

LABOUR MARKET and Wage Convergence with the Most Developed EU Countries



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LABOUR MARKET

and Wage Convergence with the Most Developed EU Countries

The logo for ČMKOS, consisting of a solid red square with the text "ČMKOS" in white, sans-serif font centered within it.

ČMKOS

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Abbreviations Used

ČMKOS – Czech-Moravian Confederation of Trade Unions

CNB – Czech National Bank

DEM – German Mark

EIB – European Investment Bank

ERDI – Exchange Rate Deviation Index

EU – European Union

GDP – Gross Domestic Product

GNI – Gross National Income

ILO – International Labour Organization

NRR – National Budget Council

PPP – Purchasing Power Parity

CEE – Central and Eastern Europe Countries

FRG – Federal Republic of Germany

V4 – Countries of the Visegrad Four (the Czech Republic, the Slovak Republic, Hungary, Poland)



Introduction

More than five years ago, ČMKOS published its “Economic Policy Change Vision” programme document.¹ The aim of this document was to prompt a social debate about fundamental economic and social changes that would lead to a significant acceleration of economic growth, but above all to bringing the Czech citizens standard of living closer to the level of the most advanced EU countries. Based on the analysis of the 25-year economic transformation in the Czech Republic, **the Vision clearly demonstrated that maintaining the set direction of the Czech economic policy was unacceptable. It turned out that the current development in the Czech Republic did not provide any guarantee that the country would get closer economically and socially to the developed EU states in an acceptable time.**

They say that human memory is very short. However, one cannot forget the beginning of the ‘economic transformation’, when the Czechoslovak population was seriously promised: *“If we tighten our belts now, we will catch up with Austria within five, ten at the most, years.”* It is true that for some citizens this promise came true, and it often did not even take that long. However, they were definitely not Czech employees. For those, the perspective of a rapid approach – convergence – to developed countries has disappeared forever, together with a number of other promises. It is a paradox that Czech employees strongly supported the ‘radical economic transformation’ and bore its immediate consequences with a one-third drop in real wages, devaluation of savings, and rising unemployment.² **Today, it is quite clear that the sacrifice that Czech employees made for the transformation of the Czech economy was wasted by the political elites. Allegedly successful economic and social reforms, after 30 years of their application, secured Czech employees only less than a third of the wage level of Austria or Germany.**

Instead of the promised modern competitive economy, a low-cost economy model was promoted. It was the ČMKOS Vision which clearly showed that, in fact, the economic model for developing countries has been applied in the Czech Republic long-term. Everything that has been happening around us are actually more or less distinct manifestations of this model, **such as key industries in the hands of multinational corporations, permanent outflow of capital from the country, low product valuation, depreciated (sale) exchange rate of the national currency, very low share of labour costs in added value versus very high share of profit, extremely low taxation of profit and capital versus extremely high taxation of labour and consumption (compared to developed countries). All this results in long-term low wages and long working hours, repeated pressure to privatize lucrative parts of public services (education and healthcare) and transfers (pensions), alongside efforts to push the less lucrative parts of social services and transfers to a level of poor care.**

1 Fassmann M., Ungerma J., [Czech Republic Economic Policy Change Vision] Vize změny hospodářské politiky ČR, Revue Pohledy 2/2015 (Dec 2015), Prague, p. 48, ISBN 978-8086846-61-3.

2 The consequences of the initial macroeconomic manoeuvre at the beginning of the economic transformation will be discussed in more detail in the next chapter. In any case, as far as the employee costs associated with the economic transformation are concerned, one cannot by any means use only the past tense.

The *Vision* pointed to the hopelessness of the given economic policy. The outcome of the model calculations was clear. If the Czech Republic continued to proceed in the same direction with its economic and wage policy as it did in the previous ten (practically even twenty) years, it would be unthinkable for Czech employees to get closer to their German or Austrian neighbours!

This finding, which was essentially unremarkable for economists, “surprisingly” initially caused astonishment and strong disillusionment among Czech employees. Above all, however, it marked the definitive end to the naive ideas that the so-called economic transformation and subsequent economic “reforms” will finally bring “well-being for everyone”. The fever pitch was reached by “independent analysts”, who immediately put the blame for the indisputable fact of the long-term (and deliberately) maintained very low level of wages in the Czech Republic on Czech employees, who “didn’t ask for more”. (The obvious and indisputable fact of significantly low wages must have been “awarded” to someone.)

It is therefore logical that the *Vision* and the subsequent programme documents of the ČMKOS fell on highly fertile ground,³ forming the theoretical basis of the long-term, and from today’s perspective successful, campaign of the Czech trade unions for wage increases headlined “**The End of Cheap Work**”. **With that, the *Vision* met its immediate activation goal.** There are several reasons for the fact that, after several years, we are now returning to the topic of wage convergence of the Czech Republic with the most advanced EU countries.

- I The *Vision*, the follow-up documents, and above all “The End of Cheap Work” campaign raised in both the professional and general public of the Czech Republic, in addition to a significantly positive response, a number of questions, misinterpretations, and deliberate manipulations, which can be expressed by the phrase “Czechs do not deserve higher wages because they have lower productivity than Germans”, or in the journalistic shorthand “Czechs work less than Germans”. Therefore, the introductory passages of the document are devoted to **summarising the fundamental causes of very low wages in the Czech Republic** and to a detailed analysis of the key macroeconomic indicator – labour productivity and its context. Only a correct interpretation of the character and development of this indicator will allow us to put a number of misleading statements into perspective.
- II Although the development of the Czech Republic so far has clearly shown that the economic model based primarily on the advantage of being geographically “wedged” into the German economic space, combined with the model of a low-cost economy, was exhausted many years ago. Efforts to preserve it were by no means abandoned in the Czech Republic. The centre of gravity of the new cheap labour policy has shifted from the methods of direct containment (reduction) of wage growth and total labour costs, which was typical

³ These are fundamental analyses prepared by ČMKOS in recent years. In these studies, on the basis of detailed analyses, fundamental programme approaches of the largest trade union headquarters in the Czech Republic are outlined both regarding individual sectoral policies (budgetary, monetary, tax, wage, and social) and to economic policy as a whole. In addition to the already mentioned *Vision*, these are mainly the following studies:

Fassmann M., [Reducing Non-wage Labour Costs – Myths, Facts, Connections] Snižování tzv. nemzdových nákladů práce – mýty, fakta, souvislosti, Revue Pohledy 1/2016 (Feb 2016), Praha, 41 pgs., ISBN 978-8086846-63-7.

Fassmann M., [Reduction of Working Hours and Competitiveness] Zkracování pracovní doby a konkurenceschopnost. In Dandová E., Fassmann M., et al., [Description of the current situation in the area of shortening working hours and introducing flexible forms of work in the Czech Republic] Popis současného stavu v oblasti zkracování pracovní doby a zavádění flexibilních forem práce v České republice, Praha 2016, ČMKOS (ESF), 32 pgs., ISBN.978-80-86809-13-7.

