001. (51 percent). The drop in outflows was even more dramatic, at more than 39%. (compared with 55 percent) (UNCTAD, 2021). Data on outflows, on the other hand, is often less detailed and consequently less precise than data on inflows. In any case, the decline in inward FDI is equivalent to approximately five times global commerce and more than ten times global GDP. This is understandable, considering that foreign direct investment is typically smaller and thus more volatile during times of crisis. This is also in line with the lessons learned from prior crises. The question is whether this crisis is one-of-a-kind in terms of its magnitude (maybe) and endurance (perhaps) (to be confirmed in the future). Greenfield project notifications have decreased in value (-33 percent in 2020), indicating that FDI flows

are projected to be muted in the following years. Furthermore, the severance of the link with foreign trade creates concerns and doubts among observers.

9. Figure The impact of the pandemic on selected indicators of the World economy, 2020 (Change over 2019 in percentage)



(UNCTAD, 2022)

The sensitivity and lack of flexibility of FDI to the epidemic's consequences could be explained by a number of factors. They all have one of two things in common: they either emphasize the disproportionately unfavorable consequences of immediate anti-Covid measures like closures, factory shutdowns, and border closures, which have harmed FDI more than local services or production, or they don't. The epidemic has amplified and catalyzed pre-existing issues that would have hindered FDI development even if the crisis hadn't occurred. The imbalance between the drop in international trade and FDI, on the other hand, causes difficult-to-solve challenges. Why is there a distinction now, when the two are so inextricably linked in theory and experience? Perhaps the reason lies in the fact that FDI almost always leads to the creation of production facilities, whereas commerce is typically a one-time transaction. If foreign direct investment (FDI) stops, output will continue with existing assets, but if commerce stops, the economy, or at least a large part of it, will come to a halt. This explanation must be supported by evidence. (Sass, 2021)

The goals of foreign investors in Hungary

The characteristics of large foreign companies differ in many respects, for example, they can be distinguished in their production activities, in the market segment they target, in their corporate strategy, and so on. This type of diversification plays a very important role in companies' investment decisions, be it launching a new product, a new R&D project or a company expansion in a foreign country. It is therefore understandable that the motivations of a foreign transnational or multinational company to invest in a foreign market often differ. According to some studies for example the study by Andrea Éltető and Magdolna Sass, (Marta Götz, 2022) companies can be divided into three main groups based on their main characteristics and business goals, which significantly influence their investment goals. These groups are: assembly-oriented export-oriented, domestically based export-oriented and non-export-oriented companies. It is important to mention that in the sample taken in the article, foreign-owned companies of various nationalities were already operating in Hungary. The publication shows that tax incentives, flexible and skilled human resources and a stable social and political background in the host country are extremely important for the first group of assembling exporting companies. As far as domestically based exporters are concerned, their investment motivations are partly similar to those of assembling exporting companies, as a flexible and skilled workforce and political stability are also very important factors for them in their decision-making. Unlike the first group, an important factor for companies in this category is the degree of foreseeable economic development of the host state. Finally, the group of non-export-oriented companies includes those that make up the bulk of the sample, for which the presence of a skilled workforce is the most important factor, followed by political stability and foreseeable economic development. Compared to the previous two groups, which are composed of export-oriented companies, the domestic market situation is a much more important factor for the non-export-oriented companies. According to the article, the low wage demand of the labor force is not one of the most important factors for all three groups, and the level of qualification is considered to be significantly more important than the wage demand. (Marta Götz, 2022)

Another study considered 74 case studies from the Privatization Research Institute as a sample. The directors of international companies of various sizes already present in Hungary in the sample were asked about the factors that played an important role in their investment decisions. Quite surprisingly, the survey found that the most important motivation for companies to

participate in the domestic market was that, in contrast to the previous study, the low wage demand of the workforce and its lesser level of flexibility and skills were important considerations. In addition, the political stability of the host country and, finally, the access to the Eastern European competitive market through Hungary were mentioned unanimously as important selection factors in the previous study, which means that Hungary's geographical location was an important reason for establishing investment. (Árva, 2004) With Hungary's accession to the EU, the country has become even more attractive to the MNC. Before joining the EU, Hungary had a special support system, which in 2004 came to the EU standard. It was interesting for me to observe that the two studies reached a competitive market through Hungary, which means that the geographical location of Hungary was also an important reason for establishing the investment. (Árva, 2004) It was interesting for me to observe that the conclusions of the two studies on foreign investment motivations in some cases, such as the wage demand of the labor force, differ from each other.

Types and motivations of investors in Hungary

The system of instruments used to encourage working capital involvement can be divided into two major groups. In one group we can list only the assets related to foreign direct investment, in the other the factors determining the general development of investor sentiment in the country.

In the countries most favored by foreign capital investors, there has been a growing phenomenon of government incentives and tax subsidies, financial subsidies and other subsidies to make investment opportunities more attractive. These incentives were not generally introduced, but sought to favor important sectors or regions. To maximize the additive benefits, investors in higher value-added industries in particular were able to receive greater subsidies.

The incentives in the narrower sense, the most common are tax breaks, and within that, corporate income tax is the most common. Also common are the remission of taxes and import duties, the possibility of duty drawback, the possibility of accelerated depreciation of assets, the support of reinvestment of profits, and the reduction of the amount of social security contributions. In addition to the above, there are countless other special tax benefits. In different

countries and different regions, the state operates with a different mix of forms of tax benefits, which best suits the local circumstances. (UNCTAD, 2022)

In developing countries, they prefer to focus on these tax and tariff reductions, as their budgetary resources are scarce and unable to compete with developed countries, where the form of financial and fiscal assistance is becoming more and more important. In part, these rebates allow for some form of reduction in after-tax profit or accelerated depreciation, this is the so called fiscal incentives. On the other hand, the state provides direct non-refundable subsidies to the investor, which will enable it to make a higher technical, higher-risk investment, these are the so called financial incentives. It is often the case that subsidies have to be repaid to the government budget if certain investment criteria are not met. In many cases, such investments are R&D investments. (UNCTAD, 2022)

Other investment incentives, subsidized infrastructure and services, various discounts or free advice, technical assistance, information services, management services, training, which were needed by small and medium-sized investors on the international stage.