Fassmann M., Ungerman J., [Benefits and Costs of the Czech Republic’s Eurozone Accession] Přínosy a náklady přistoupení ČR k eurozóně, Revue Pohledy 1/2018 (Feb 2018), Praha, 71 pgs., ISBN 978-8086846-66-8.

in previous decades,⁴ to pressure for maximum openness **to the influx of cheap labour, primarily from countries outside the EU, alongside other things. Under the guise of fighting the coronavirus crisis, a number of tax measures were adopted last year, which had, and will continue to have, a fundamentally negative impact on the convergence of Czech wages and salaries to developed Europe.**⁵

- III „The “Vision of Economic Policy Change” did not have the ambition to analyse in detail **all the connections between the economic convergence of the Czech Republic and the developed countries of the EU.** Therefore, during its elaboration, some questions were put aside (the connection between the length of working hours and the amount of wages, theoretical and methodological questions related to the process of convergence between developed and less developed countries, key indicators of convergence and their quantification, the effect of the possible adoption of the euro on the convergence of new EU member countries from CEE states etc.). We devote significantly more space to these questions in this study.
- IV With time, the **Vision has become outdated in some respects and needs to be updated in a new context.** It is not just a simple update of data. The internal and external environment of the Czech Republic has changed significantly over the past three years. In 2014, a new coalition took office with a significantly different concept of economic policy, and this policy continues. The policy of the previous and current government coalition and the ČMKOS campaign “The End of Cheap Work” marked a significant breakthrough in approach to the minimum wage and salaries in the public sector. This subsequently had a positive effect on the **increase in the overall wage level.** After three years and five months, the exchange rate commitment of the CNB was cancelled in April 2017. (The *Vision* fundamentally criticised the exchange rate commitment.) Unfortunately, for the time being, this cancellation has manifested itself only very slightly in the expected strengthening of the Czech crown. However, by loosening the wage and exchange rate channel, it was possible to overcome the unfortunate legacy of budget restrictions by right-wing governments and the devaluation of the exchange rate when the exchange rate commitment was announced – i.e., **the wage divergence of the Czech Republic compared to the most developed EU countries.** Thus, naturally, the question of how to further support and strengthen this established positive trend is the core focus of this study.⁶
- V In the context of the previous points, the study focuses **on the search for a new direction of the economic policy of the Czech Republic,** both in the sense of shielding the effort to return to the policy of cheap labour, as well as active measures strengthening the convergence of the Czech Republic with the most developed EU countries.

Compared to the previous Vision, the aim of the ČMKOS study is to make a more significant contribution to the discussion on the economic policy change and (on the basis of international experience) to assess the chances of the Czech Republic as a medium-developed country with a long industrial tradition resulting from the maximum use of new directions and opportunities for

4 In summary, these processes are described in: Fassmann M., Ungerma J., [Vision of Economic Policy Changes in the Czech Republic] Vize změny hospodářské politiky ČR, Revue Pohledy 2/2015 (Dec 2015), Praha, 48 pgs., ISBN 978-8086846-61-3 Section Labour Costs and Wages pgs. 35 –42 and further in Fassmann M., [Reducing Non-wage Labour Costs – Myths, Facts, Connections] Snižování tzv. nemzdových nákladů práce – mýty, fakta, souvislosti, Revue Pohledy 1/2016 (Feb 2016), Praha, 41 pgs., ISBN 978-8086846-63-7.

5 Discussed in detail in the last chapter.

6 This relatively fundamental problem of the current economic policy of the Czech Republic would certainly deserve a more detailed analysis from all possible points of view. Due to the focus of the study, we treat this topic mainly in the context of wage convergence in the Czech Republic.

the development of science, technology, and digital technologies, as well as new management systems, thus skipping the entire development stage and thereby reaching the level of the most developed countries much faster (as Finland and Denmark have done in the past, for example). It is precisely the question of “rearmament”: changes in the structure of the economy, the role of the state in these processes, examples of good and bad practice. These are the questions that this study addresses in more detail.⁷

Low wages are not an advantage, but a fundamental problem, of the Czech economy and Czech society, which we encounter at every step. They are the cause of already obvious, sometimes still hidden – but not non-existent – problems of Czech society, alongside many more. The pursuit of an ever-cheaper labour force, in order to maintain a competitive advantage “just a little while longer”, will not get us among the most advanced European countries, but quite to the contrary.⁸

A stable political environment cannot be achieved without the rapid economic and social rapprochement of poorer countries with developed countries and without the elimination of stark differences between individual EU member countries, whether in the economic or social fields.

For the Czech Republic, as the “most western of the eastern countries”, located in close proximity to the richest regions of the European Union, extreme differences in the level of remuneration of employees cause a big problem. This – if left unresolved – will increase over time. Many issues cannot be recognised yet, but some problems are already visible. Fundamental and increasing personnel problems in the Czech health care system associated with the migration of Czech doctors and nurses for higher earnings “to our backyards”, shortages in the supply of some key medicines, the persistent poor quality of imported food and other goods (all related to the low purchasing power of the Czech population in relation to abroad), and the encroaching of “Western prices” into the real estate market, energy, etc. are in fact only the imaginary tip of the iceberg.

7 This topic is currently very pressing not only in countries of our type (we must highlight the document *Innovation Strategy of the Czech Republic 2019–2030*, drafted by the Government Council for Research, Development, and Innovation at the beginning of the year), but also in developed countries. In this regard, the recently outlined industrial policy strategy of the Federal Republic of Germany, published at the beginning of February this year, must be considered very inspiring. (See, *Nationale Industriestrategie 2030, Strategische Leitlinien für eine deutsche und europäische Industriepolitik*, Bundesministerium für Wirtschaft und Energie, Februar 2019). We will return to both of the materials in more detail in the final chapter.

8 It should be noted that despite the significant increase in wages in the recent period, the price competitiveness of the Czech Republic (based on very low wages and/or labour costs) is still very high. In 2017, the ratio of hourly labour productivity (GDP per hour worked in purchasing power parity) of the Czech Republic compared to Germany equalled 58.4%. However, the ratio of nominal labour costs per hour worked in the Czech Republic compared to Germany was only 33.4%. This means that for the value of one (1) working hour in Germany it was possible to buy three (3) working hours in the Czech Republic. And in those three (3) hours, 75% more real product was produced in the Czech Republic than in Germany.



Do Czechs really not deserve higher wages?

On 14 May 1996, at the ODS pre-election press briefing, then Prime Minister Václav Klaus uttered the following words: *“I do not promise, but I say: with us, it is possible to expect that at the turn of the 20th and 21st centuries, in the year 2000, the average wage in the Czech Republic will in the minimum variant double and in the maximum variant get close to the amount of 20 thousand crowns.”*

On 15 May 1996, at a press briefing after the government meeting, he further specified this statement: *“I foresee a doubling of the average wage to approximately 17 thousand crowns in 2000. I consider this to be a very serious estimate, and, naturally, I was talking about nominal wages.”*⁹ After major criticism raised mainly by the trade unions, the alleged absolute realism of this estimate was supported by a vast number of independent analysts, who of course rejected the trade unions’ reservations in the same breath.¹⁰

How did it end up? Employees waited for an average salary of 17 thousand CZK – even with the subsequent significant pro-growth policy of “competing” ČSSD governments – for not four, but nine years. The average salary of twenty thousand was conquered after twelve years, while thirty thousand (1170 euros gross) in 2018, i.e., after 23 years. With the last phase being thanks to the significant contribution of the ČMKOS campaign “The End of Cheap Work.

However, whoever would have expected that Václav Klaus would be happy that his old forecasts about the rapid growth of wages in the “successfully transformed” Czech Republic are finally starting to come true, would be disappointed. In the middle of 2018, he claimed that “the financial evaluation was what it was” and that “higher wages were nonsense, and the Czechs did not deserve them”. Even now, as years ago, he has found willing supporters for this position.¹¹ Václav Klaus unfortunately spoke out against the current wage growth, and contradicted himself when he predicted and defended the need for very fast wage growth in the Czech Republic in the 1990s.