In economic terms, the meaning of incentives is given by external economic effects. Positive externalities may arise from the scale efficiency of foreign direct investment, the effects of agglomeration, the increase of workers' skills, the acquisition of new knowledge and the spread of technology. As some of these externalities cannot be internalized by the producers who create them, there is a difference between the rate of return at private and social level, so an investment incentive is justified as long as its cost does not exceed this difference.

As the regulation of working capital flows has become increasingly liberalized, macroeconomic effects that have not previously been overemphasized have now come to the fore, making it an important factor for transnational working capital investing companies.

Such effects:

- The monetary and fiscal policy of governments, as it determines the development of economic stability measures, inflation, external and fiscal balance, the cost of capital through the formation of interest rates, and thus also affects the types of investment. It affects the relative price of the securities of the host country, the size of the repatriated

profit, and in the case of export-oriented investment, the competitiveness of the exported products.

- Structural policy influences the development of the industrial structure, by highlighting the different regions, it determines the spatial location of investments, the position of R&D, and the composition of economic actors.
- Labor market policy, which affects the cost of labor.

The education and training policy that determines the degree of qualification of the workforce and the orientation of their qualifications.

When encouraging investment, a state should take into account that targeted forms of incentives are generally more effective than general forms. When encouraging investment, it should be borne in mind that the goal is not only to attract new investors, but also investment retention is important, to keep the investments already established in the country and integrated into the economy. In general, three incentive principles can be distinguished. Which country applies which investment incentive principle depends on the stage at which that country is raising capital. The first principle is to improve the general image of the country, the essence of which is to improve the country's external image in general, to have appropriate macroeconomic indicators, to have the possibility of law enforcement, to have a stable and balanced government, and to have good international relations. The second principle depends on the effectiveness of a policy to attract direct capital. The most important question is which multinational group is the target, which has already decided that it wants to make an investment, but has not yet decided where, in which region, country, city the conditions are best, or which is still the best. is now planning to invest. (OECD, 2022)

The services provided to current and potential investors in the third large group are increasingly in demand by transnational companies today, as they can facilitate and accelerate the achievement of the investment goal. Such services include consulting, speeding up official administration, helping current investors by municipalities, chambers, local organizations.

In order to properly design the investment incentive system, it is important to take into account that companies cannot be represented as a homogeneous set, as each investment is unique, motivations are based on diverse economic considerations, and emotions and political pressures final decision. Transnational companies operating in different sectors decide on different

weighted investment matrices, so it is up to the current government to decide which investors it wants to attract to the country and what investment policy may be most appropriate for this. Hungary may benefit from the fact that mainly export-oriented, network-based, value-added investors with increasing added value come to the country. It is important that companies that are already established here become an integral part of the economy, find the right infrastructure, that regulations are clear and unambiguous and, above all, that they do not get lost in the maze of bureaucracy. It is desirable for companies to plan for the long term in the country, to establish a regional center, to bring their research and development department here, to have domestic suppliers, and to promote the integration of the Hungarian economy into the European Union.

Hungary's direct investment promotion instruments include non-refundable financial support, which is financed from state or EU funds within the framework of a tender system or on the basis of a contract based on an individual government decision. Indirect means of investment promotion include tax and contribution reductions (for which the State waives future revenue) and other non-quantifiable subsidies.

Hungary has many features that can be attractive to foreign investors such as:

- Hungary, and more broadly, the Central and Eastern Europe region is a desirable destination for foreign direct investment, because of the cheap and educated labor force and its geographic position inside Europe and also due to its economic growth. However, the global economy is changing, and the digitization trend necessitates attention and adoption. Recognizing trends and possibilities is a critical component of future planning.
- To begin with, the worldwide volume of FDI is on the decline. One explanation is that, as a result of digitalization, investment projects are becoming smaller (Goreczky, 2021). The other reason is the global economic turbulence: Brexit in 2016, the US-China trade war in 2017, Covid-19 in 2020, and supply chain difficulties. Because of these factors, businesses are considering the potential of arranging shorter supply chains, investing in more agile supply networks, and offshoring production.
- Hungary's workforce is highly educated and competent, with special emphasis on engineering, medicine, and economics. The literacy rate in 2015 was 99.05 percent, which was the highest in the region. Because the labor supply in the country is relatively

inexpensive, it can best fit into the European production chain and be referred to as an efficient manufacturing workshop.

- Despite a brief drop in 2015, Hungary's economy continues to be one of the most active in the EU. It has one of the region's most advanced financial systems..
- Despite a temporary dip in 2008 and 2015, Hungary's economy remains one of Europe's most active, growing at 3.9 percent in 2017. The Covid outbreak has likewise been handled fairly efficiently.
- Hungary's infrastructure is well-established, and the legal and regulatory framework is clear, creating a favorable climate for long-term growth.
- The EU's integration strengthens its political and economic stability, while huge international organizations' support can help mitigate the pandemic's economic effects.

In recent years, Hungary has benefited from the fact that FDI is open to wholesale, retail and car maintenance in addition to the low-value textile and food processing sector. However, the country's demographic decrease and the education system's poor progress obstruct key structural transformations. Hungary is ranked 48th out of 190 countries in the World Bank's Doing Business 2018 report (41st in 2017). A business-friendly tax regime, strong infrastructure, and a key location as a crossroads between Eastern and Western Europe are among the country's advantages.

The investment climate in Hungary

Because of its central European location and high-quality infrastructure, Hungary is an attractive destination for foreign direct investment (FDI). Between 1989 and 2019, Hungary received \$ 97.8 billion in foreign direct investment, mostly in the banking, automotive, software development, and life sciences sectors. Hungary actively encourages investment in manufacturing and high-value-added businesses with substantial employment potential, such as R&D, defense, and service centers. To encourage investment, the GOH reduced its corporation tax rate to 9%, one of the lowest in the EU, in 2017. At the same time, Hungary's value added tax (VAT) is the highest in Europe, at 27 percent.

By reducing the corporate tax rate to 9 percent from 2017 and reducing the employer's social security contribution rate from 17.5 percent to 15.5 percent by mid-2020, additional incentives have been created for business start-up investments. HIPA is working to attract foreign companies to engage in R&D and favors large-scale government-approved projects and

investment in emerging technologies. Foreign direct investment would not be at the expense of one of the lowest wages in the EU.

Hungary is a low-wage country, although wage increases have generally outpaced inflation in recent years, partly due to a shortage of skilled labor, and there are some indications that wage and salary increases are becoming more real. Hungary is economically closely linked to Germany and mainly to the automotive industry, so it inevitably depends on both European and world economic developments. Almost 18 percent of Hungary's GDP is generated by the automotive industry, including the supplier industry. Almost 32 percent of Hungary's exports come from German companies, and nearly 26 percent of its imports come from them. The trade balance between Hungary and Germany is one of the few that is positive. (OECD, 2022)

The legal framework is also stable in the country, providing a solid basis for economic activity. The same legal principles apply to Hungarian companies as to German companies. In general, it can be said that Hungarian labor law is extremely employer-friendly in terms of working hours and wages. Due to the current crisis, Hungary has experienced erosion in several sectors due to a strong focus on the automotive industry due to order erosion and job losses. In order to prevent mass redundancies, several regulations based on the German reduced working time allowance model have been adopted. In practice, however, this model is only to a limited extent comparable to the German one.

In Hungary, foreign direct investment has already accelerated, with well-known corporations such as BMW making significant investments. Hungary has a lot of benefits that make it a desirable investment site, including its proximity to Germany, good infrastructure, low wages, and continuously high educational standards. In Hungary, Asian firms are increasingly choosing Europe as their new headquarters, and this trend appears to be continuing. Many corporations are attempting to minimize their reliance on Asia and relocating to Europe in order to do so. Hungary will also gain from this. Hungary, based on its enterprises and sites, can become a trusted partner in the current scenario.

Hungary provides investors with a favorable legal environment. As a member of the European Union, Hungary's legal system has been harmonized with European law. Hungarian corporations can be founded in a variety of ways, the most prevalent of which is the limited liability company (LLC) (Limited liability companies are hybrid entities that combine the

characteristics of a corporation with those of a partnership or sole proprietorship.) is currently in widespread use. In comparison to other European nations, starting a company in Hungary is inexpensive, and the process may be completed in as little as 1-2 days.

Despite these advantages, Hungary's regional economic competitiveness has recently weakened. Since the beginning of 2016, the absence of a trained workforce, particularly technicians and engineers, has been cited as the most significant barrier to investment in Hungary by international companies. Unpredictably sector-specific tax and regulatory policies have benefited national and government-affiliated corporations in several industries, such as finance, energy, telecommunications, healthcare, and retail. Furthermore, the public sector continues to be plagued with corruption and friendship. Hungary is tied for 69th place globally and 25th among 27 EU Member States in the Transparency International (TI) 2020 Corruption Perceptions Index. Hungary left the Open Government Partnership (OGP) in 2016 after refusing to respond to the organization's concerns about openness and good governance. Investors from both abroad and at home are urging them to sell their businesses to government-linked bidders. Those that refuse to sell claim that increased tax rules, as well as bogus regulatory and court challenges, hinder them from doing so.

Summary of competitiveness factors using a SWOT table

2. Table Summary of competitiveness factors using a SWOT table

SWOT	Strengths	Weaknesses	Opportunities	Threats
Market situation, consumer environment, additional sales opportunities Internal, Regional, EU	Internal Market: Strong consumer base compared to Eastern Europe Regional market: We enjoy a competitive advantage due to our central location.	In some areas, the internal market is saturated, competition is fierce, and for new entrants, entry can only be achieved with high investment, expensive marketing campaigns and high risk and dubious profit.	Hungary is integrating into a relatively homogeneous market in the European Union, and thus all players present in the Hungarian market also "enter" the market.	-
Economic development	Economic growth and productivity are growing permanently above the EU average.	The decline in foreign trade due to Covid-19 is having a negative impact on the economy. The international problems of the already present transnational companies are also appearing in Hungary.	As a result of an investment environment that becomes safer through growing economic potential, the risk of investing in capital is reduced. With offensive productivity growth, the economy can recover quickly from difficulties.	Due to unfavorable macroeconomic trends, the profitability of working capital entering the country is declining and risk factors are increasing.

Legal environment, competition regulation, environmental regulation, consumer protection regulation	Advanced legal harmonization with the EU, a stable legal environment, which means a high degree of security and stable predictability for the company.	Harmonization is not yet complete in some areas, and regulatory gaps remain.	Companies operating in the EU do not have to adapt to a new regulation, they can increase their international integrity.	Due to the EU conformity of environmental and consumer protection regulations, brown investment investors will face significant costs, which, if they do not receive state support, will reduce their profitability, may deter new investments and, in extreme cases, may lead to withdrawals.
Labor costs	Wages are low compared to developed economies.	Labor shortages have developed in the regions most favored by investors. The public burden on wages is very high, which degrades competitiveness and forces companies to look for coercive solutions.	Labor costs are not expected to increase drastically in the short to medium term, but productivity may increase and so may competitiveness.	In the long run and in some frequented areas of the capital and developed regional central areas, a significant increase in wages can be expected.
Labor mobility	The highly skilled workforce is relatively mobile	The labor force is extremely immobile, and despite high unemployment, it is not migrating from certain areas to the more developed region, which is struggling with labor shortages. The highly skilled workforce is relatively mobile. (emigration, brain-drain)	If mobility is reduced in the medium term and the workforce is more likely to change residence - renting is a priority and people are renting out their homes - it will be easier for investors to get the right workforce and no need for free labor in their site selection matrix. place such a strong emphasis on its regional location.	If immunity persists, some regions may fall behind permanently and the regional crisis will place a heavy burden on the economy as a whole.
Logistics infrastructure	Appropriate geographical conditions are ideal for the creation of regional logistics centers.	Due to the unequal infrastructural development of the country, less investment is made in the less developed parts of the country	With the development of the road network and the priority given to companies wishing to set up regional centers, it is possible for TNCs to set up their regional logistics centers in Hungary.	If we do not make improvements, we may miss out on this opportunity. High road loads can also cause environmental problems.
Environmental quality, environmental protection	-	The country's lagging behind in the field of environmental protection is very significant compared to the European Union.	Large-scale environmental investments will be required. Investments in the use of garbage treatment, wastewater treatment and renewable energy sources will be required, the realization of which will also require the appearance of foreign capital.	Failure to invest in the environment can lead to significant additional disadvantages in various areas of the economy.