Václav Klaus’s reservations against wage increases were in fact only the tip of the iceberg. The relatively rapid growth of wages and salaries before the coronavirus crisis has gradually been eroding the foundations of the long-term low-cost economy and has not been receiving a positive response in some circles – primarily in those whose profits are directly dependent on this surviving model in the long term.

Why is the financial evaluation of employees within the EU one of the lowest? In order to answer this question honestly, we have to go back to the beginning of the economic transformation and reminisce on what really happened in the wage area at that time.

9 This thesis was published in editorial on 15/05/1996 by MFD (Klaus Promises Doubled Salaries), Telegraph (ODS Promises Doubled Salaries, LN (Klaus Promises Doubled Wages), Lidové noviny 16/05/1996 (The Left Blames the Prime Minister for Populism), etc.

10 E.g., the experts supported Klaus’ estimate, MFD periodic 16/05/1996: *“The Prime Minister’s estimate is realistic,”* LN 17/05/1996 and MFD 23/05/1996: *“Don’t let the trade unionist scare us,”* NOVA 21/05/1996 Main Session: *“This is only theoretical speculation ... it will not be dangerous if real wages rise faster than labour productivity in the next few years,”* MFD 22-23/05/1996, etc.

11 I.e.: www.e15.cz 14/06/2018, www.byznysnoviny.cz 19/06/2018, www.eurozpravy.cz 24/06/2018 etc.

The essence of the 1990-1991 macroeconomic manoeuvre was, in addition to a significant undervaluation of the currency exchange rate relative to purchasing power parity (“currency cushion”), a significant undervaluation of wages (labour costs) in the national currency relative to labour productivity (“wage cushion”). As a result of the impact of these two cushions, Czech wages (labour costs) are a fraction of the wages in developed countries when viewed from the outside of the Czech economy, in the eyes of a potential investor.¹² Their low (in relation to abroad) level was made possible by the significantly lower price level of goods and services on the domestic market compared to prices abroad.

So, what was the reality like? The purchasing power of Czech wages abroad dropped to less than a fifth of their purchasing power on the domestic market. After several devaluations of the Czech crown in the course of 1990, Czech nominal wages (in exchange rate conversion) dropped to a fraction of wage levels in Western Europe. **The exchange rate of the Czech crown and wage regulation ensured that the average wage in the Czech Republic was reduced to about 10% compared to the Federal Republic of Germany.**¹³

According to estimates, in 1990, the rate of undervaluation of the Czechoslovak crown measured by the ERDI (Exchange Rate Deviation Index) based on GDP against the German mark (DEM) was 5.17. This means that the DEM had 5.17 times higher purchasing power in Czechoslovakia at the official exchange rate than in Germany. In fact, it was a “sale rate”, which was very “successfully” manifested in the subsequent widespread privatization of the Czech economy.¹⁴

The significantly strong compression of wages at the beginning of the economic transformation can also be evidenced by the fact that Czech wages (in exchange rate conversion) even fell below the level of wages in Poland or Hungary, i.e., countries that had at that time a significantly lower national economic labour productivity and a significantly higher degree of overall economic imbalance. (In 1990, the ERDI index was 4.1 for the Polish zloty and 3.1 for the Hungarian forint.)

However, a significant decline in the purchasing power of Czech wages also occurred on the domestic market. In 1991, real wages fell by 26.3% year-on-year (while nominal wages grew by 15.4% and inflation by 56.6%). The actual decline in real wages was thus more than 2.5 times higher than the level at which **the General Agreement was based, concluded at the beginning of the economic transformation between the federal government, the unions, and employers.**

This agreement, outlining a fundamental social consensus on reform measures, assumed an increase in consumer prices of only 30%, an increase in nominal wages by a maximum of 20%, and, thus, a minimum decrease in real wages by 10%. Wage regulation, valorisation of social transfers, and other transformational measures were then based on these parameters. **A significantly higher than expected increase in prices, triggered by the last (unexpected and not included in the calculations) devaluation of the crown at the end of 1990, fundamentally changed these parameters. In this regard, it was clear that the Czech Republic entered the reform year of 1991 with unrealistic assumptions. Unfortunately, no additional adjustments were made in the area of wage regulation and the valorisation of social transfers.** As a result, the effects of the transformation manoeuvre were significantly greater in the area of wages compared to the government’s original claim.

As a result of the so-called pre-reform preparations (gradual devaluation of the crown, abolition of the negative sales tax), there was a significant increase in prices, especially of basic necessities of life. Inflation reached almost 10% and real wages fell by 5.8%. During 1990–91, when headline inflation reached 71.7%, real wages fell by 33.6%.¹⁵

12 Naturally, this basic factor of cost competitiveness is supported by other factors, such as a low level of corporate taxation, a low level of environmental protection, or the factors of very low social protection and reduction of labour law standards discussed in detail in the *Vision* (2015).

13 Za dvacet sedm let, tj. do roku 2017, „dokonvergovaly“ mzdy (resp. náklady práce) v ČR zhruba na třetinu německé úrovně.

14 Viz Sociální a ekonomické dopady integrace České republiky do Evropské unie, Rada vlády pro ekonomickou a sociální strategii, červenec 2001, str. 112.

15 In parallel, there was a significant devaluation of the population’s savings. In four years (1990–1993), their real value decreased by 56.6%. From the total deposits of the Czech population, which amounted to 277.6 billion CZK in 1989, the purchasing power of 157 billion CZK “evaporated” by the end of 1993. Statistical Yearbook of the Czech Republic 1993,1994, ČSÚ Praha 1993,1994, own calculations.

The level of low wages set in this way in the Czech Republic was further deepened by other measures, the task of which was to inhibit wage growth and keep wages at the lowest possible “competitive” level for as long as possible. In addition to the restrictive monetary and budget policy, it was mainly due to the wage regulation, wage regulations determining the setting of individual wages, long-term intentional maintenance of the minimum wage below the minimum living standard, the use of the so-called cold progression in wage taxation, and specific wage determination systems in the budgetary sphere. Naturally, the fact that in the initial stages of the transformation the vast majority of enterprises were in state ownership and were still directly managed and influenced by the department was also used to regulate wages. All these “transformational” tools have literally resulted in a long-term and systematic entrenchment of low wage levels in the Czech economy.¹⁶

The immediate impact of the macroeconomic manoeuvre in the decline of real wages was painful, and it took about five years to get it balanced. Its long-term effects are much more serious, as we still encounter them every day.

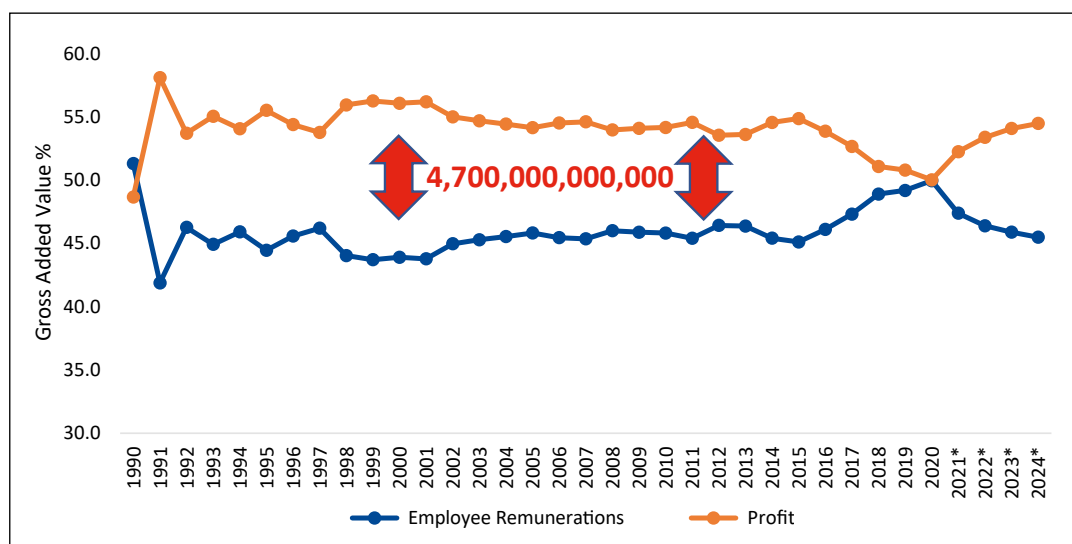
As the following graph clearly shows, **this manoeuvre fundamentally reset the distribution of added value between wages (employee compensation) and profit (operating surplus) in the Czech Republic.**

How did this happen? Quite simply. Wage regulation was the main tool in this case. In the key years after the start of the economic transformation, it ensured that the inflation caused by the economic manoeuvre did not immediately spill over into the wage area. Thus, while inflation actually flew freely in all price ranges, in the area of wages it was contained by wage regulation and other regulatory instruments. (See above). Thus, only one quarter of the year-on-year inflation (56.6%) was covered by the growth of nominal wages! **This led on one hand to a fundamental decrease in the share of wages (employee compensation) in added value and, on the other hand, to a significant increase in the share of profit (operating surplus).**

The share of wages in added value, which was already low in socialist Czechoslovakia (approx. 5 points below the level of developed countries), has significantly decreased. As a result of this operation, approximately CZK 81 billion was not paid to employees in wages in 1991 but ended up in the company’s profit. At that time, it was a quarter of the wage volume!

Graph No. 1

Development of the share of wages and profit in the gross added value of the Czech Republic in the years 1990–2024



Source: own calculations from Czech Statistical Office data (Historical Yearbook of National Accounts 1990 to 2010, 9.6.2021), Statistics of National Accounts). (29 June 2021), years 2021 – 2024 – calculated from the Macroeconomic Prediction of the Czech Republic, Ministry of Finance, April 2021.

¹⁶ Fassmann M., Rusnok J., The True Effects of Wage Regulations in the Czech Republic, In: Vaughan-Whitehead (ed) Paying the Price – The Wage Crisis in Central and Eastern Europe, London, Macmillan Press 1998, New York, St. Martin’s Press 1998.

The initial distribution of added value of 51.3% to 48.7% in favour of wages changed year-on-year to a ratio of 58.1% to 41.9% in favour of profit. After partial corrections, in 1992, the share of profit and wages in added value stabilised for a long time in a ratio of roughly 54:46 in favour of profit. This distribution remained practically preserved on average for the following years and only began to change in 2016 in connection with the long-term campaign of the Czech trade unions’ “The End of Cheap Work”. This at least managed to increase the ratio to 50:50 in 2020. But not for long – (see chapter 9 for more details).

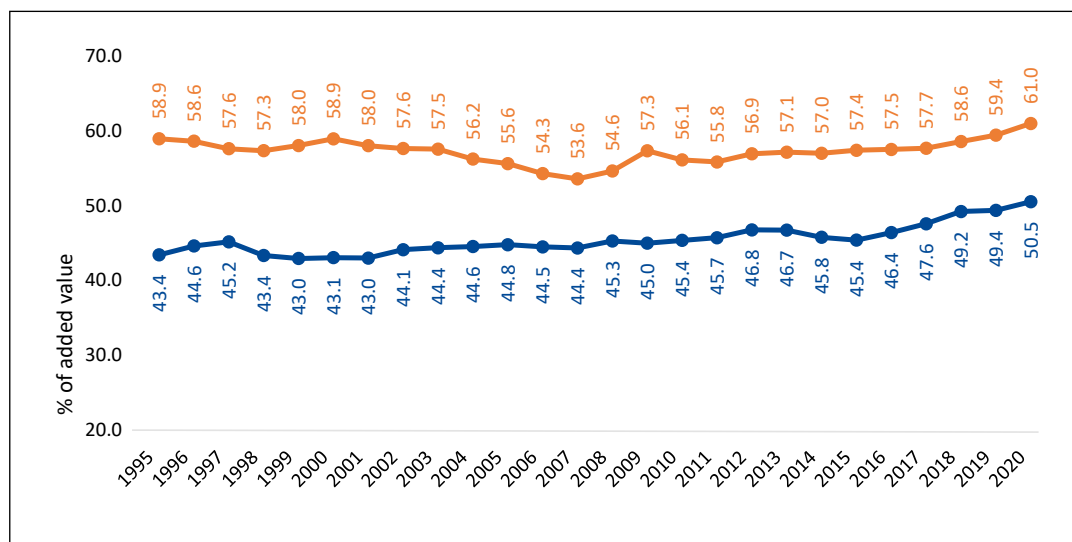
It is not surprising that the reformers of the time did not emphasise this fundamental change in one of the key macroeconomic proportions too much. It would show that the tightening of belts was only for some people – employees. While one was tightening it, the other was loosening it.

However, the external view is also interesting. **The distribution of added value in the Czech Republic has fundamentally differed from practically all developed countries. It seems as if the values of the share of wages and profit in added value in these countries are “mirror reversed” compared to the Czech Republic.** For example, the values of the share of labour costs on added value in the Czech Republic are strikingly close to the share of profit on added value in Germany and vice versa. The difference between the shares of labour costs and profit on added value achieved in the Czech Republic and in individual developed countries is very high +/-10 to 15 percentage points. **It clearly shows that the Czech Republic achieves a significantly above-average share of profit on added value in an international comparison.**

In practice, this means nothing less than Czech employees are actually subsidising the very high profitability of companies operating in the Czech Republic through unpaid wages. Between 1991 and 2020, roughly 4.7 trillion crowns were “moved” from wages to the profits of companies in this way!

Graph No. 2

Share of employee compensation in percentage of gross added value in the Czech Republic and Germany¹⁷

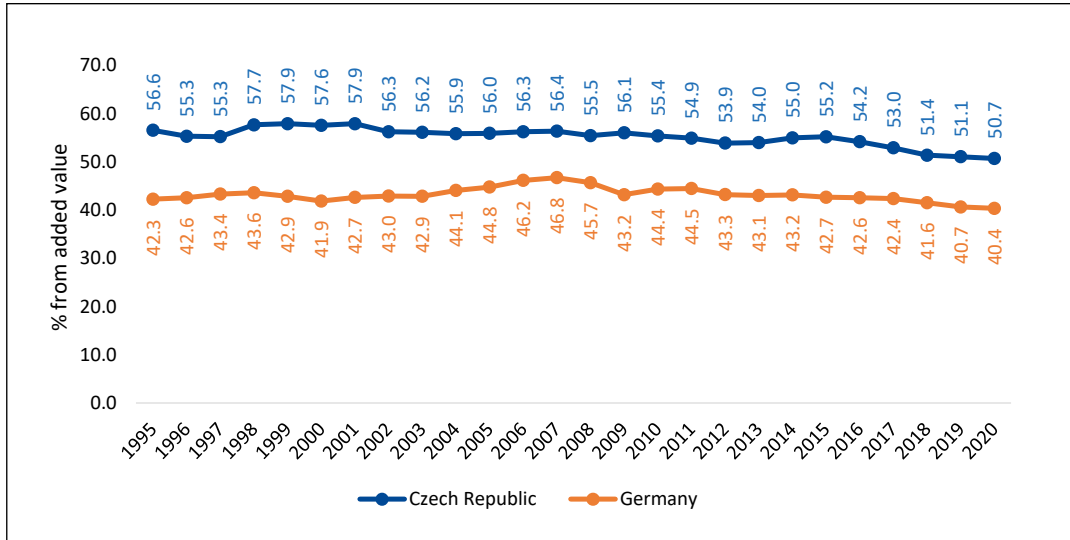


Source: own calculations, Eurostat (29/06/2021).