The Hungarian investment promotion system

Hungary has had an investment incentive scheme since the late 1980s. In the first period, when the country opened its doors to foreign direct investment, it used fiscal incentives in the narrower sense, most notably tax breaks. The aim was to lure large multinational companies, also known as "flagships", to Hungary. Large companies that invested in the country were granted a ten-year tax exemption by the government. Many multinational companies came to Hungary using investment incentives, but investments were mainly concentrated in the capital and the north-west, which resulted in economic disparities between regions, and the domestic investment incentive system did not meet the conditions for joining the European Union. As a result, the Hungarian investment incentive system underwent significant changes between 1996 and 2002. Companies that invested in the less-favored regions received at least HUF 3 billion or one hundred percent tax relief. they were given for ten years. Investors who have invested at least € 10 million, in this case in any part of the country, have benefited from the same discount. Entrepreneurs who have been employed for six months or more have also benefited from a tax credit. In addition, the first fiscal incentives have been introduced, such as the financing of infrastructure costs and various economic development programs. However, the Hungarian investment incentive system still did not meet the requirements of the European Union, as it violated competition policy regulations. Thus, even before the accession in 2004, Hungary coordinated its system with the European Union. (Artner, 2018)

The incentive system in Hungary between 2004 -2010 had changed a lot, due to the accession of the EU. Hungary changed from its unique incentive system to a unified EU support system between 2004 and 2010. An important investment incentive system in Hungary in the narrow sense can be divided into two different groups from 2010 to the present. The first category includes so-called direct or indirect instruments, which are instruments created directly from state or European Union funds to support investment. An important part of this system of direct instruments is subsidies based on individual government decisions. In this case, the company turns directly to the state to get the necessary funding. The government will then decide whether or not to support the investment. If the answer is yes, the state will support the investment project, mostly from the Investment Promotion Target Appropriation. According to the Government Decree on the Investment Promotion Target Appropriation, preference will be given to investments in certain industries (eg mechanical engineering, automotive, IT sectors) and projects in certain less-favored regions, which are expected to bring new jobs and

technological development. Direct investment support instruments also include funds available through tenders for business development and support for R&D activities. These financial contributions are largely provided by the European Union's Cohesion Fund, supplemented in part by the state from its own capital. The purpose of the grants is to support research and development projects, the technological and production development of companies, especially small and medium-sized enterprises, and, last but not least, the creation of new jobs. Furthermore, the system of financial contributions from the National Employment Fund can be classified as direct investment aid. The non-refundable aid is intended to create new jobs and is open to companies wishing to create new jobs and provide vocational training to develop their workforce. (Kádár, 2019)

Objective of the investment promotion program

In order to develop the Hungarian economy and its competitiveness, maintain and improve its competitiveness, the priorities of the plan are the following:

- Giving a boost to investments is an obvious fundamental goal, of course it doesn't matter what kind of investment or what form and what the effects of the activity will be.
- Retaining companies operating in Hungary and making them interested in new investments and the return of their profits for development purposes. At the moment, we are not bad about this, the companies investing in Hungary will always return a part of their profits. Of course, the export of incomes from the country at transfer prices and in other ways cannot be traced. This can only be prevented if we can create an environment in which it is better to keep income in Hungary than to extract it in any form.
- In addition to accelerating the growth rate of investments in the manufacturing industry, increasing the proportion of strategic services and increasing the regional role of Hungary by establishing regional corporate control centers and "service centers" in Hungary. Supporting the service sector in this direction has created long-term opportunities for Hungary. With rising labor prices and other benefits that disappear with increasing social welfare, advanced management centers can create competitive advantages in addition to the skills of the workforce.
- Strengthen the ability to attract capital to disadvantaged, disadvantaged and exploitable regions in order to reduce regional disparities within the country. Closely related to this

area is the lack of infrastructure; is present. The development of infrastructural and investment support in lagging regions requires inseparable, parallel and coordinated development strategies.

- Better use of R&D and innovation capabilities in Hungary by the business sector.
- Building and increasing the use of Hungary's supplier networks and developing its clusters.
- Accelerating the development process with a focus on ecological / environmental requirements.

Under the new aid scheme, which was introduced with by joining the EU, greater emphasis will be placed on grants, both in terms of their intensity and their share of total aid. The rationale is that it is more favorable for companies to receive aid in the investment phase. These grants are also better planned for the budget. As everywhere in the world, these direct grants have the greatest impact in terms of incentives.

In addition to the aforementioned, Hungary should, in my opinion, pay attention to technology development, as this is possibly the most important channel via which foreign enterprises can have a good impact on the Hungarian economy. MNCs are the primary source of corporate research and development (R&D) activity in the industrialized world, and they typically have a higher level of technology than the host countries, in our instance Hungary, allowing them to have a considerable technological effect. However, depending on the situation and sectors, the way and extent to which the MNC supports such effects would differ.