¹⁷ Small differences between the values of the previous graph, based on data from the Historical Yearbook of National Accounts, and the following graphs (Eurostat Database) result from different methodologies.

Graph No. 3

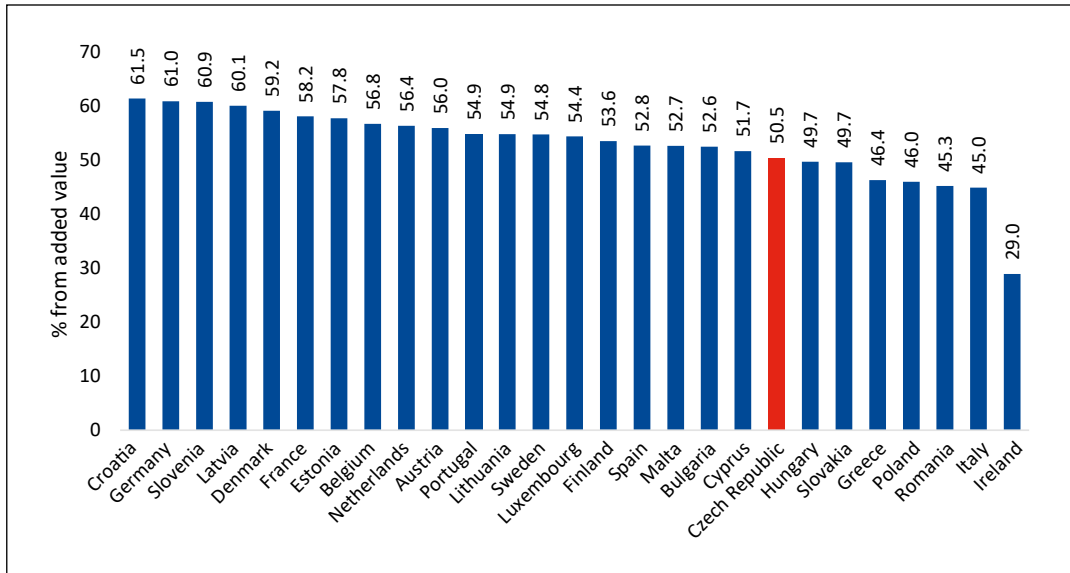
Operating profit rate – share of gross operating surplus and mixed income on gross added value in the Czech Republic and Germany



Source: own calculations, Eurostat (21/06/2021).

Graph No. 4

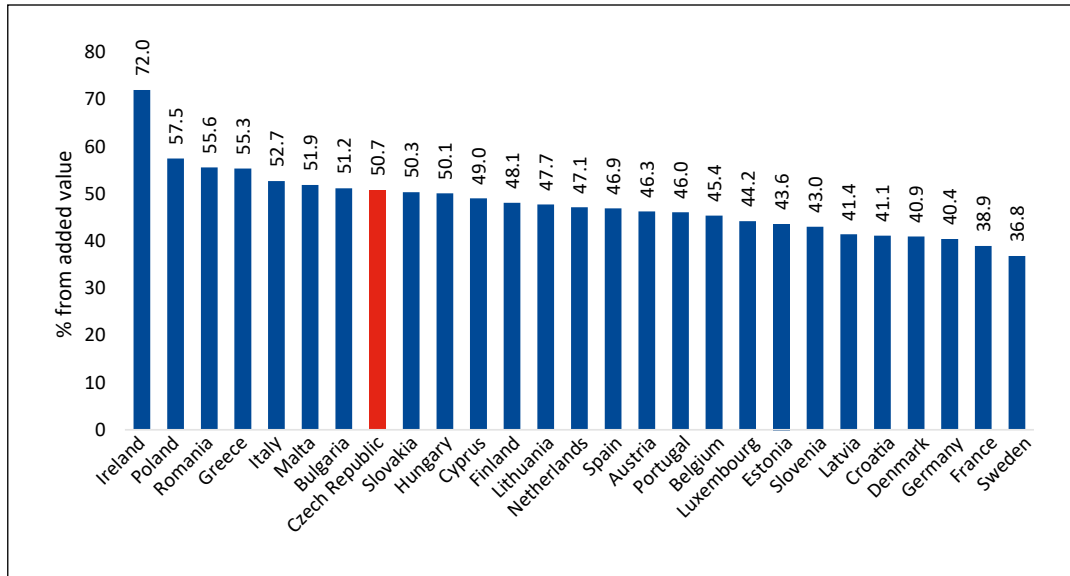
Share of employee compensations in gross added value in percentage in the EU in 2020



Source: own calculations, Eurostat (29/06/2021).

Graph No. 5

Operating profit rate – share of gross operating surplus and mixed income in gross added value in percentage in the EU in 2020



Source: own calculations, Eurostat (29/06/2021).

From a long-term perspective, this situation raises two key questions:

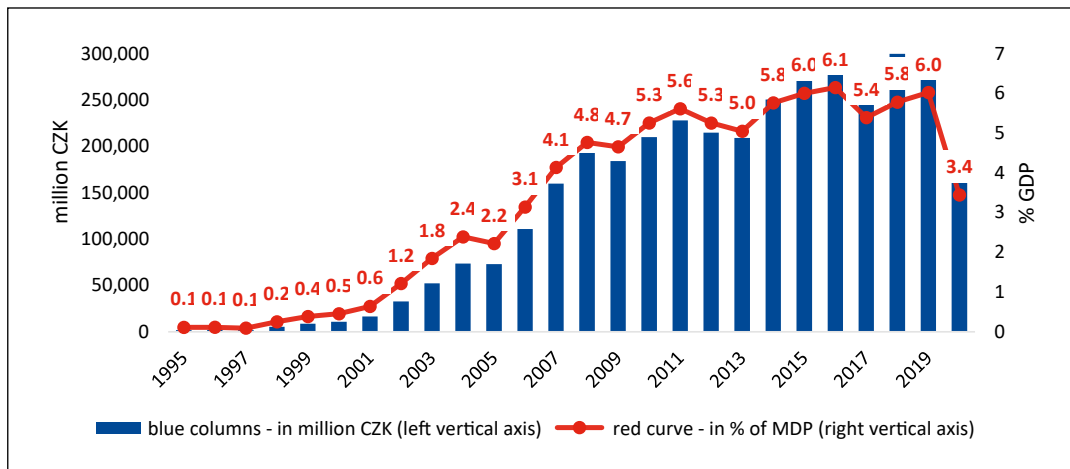
- I Does the performance, structure, international position, and economic perspective of the development of the Czech economy correspond to the long-term very high profitability of companies operating in the Czech Republic?
- II Were thirty years of the so-called successful transformation of the Czech economy built on the basis of a low-cost economy really so successful?

If so, then why did the previously most developed economy of the CEE countries – an economy producing final products – in thirty years of “successful transformation” turn to a supplementary, subcontracting economy, to the backup economic space of Germany, to an economy characterised by a high share of foreign ownership in all decisive spheres, to very low wages in the European and world context, to a country with an extremely high (legal and semi-legal) outflow of profit from the country...?

Our answer to these questions is clear. The model of a low-cost economy based on a very low share of wages in added value has had a long enough time to prove its effectiveness. However, during its thirty years of work in the Czech Republic, it rather proved its hopelessness. The effect of low wages was wasted. Instead of massive investments and a modernised economy, it mostly ended up in unproductive consumption by company owners and a massive legal and semi-legal outflow of profits from the Czech Republic.

Graph No. 6

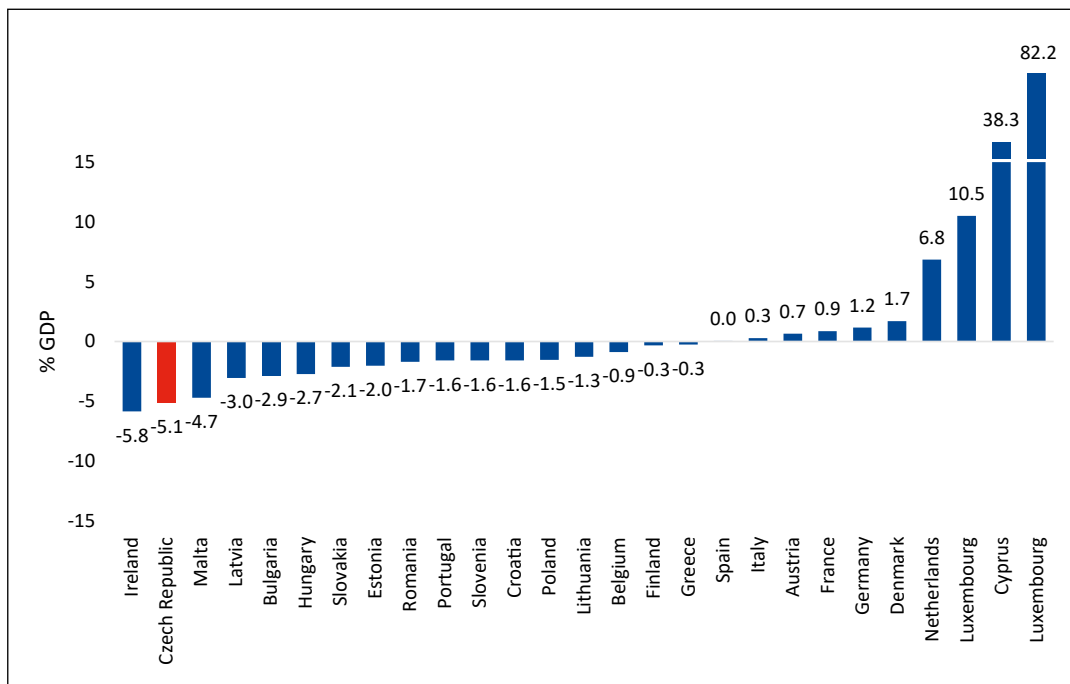
Outflow of dividends from direct and portfolio investments from the Czech Republic



Source: Eurostat (BPM6), own calculations (20/04/2019).

Graph No. 7

Balance of dividend flow from direct and portfolio investments as a percentage of GDP in 2019



Source: Eurostat (BPM6), own calculations (20/04/2019).

It clearly shows that there is no point in further supporting and prolonging this policy of cheap labour. In our opinion, Czech society and Czech trade unions are faced with the task of redefining and enforcing a fundamental change in the long-standing unfair distribution of the added value of the Czech Republic between profit and wages. From this point of view, there is still relatively significant room in the Czech Republic for a faster growth of wages than labour productivity. It is also the only point that can fundamentally change the ratios in the distribution of added value between profit and wages.¹⁸

If we set out for ourselves the goal of achieving the same distribution of added value between profit and wages that was achieved before the start of the economic transformation in 1990 (i.e., from the point of view of wages still significantly lower than in the developed countries of the EU), this would mean (on the basis of the year 2018) to accelerate the growth of the volume of wages compared to the growth of labour productivity overall by approx. eight (8) percentage points. This currently represents approximately CZK 170 billion.

This is not just the conclusion of the Czech trade unions. For example, the National Budget Council states in its Report on the long-term sustainability of public finances: “... we do not expect real wages to grow at the same rate as GDP per worker. The share of employee compensation in GDP has been relatively low in the Czech economy compared to other countries for a long time (in 2017 it represented only 41.7%). However, even this indicator has gradually increased in recent years. **In addition, we see no reason the share of compensation to employees in GDP in the Czech economy should be permanently and systematically lower than usual**“.¹⁹

At the end of this chapter, it is necessary to repeat and answer a simple question: How is it possible that the wage level in the Czech Republic, originally the most developed of the new CEE member countries, is among the lowest in the European Union?

The fundamental cause of the low level of wages at the present time must be sought in the ways of implementing the economic transformation. The low level of wages in the Czech Republic is a direct consequence of the long-term continuation of economic policy based on cheap labour, low taxes, and low social standards.

Regarding the share of trade unions in this development, it is necessary to state: the wage level in individual specific companies or sectors is actually set according to the total wage level in the given country (or region) and not according to the level of productivity achieved in a specific company. Ultimately, cost calculations etc. are also subject to this.

In collective wage bargaining, one does not and has never had negotiated the overall wage level policy, but always the wage increase. If, at the beginning of the transformation, the macroeconomic manoeuvre of the “exchange rate and wage cushion” set the level of Czech wages at roughly one-tenth of the level of Germany and the share of wages in added value at the level of approximately 45%, i.e., ten percentage points below the level of developed European countries, and at the same time for the next five years the move was accompanied by wage regulation and other administrative tools to restrain wage growth (including long-term enforced budget restrictions), then the blame for the consequences of this policy cannot be placed on the unions. Free collective bargaining only started after

¹⁸ This is an absolutely obvious process, which, due to the ongoing extreme setting of the share between wages and profit on added value, will not have a major impact on the increase in inflation. We are aware that some business entities may have difficulties with this absolutely necessary and, given the geographical location of the Czech Republic, unstoppable increase in wages. It can mainly comprise small and medium-sized enterprises with low labour productivity. In this regard, however, it is necessary to prepare and implement an economic programme for all-round assistance and development of small and medium-sized enterprises as soon as possible. The situation on the labour market is also relatively favourable for more fundamental restructuring measures. However, in no case can we (for example, under the “banner” of protecting small and medium-sized companies) support a dead-end “way back” to the model of a low-cost economy.

¹⁹ Report on Long-term Sustainability of Public Finances, National Budget Council, October 2018, p. 14.

the abolition of wage regulation. That is, at a time when the “cards have already been dealt”, i.e., when the basic macroeconomic proportions have already been determined and stabilised. In this way, the possibilities for collective bargaining were outlined in a fundamental way.

The effort to keep wages low for as long as possible has resulted, for example, in limiting the tripartite dialogue at the national level, in a reticent attitude towards the ratification of the European Social Charter and some ILO conventions, in resistance to the expansion of higher-level collective agreements, in the weakening of the socio-economic function of the minimum wage, etc. Naturally, this could not fail to be reflected in the scope and quality of collective bargaining at all levels.

With a gap of almost 30 years, perhaps only one reservation can be made to the trade unions. Namely, that at the beginning of the economic transformation, they allowed themselves to be fundamentally deceived by the political representatives of the time, just like the majority of the nation.