Technological transfer and diffusion works through four interlinked channels: some relationships with customers in suppliers in host countries, other relationships with companies competing or complementing the same industry, the flow of skilled labor, and the internationalization of R&D. Evidence of positive effects in the case of vertical relationships is strongest and most consistent, mainly through “underdeveloped” relationships with local suppliers in Hungary. The MNC typically provides technical support to local suppliers for the purchase of raw materials and temporary goods, and for the modernization and repair of production equipment.

The relevance of the technologies transferred is a stipulation. In order for a technology transfer to be successful, the technologies must be relevant to the Hungarian business sector, and the

company must be the first to implement them. The level of technology in the host country's corporate sector is critical. If the "technology gap" between local enterprises and foreign investors is relatively small, evidence suggests that FDI will have a considerably more favorable impact than local investment. It is unlikely that local enterprises will be able to accept the foreign technology transmitted by the MNC when there are significant variances or where Hungary's absolute technological level is low.

The Economic Competitiveness Operational Program (ECOP)

The European Commission supports Hungary's development by co-financing the "Economic Competitiveness" Operational Program between 2021 and 2027. Under Objective 1, this initiative offers community support for all Hungarian regions (regions lagging behind in development). Out of a total budget of almost € 606 million, the Community grant amounts to more than € 429 million. The Economic Competitiveness Operational Program (ECOP) focuses on enhancing firm productivity, attracting foreign direct investment, and the overall economic environment, which is one of the specific objectives of the Community Support Frameworks (CSFs).

The ECOP identifies three specific objectives where progress is critical: developing a knowledge-based society and innovation capacity, developing an economy based on high-tech industries and services, and developing small and medium-sized enterprises (SMEs) to reduce economic duplication.

Priority 1: investment protection, which supports the modernization of the productive capacity of enterprises, especially where it allows them to become suppliers to larger companies, and the creation of service centers to support the manufacturing industry. It also supports the development of high-quality business infrastructure in the form of industrial parks, incubators, technology transfer and logistics centers. The priority also supports proactive investment advice.

Priority 2: Developing SMEs focuses on the needs of SMEs to help them realize their potential and overcome the divide between smaller, less efficient, family businesses and large, modern, foreign-owned companies. These measures include technical and technological investment and quality assurance to modernize production equipment and systems and raise them to EU

standards, and to support the development of more innovative products. It also supports the provision of business advisory services by SMEs to improve business management and provides support for cooperation between SMEs to maximize competitive advantage.

Priority 3: Research + development and innovation, which supports R&D and innovation in research projects in key areas that develop research infrastructure, cooperation between public research institutes and the private sector for technology transfer, and - spin-offs including by supporting the innovation activities of SMEs.

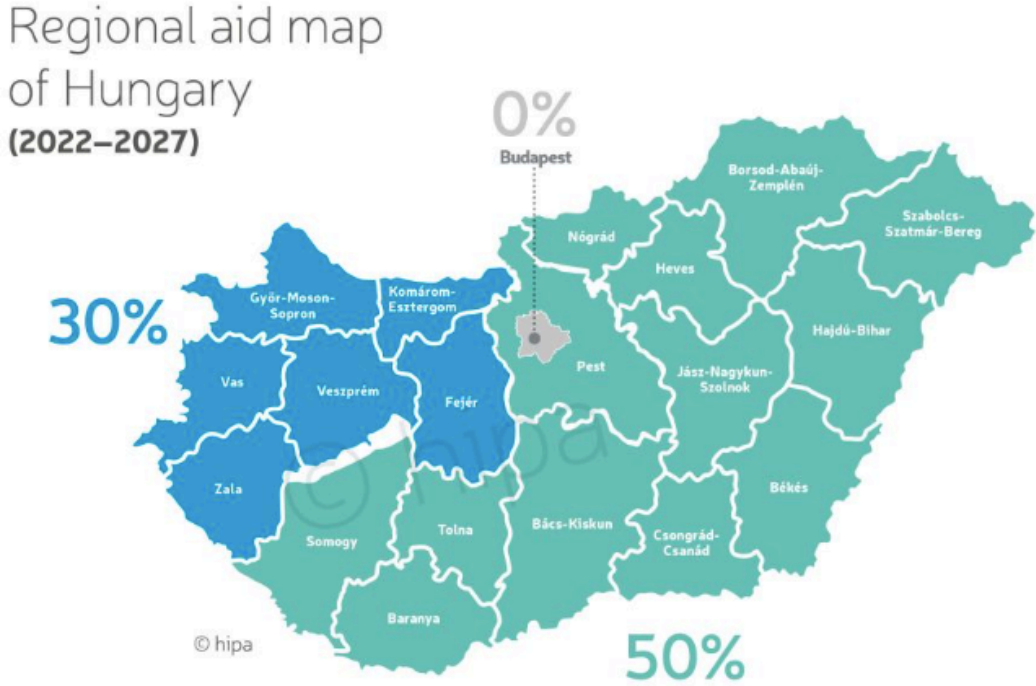
Priority 4: Development of the information society and e-economy, providing investment in the development of relevant services, applications, content and infrastructure for businesses. ECOP supports the introduction of IT-based business systems in order to increase efficiency within companies and their capacity to share information with partners. As there is currently not enough digital content related to current business in Hungary, the ECOP also supports the creation of such data in order to expand the knowledge base of the companies. It helps to develop business-friendly public administration services to make the exchange of information between public administration and business more efficient. In order to ensure the inclusion of remote and disadvantaged regions in the information society, the ECOP also supports the provision of broadband telecommunications infrastructure in these remote and disadvantaged regions. (Comission, 2021)

Financial subsidies for foreign investors in Hungary

Hungary has aspirations to attract more FDIs with cash subsidies. Cash incentives for investments are typically used to implement the investment (for example, to purchase assets, finish building work, and so on), to generate new jobs, and to train personnel. Cash subsidies (from the Hungarian government or EU funds), tax incentives, low-interest loans, and land provided for free or at a reduced price are the most popular types of investment incentives. The reward opportunity legislation complies with EU requirements. A regional aid map determines the maximum permitted quantities of regional incentives. The majority of Hungary's regions are eligible for incentives, and the amount of support varies based on the size of the company, with small and medium-sized businesses having the opportunity to expand their aid. All regional incentives, including financial subsidies, development tax benefits, and so on, must be taken into consideration when calculating the maximum permissible amount of regional incentives.

For enterprises interested in state aid, the year 2022 has brought significant changes. As of January 1, major national regulations holding attractive chances have been updated. Large companies in Pest county can look forward to a new chapter in their operations thanks to the Government decree on earmarked subsidy scheme provided on the basis of individual government decision (Gov. decree on VIP cash subsidy), which allows them to receive a regional aid intensity of up to 50%. Regional subsidies in Pest County could only be awarded for initial investments in favor of new economic activity in the case of major firms, according to a regulation in effect until 2021. However, as of January 1, 2022, new state aid legislation allows large firms to be subsidized in the event of a capacity extension of an existing establishment. The revision is in response to the European Commission's adoption of updated EU guidelines on regional state aid for the period 2022-2027. As a result, the guidelines for Member States granting State aid to firms to support the economic development of disadvantaged areas in the European Union have been established. (HIPA, 2022)

10. Figure he maximum available amounts of regional incentives



(HIPA, 2022)

VIP investment subsidy:

For investments over EUR 10 million that create a specified number of jobs, the Hungarian government offers a VIP subsidy system. The terms of the investment are determined by the investment's purpose and location. The Hungarian authorities are looking into a possible subsidy for the project from available European Funds for investments between EUR 10.00 and EUR 25.00 million. The most popular areas to acquire investment are manufacturing (greenfield, brownfield, and capacity expansion), as well as studying and creating tourism and development initiatives and business incubators. To qualify for a subsidy while investing in manufacturing, the investor must create 50-100 new employment in the region where the investment will be made. Depending on where they are produced, investments over EUR 50 million have the potential to create between 100 and 200 new employment. When R&D investments are made, a minimum of 10 new employment must be created. You can submit a subsidy application in either Hungarian or English. The terms and circumstances of the VIP subsidy are determined through negotiations between the Hungarian government and investors. (Hungary, 2022)

VIP training subsidy:

Those employees will be eligible for a job training subsidy known as the VIP subsidy. Investors who create 50 or more employment are eligible for the subsidy. Training subsidies of up to EUR 1 million for employment produced in the range of 50 to 500, and up to EUR 2 million for jobs created in the range of 500 or more. Training in both general and specialist areas is possible. General training can be done at a maximum intensity of 60%, whereas target training can be done at a maximum intensity of 25%. The level of support can be enhanced even more. Smaller firms and disadvantaged people could benefit even more from the assistance. In addition to the maximum amount of regional support, the training subsidy is not a regional incentive.

Non-Refundable Cash Subsidies from EU Funds:

Investors with less than EUR 10 million may be eligible for a variety of EU Fund tender possibilities. In terms of eligibility for EU bids, timeframe, and subsidy amount, different EU tenders differ. Several topics, such as supporting R&D, creating new jobs, investing in environmental projects, and investing in technology, are emphasized in the tenders (with preference given to smaller medium-sized businesses).

Tax Incentive

Future transactions of companies are eligible for tax incentives. Before any project can begin there must be an application filed with the Hungarian authority or the European institution.

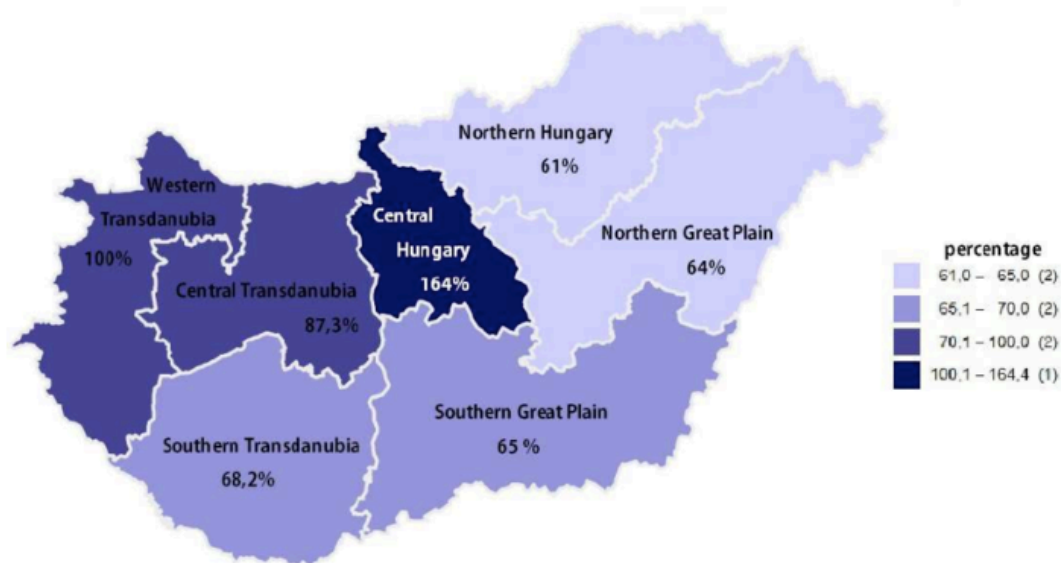
Development Tax Incentives

A maximum of 14 years can elapse between the time the incentive was first applied and the time the tax incentive can be claimed for 10 years (starting nine months after the development is completed) (Petrovan, 2020)

In any particular tax year, an incentive of up to 50% of the tax is available, but the overall amount of state help is limited. If the total cost of an investment in Hungary exceeds EUR 100 million and it is presented to the Ministry of Foreign Affairs and Trade, it is eligible for tax advantages. A taxpayer who intends to invest less than this amount just needs to notify the Ministry of National Economy of his intentions. For enterprises that conduct research and development (R&D), create jobs by establishing shared service centers (SSCs), or make movies, perform, and sell sports tickets, incentives and allowances for different corporate taxes and municipal business taxes are available.