The unions were the only force that consistently emphasised the importance of maintaining the social tolerability of the transformation. In 1995, under the slogan “Trade unions for a dignified life”, 90 thousand people demonstrated on the Old Town Square against bad social laws. It was the first major union protest action. However, the voices that warned against this form of transformation were in the minority, and the illusions of the majority that in a few years we would all be well were all the greater.

The general agreement, concluded in 1990 by representatives of the government, trade unions, and employers, was based on the assumption of a 30% increase in inflation and a 10% decrease in real wages (the wage regulation system was also based on this). The devaluation of the Czech crown at the end of December 1990 fundamentally changed these parameters, without modifying the conditions of the General Agreement and wage regulation. The consequence was an increase in inflation by 56%, a decrease in real wages by almost 30%, and above all, a fundamental decrease in the share of wages in added value.



What lies behind Czech low labour productivity?

The fact that even in 2014, when the 25th anniversary of the start of the economic transformation was celebrated, this transformation was assessed as clearly successful, is a certain paradox of the discussion about wages in the Czech Republic. In the discussions at the time, the nearly unison expressed opinion claimed there was no need to change anything with regard to this transformation.

At the same time, almost none of the politicians decided to show the development of the position of the Czech economy in international comparison and most certainly not in regard to wages. Evidently, for a long time, no one from the political representation at the time, nor from the economic mainstream, wanted to appear before citizens and voters to say how far the Czech wage development diverged from the trends of other countries and that this was an inevitable consequence of the transformation of the Czech economy.

In the previous chapter, the disproportion in the distribution of added value between wages and profit is highlighted. Even if the balancing of this disproportion can somewhat contribute to reducing the significant differences in wage levels between the “old” and “new” EU member states, it can in no way eliminate them.

The solution really lies in the area of labour productivity growth in the Czech Republic. However, this by no way means – bluntly speaking – that Czechs should work more than they do now. The purpose of such statements is clear – to subliminally impose on the Czech society the general idea that our employees can only make do with their low wages. Such ideas must be fundamentally rejected because they are meaningless. If we were to continue with this “logic”, then we would have to conclude from the fact that an employee in the Czech Republic has a third of German wages, that a German employee works three times more than a Czech employee, which is not true. Let’s see what this problem really is. We will start with labour productivity, the level of which is so often used in the debate about wage growth in the Czech Republic.

Labour productivity at the national economic level is most often expressed as a share of GDP (in purchasing power parity) per hour worked.²⁰ It currently reaches a level of roughly 64% compared to neighbouring Germany and has basically stagnated in the last ten years (with a more significant increase at the end of the decade). A similar development trend can be noted when making comparisons with other developed countries.

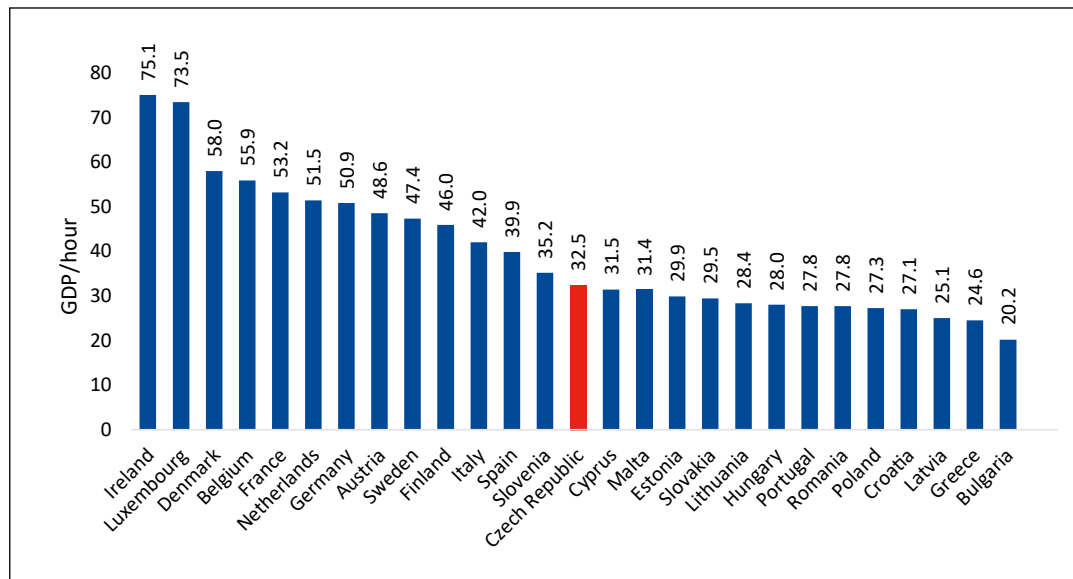
However, the labour productivity values reported in this way very often raise significant doubts in real practice. Especially in specific companies or in fields where it is possible to compare this level of reported “financial” productivity with **“natural” productivity, i.e., the number of products or services provided per time unit.**

It is therefore clear that we need to take a closer look at the issue of lagging labour productivity. Especially when the overall wage level in the Czech Republic is derived from low productivity.

²⁰ However, there are other indicators of labour productivity that differ from this indicator, which is most used for international comparisons, both in the numerator and in the denominator. An indicator of nominal labour productivity (GDP at current prices per hour worked) as well as labour productivity per employee (in purchasing power parity or nominal value) can be used. The use of the indicator depends on the context in which the productivity indicator is used.

Graph No. 8

Gross domestic product per hour worked in purchasing power parity in 2019²¹



Source: own calculations, Eurostat (29 June 2021).

Measuring Labour Productivity

Let us first look at a relatively simple situation where a Czech employee produces a comparable number of products per shift as their foreign colleague. The “natural labour productivity” is basically the same and practically cannot be increased (e.g., for technological reasons). The productivity expressed by the financial indicator is fundamentally different for these two employees. At the same time, it is a very real problem, evident today. For example, in the automotive industry, where the productivity of manufacturing lines in Czech companies is the same (sometimes even higher) than abroad, the products are of the same quality, but the salary is nowhere near the level of the parent company somewhere in Western Europe.

In the above example, two problems are intertwined. The first general problem is how to measure productivity at the national economic level. It is obvious that, at this level, the performance of the economy (per employee or hour worked) cannot be expressed comprehensibly by a set of natural products or services. Therefore, a financial indicator comes into play, which assigns “its financial valuation” (added value) to each of these natural products. Its advantage is that this indicator can be accumulated even for materially dissimilar commodities.

The second problem is what “valuation” will be assigned to this product. And it is precisely this **different valuation of the product that is the fundamental cause of the extreme differences in the level of labour productivity achieved between individual countries.**

21 In international comparisons, labour productivity is measured by GDP per employee or hour worked in purchasing power parity in order to exclude differences in the price levels of individual countries, but the methods used for international comparisons take these influences into account only partially and are therefore only approximate. At the level of aggregate productivity (GDP per worker), a 5% error is not considered statistically significant, while at the level of partial (sectoral) disaggregation, it can be even greater. (OECD Purchasing Power Parity and Real Expenditures, Paris 1999).

What affects Czech labour productivity?

In the previous graph, we expressed labour productivity in purchasing power parity (i.e., with a certain elimination of the difference in product valuation). In this way, productivity should somehow approach its real value. However, this is not an indicator of labour productivity, on which the wage level depends. This is an indicator of “nominal” labour productivity, where the numerator is expressed as gross domestic product in current market valuation – current prices.