Only within the framework of EU NUTS2-based regional incentive rates may development tax incentives be offered. The Hungarian Nomenclature of Territorial Units for Statistics (NUTS) is part of a system created by Eurostat and legally laid down in Regulation (EC) No 1059/2003 of the European Parliament and Council, which covers the entire European Union. The EU NUTS2 classification system divides the country into seven regions. (Kádár, 2019)

11. Figure EU NUTS2 regional distribution of GDP per capita adjusted by PPS relative to the national average



(Researchgate, 2018)

Hungary, a small and very monocentric country, has developed a much more moderated region in and around its fast-growing capital region. The purpose of the aid is to eliminate such differences.

Tax Credit on Investment to comply with energy efficiency targets:

Companies who make investments to improve energy efficiency as of January 2017 may be eligible for CIT incentives. Because there is no geographical limit to where investments can be made, the tax incentive varies from development tax incentives in that all conditions must be met even for investments in Hungary's capital. The applicable CIT liability can be reduced by up to 70% by utilizing any other eligible development tax incentive (if any).

After the investment has been installed, certificates produced by energy auditors or agencies mentioned on the HEUPUA website are required to qualify for the incentive. In addition, an audit (by the same company as mentioned above) must be done to demonstrate the predicted savings from the proposed investment or rebuilding. Regional legislation allows for a tax credit to be applied to up to 45 percent of qualified costs (together with additional incentives and subsidies) for small and medium businesses (only up to EUR 15 million at current values). For medium and big businesses, there are tax incentives of 20% and 10%, respectively. The

investment may be eligible for a tax credit in the five years after the tax year in which it is put into operation.

Tax Incentives for acquiring Startup:

Depending on the requirements, a specific amount of shareholding expenses acquired in start-up enterprises could cut pre-tax profits by three times from 2017. This item can be used in four equal installments for the tax year in which the acquisition is made and the three following tax years, but only up to HUF 20 million per firm and per year. Limitations imposed by De Minimis (small amount of aid) should be examined in accordance with EU legislation. Any legal organization registered under the Startup Companies Regulations, plus two or more employees on average in the tax year in which the company is receiving the allowance, is considered a startup company.

R&D Tax:

In 2019, Hungary implemented a third R&D tax incentive that is mutually exclusive with the SSC exemption and is not covered in this note: the SSC credit and KIVA (a tax on small businesses that replaces SSC). Only large and medium-sized enterprises are required to contribute 0.3 percent of their revenue to innovation. This tax is based on net sales revenue, fewer payments to subcontractors, and raw material prices. The tax credit rate for the development tax incentive varies based on the size of the company and the location of the investment. Local business taxes (LBT) are deducted at a rate of ten percent for fundamental, applied, or experimental research undertaken by municipalities in Budapest. In Hungary, tax incentives are available for R&D outputs.

12. Figure Main design features of R&D tax incentives in Hungary 2021

	R&D related tax base deductibility	SSC and VTC exemption	Development Tax Incentive	R&D tax allowance in Innovation contribution**
Tax incentive	Tax allowance	SSC exemption*	Tax credit	Tax allowance
Type of instrument	Volume based	Volume based	Volume based	Volume based
Eligible expenditures¹	Current	Labour	Capital, Intangibles	Current
Headline rates (%)	100 (300 R&D collaboration)	100 (SSC rate: 17; 7.75 for PhD students/doctoral candidates)	0-50 (large), 10-60 (medium-sized), 20-70 (small)***	100 (medium-sized and large firms only)
Refund	No	Redeemable against payroll/ related taxes	No	No
Carry-over (years)	5 (carry-forward)	n.a.	14 (carry-forward)	n.a.
Thresholds	Floor	-	HUF 100 million	-
	R&D tax relief	SSC liability	80% of the calculated corporate income tax	-
Ceilings	R&D expenditure	Gross wages per month: HUF 500 000 (HUF 200 000 for PhD students/doctoral candidates)		-

SSC: Social Security contributions; VTC: Vocational Training Contribution. *In 2019, Hungary introduced three additional R&D tax incentives which are mutually exclusive in their use with the existing SSC exemption and beyond the scope of this note: an SSC credit and KIVA (optional small business tax, replacing SSC and corporate income tax) exemption and credit, both available to small companies. ** Only large and medium sized enterprises pay the innovation contribution of 0.3%. The base of this tax is net sales revenue decreased by the value of the payments to subcontractors and the cost of raw materials. *** The tax credit rate applicable under the Development tax incentive varies by firm size and region of investment. Municipalities in Hungary also provide local business tax (LBT) deductions equivalent to 10% of the direct costs of basic, applied, or experimental research. Hungary also offers income-based tax incentives for outcomes of R&D activities. These are beyond the scope of this note.

(OECD, 2022)

Hungary has favorable corporate income tax regime, which can attract foreign investors. In Hungary, only a flat rate of 9% applies to corporate tax (CIT). Under Hungarian domestic law, payments to foreign companies (including dividends, interest, royalties and management fees) are not subject to holding tax. Unless it is from CFCs, dividends are exempt from PIT. Hungarian capital gains are also excluded from taxation under the Hungarian participation exemption system. In addition, from 2019, Hungarian taxpayers belonging to a single group of companies will benefit from a preferential group taxation system. The advantage of group taxation is that by choosing group taxation, the positive tax base of group members can be offset by the negative tax base (or pre-tax loss) of other group members, and group members can receive a tax credit at the same time. . In Hungary, you have to pay according to the following tax rates:

- Local business tax up to 2%;
- 0.3% innovation contribution;
- VAT is usually 27%;
- Some products, such as bread and certain dairy products, are subject to an 18% discount on VAT;
- Some products and services receive a 5% VAT rebate, such as publications, books, Internet services, medicines, poultry, pork, fish, heating, rental housing, and the sale of new homes.

Hungary's government has signed a number of bilateral investment treaties in attempt to attract foreign firms (international agreements establishing the terms and conditions for private investment by nationals and companies of one state in another state). The following are the most notable bilateral investment accords with Hungary: Argentina, Australia, Austria, Belgium, Canada, Chile, China, Croatia, Egypt, France, Germany, Greece, India, The Netherlands, Norway, Paraguay, Poland, Portugal, Russian Federation, Singapore, South Korea, Switzerland, Turkey, Ukraine, Uruguay. (State, 2020)

Albania, Australia, Austria, Azerbaijan, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hong Kong, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Kuwait, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Morocco, The Netherlands These treaties make it more appealing for foreign companies to invest in Hungary.. (State, 2020)

There are further negotiations to expand these lists and find the golden middle way between to attract FDIs with favorable taxes and to retain the income for the state from the taxation of investments.

Other investment subsidies

Sites tailored to the needs of investors

An important priority for Hungary is the establishment and retention of capital-intensive investors bringing modern technology, and thereby attracting their suppliers to Hungary, helping domestic companies to become suppliers, creating new jobs, and accelerating the development of regions lagging behind or struggling with labor market tensions. Attracting foreign investment is greatly facilitated by providing the site on preferential terms in certain cases.

The Site Development Program aims to encourage:

- investments that help lagging regions to catch up,
- investments in areas with above-national unemployment,
- R&D investments,
- the establishment of modern production and service capacities,

- production, development, etc. around large companies. establishing cooperative relations.

Infrastructure development support

When designing multi-site infrastructure development programs, including ideas for the further development of IT networks, motorways, airports, railways and river navigation, public support for projects tailored to investor needs is essential, as the investment decision includes the development of infrastructure. a key factor. At the same time, the impact of the implementation of investment projects, which results in the reduction of the infrastructural backwardness in Hungary and can significantly improve the situation of a micro-region, cannot be neglected. Therefore, in order to balance the conditions of international competition, the establishment of off-site infrastructure directly related to investments should be given a special role in the promotion of investments in the supported developments.

Vocational training, adult training, employment support

The national economy is increasingly in need of a well-trained workforce. The state plans to introduce several forms of support to improve training. These will be among the factors stimulating investment.

The main planned grants are:

Training aid for the supply of labor to medium and large enterprises: By directly identifying the special training needs of investors with a human resource development program, it is possible to provide a workforce with the appropriate professional skills during the training.

Training aid to encourage new capital-intensive investments: It aims to provide a workforce with the qualifications required by the employer, in line with the production profile, by implementing short-term training or retraining programs, regardless of the size of the business, according to the needs of new or growing businesses. This support can also be interpreted as training that meets the special needs of the labor market.

Supporting job creation investment: In the case of an investment representing the production of modern products and the provision of high-quality service activities that represent a high standard of quality, support could be used for the creation of at least 20 new jobs in the case of long-term employment. (HIPA, 2021)

Supporting IT developments with direct grants

Information technology (IT) and the Internet can transform relations with agencies and health and education organizations outside the production and service sector. Supporting access to workers and education can significantly improve the quality of Hungarian human resources in terms of computer and communication skills, and thereby strengthen the competitive position of the domestic economy. Approximation and achievement of these goals in the EU member states is included in the Digital Europe program.

The Digital Europe program provides project funding in five key areas:

- Super-computing
- Artificial Intelligence
- Cyber security
- Advanced digital skills

Ensure that digital technology are widely used in the business and society

The program's goal is to close the gap between digital technology research and end-product market introduction. The initiative supports European citizens and businesses, particularly small and medium-sized enterprises (SMEs). The Digital Europe program's investments promote the Union's dual goals of greening and digital transformation, as well as its resilience and digital sovereignty.

The programs increase the information technology knowledge and skills of the Hungarian population, which contributes to competitiveness as an investment in knowledge capital; reduce education costs; support the spread of more flexible work systems. (HIPA, 2021)

State support for corporate research and development and innovation

The knowledge-intensive environment shaping facilitated by the state co-financing of R&D, the priority support of long-term projects, the encouragement of retaining qualified researchers in the country can be a key tool for introducing knowledge-intensive activities, attracting them to Hungary and creating an innovation-friendly economic environment.

Domestic R&D and innovation programs give priority to cooperation and partnership between companies and the scientific sphere, diffusion of scientific and technological results, transfer at the regional level, and international cooperation - in view of the EU integration preparations and the forthcoming National Development Plan. requirements. (HIPA, 2021)

Conclusion

Prior to the COVID-19 pandemic, the Hungarian economy has been characterized by dynamic growth since the change of regime. This dynamic development can be observed in the Hungarian budget deficit on GDP and the unemployment rate and the volume of the foreign direct investments. The economy grew by about five percent a year, employment grew, and productivity also improved. However, the pandemic and its tragic social cost have forced Hungary to apply the brakes, and efforts to grow the economy have temporarily been pushed into the background.

At the same time, the economy has stable fundamentals, and if the drivers of growth are effectively harnessed, the economy can regain the momentum stalled by the pandemic. Of course, optimal economic growth does not happen by itself. International and Hungarian experience also shows that one of the most important factors for growth and competitiveness is foreign investment, which brings capital to the country and provides job opportunities. But in addition to these, they have a number of positive effects on the host economy and domestic firms. For example one of the most important the technological development, local firms can adopt the technology of the multinational firms, which helps them to become more competitive and developed. Another illustration FDI appears to have a positive impact on the labor market. Domestic firms will not hesitate to pay greater wages to labor if their productivity rises as a result of adopting multinationals' production model, which is predicated on increasing labor productivity.

In terms of the country's economic aspirations reducing regional disparities and producing the right infrastructure and skilled labor is key to attracting more foreign capital to the country. All in all Hungary is really attractive for foreign investors, because the development level of the country the highly skilled labor force, the financial and non-financial subsidies make Hungary an attractive destination for FDIs. Although to today's eyes, when it is difficult to focus on issues other than mitigating the social and economic damage in the wake of the coronavirus and the Ukraine-Russia conflict, any such effort may seem a mere dream.

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