At first glance, it is clear that the differences between the two graphs are significant, both per one country and per individual states. The question is: Why? What is the specific cause of the significant difference in product valuation between the Czech Republic and the most developed states of the European Union? Although it is theoretically possible to find a number of reasons for these price differences, the following two are generally considered to be the decisive factors (especially in the current post-industrial sphere):

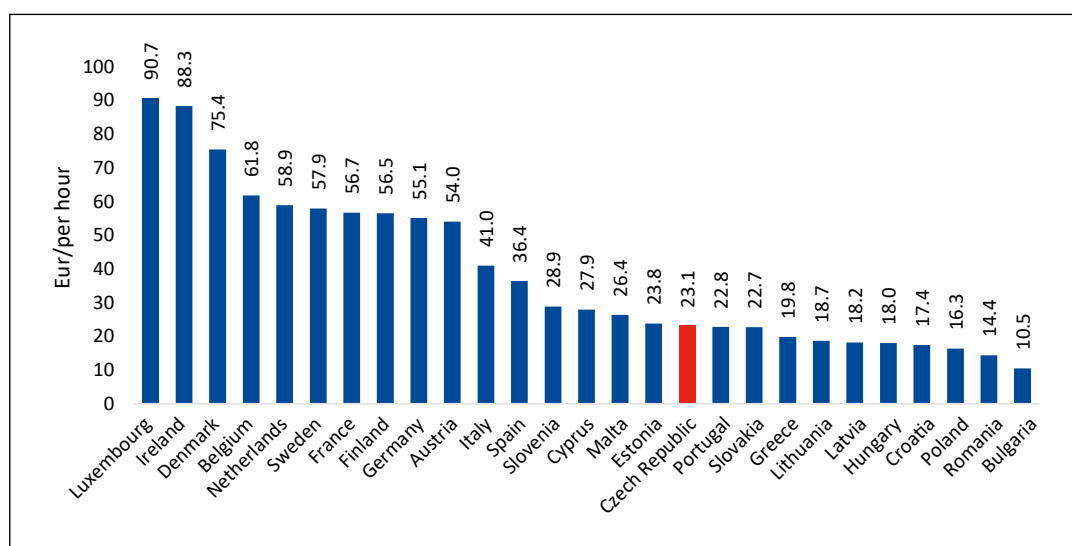
The first factor is mainly the lower degree of transfer of the knowledge of the advancement of science and technology into the product. In general, the price for the technical perfection of a product grows significantly faster than the main technical parameters that can be used to express it. Conversely, a low level of implementation of the latest knowledge of science and technology into products leads to a sharp drop in price and, in an extreme case, basically makes the product unmarketable. The dependence of the price on the level of product parameters is undoubtedly important when evaluating the level of competitiveness.

How important is this factor in the Czech economy? It is a known fact that almost two-fifths of Czech production is exported, of which almost 85% ends in the markets of EU countries. At the same time, around three quarters of exports are products of higher processing levels of the manufacturing industry (engineering, consumer industry, semi-finished products, etc.) .

If we realize that part of the GDP (a large part of the service sector, as well as the production of the food industry, etc.) cannot even be the subject of export, this is a relatively high level of participation in international trade. Would such a high degree of involvement in international trade be possible if the products concerned were of a low degree of processing, obsolete, etc.?

Graph No. 9

Gross domestic product per hour worked in euros in 2019 (common prices)



Source: own calculations, Eurostat (29 June 2021). Belgium 2019.

A large part of Czech exports comprises, for example, products of the automotive industry, both the cars as such – fully comparable in quality to the competition – and various complex sets and assembled parts. Even in this case, these must be products that meet very demanding requirements in terms of the quality of useful properties and the materialization of scientific and technical knowledge. If this were not the case, they could not be exported and used in the cars of the world's most important brands. It is not even possible to hide the relatively well-known fact that Czech companies manufacture products locally that are in the end referred to as products of a well-known foreign company, without having passed through the doors of such a company at all. The same is the case with other export products. It is basically impossible to say that they are technically behind the competition.

Therefore, the second and, in our opinion, the decisive factor determining the price of the product are the sales prices, or more broadly expressed as sales conditions.

In today's world, markets are largely occupied. A substantial part of the goods market is controlled by multinational companies that dominate it and set prices.²² On the demand side, there is also a habit of honouring continuity and orientation towards proven brands and companies with tradition and good reputation (goodwill), all of which is enhanced by aggressive advertising. If Czech companies (but practically all companies from the countries of Central and Eastern Europe) supply final products in the same segment as multinational companies, then to a large extent they occupy an outsider position on the market, mainly due to the fact that they come from an unknown country "somewhere in the East", which is a term generally associated with low quality and consumer distrust. Entry into occupied markets therefore presupposes the necessity of significant price concessions, even for products with parameters in no way behind competitive analogues.

Cooperating companies, i.e., those that have their customer abroad and receive not only orders from them, but often also material, are in a similar position. By "working for wages", these companies become dependent on their customer and are in the situation of a "price taker", i.e., the one who accepts the price (or to whom the price of their work is determined from the outside).

Other price tools can be found in companies located in the Czech Republic, which are part of multinational conglomerates. There, the level of non-market determined "intra-group" prices within international companies, e.g., payments when exporting products or components from the Czech Republic, and similarly, when importing them into the Czech Republic, has a significant effect. These prices may be lower for exports and higher for imports compared to the actual costs, including the profit rate. It is also possible that the product is sold by a business outside the Czech Republic, and therefore most of the profit goes abroad. There are countless options for transferring profits elsewhere. The cause can be found primarily in the redistribution processes within these concerns, which primarily aim at tax optimisation within the group, but political factors are not excluded either.

The "**non-price redistribution of added value**". works in a similar way and for similar reasons, **which, like price redistribution, has an effect on reported productivity in the Czech Republic.** It is an outflow of Czech added value among companies, from a subsidiary in the Czech Republic to its foreign parent company or to another subsidiary through various intra-company loans, expensive consulting services, and a number of other channels. The reason is primarily tax optimisation within the entire group. Profit is mainly transferred where there is a tax shield, i.e., no taxes are paid.²³

22 In-house deliveries of multinational companies and deliveries under cooperation agreements are already estimated to account for more than two-thirds of world trade.

23 In the past, ideas were often spread that this phenomenon could be prevented by significantly lower taxation. This led in countries of our type, incl. the Czech Republic, to participate in tax undercutting by striving for the lowest possible taxation of corporations. In fact, for this type of operation, tax undercutting (which severely depresses public finances) is effectively ineffective, as any slightest taxation is still greater than zero. Unfortunately, even with this type of taxation (and similarly to other types of taxes) the theorem of the gate or trapdoor applies to a large extent. Once the tax rate reduction actually occurs, and individual entities adapt to it, it is very difficult to "go back", especially through a change in the tax rate. The generally accepted principle for income taxation and corporate income taxation, that adjustments in the area of the tax base are much more effective, also works in this case.

The total volume of the two latter methods of outflow of added value from the Czech Republic is unknown. Estimates of unofficial capital outflow are roughly at the level of official capital outflow from the Czech Republic. This amounts to roughly 8% of GDP.

The level of productivity expressed in this way also includes subjective factors of “unequal” valuation of products. At present, its consequences affect the manufacturer much more significantly, although in many cases this impact is “equalised” within the concern in which it operates, than in the case of a lower level of technical parameters and product quality.

To summarise, all these factors lead to a lower realisation price and from a national economic point of view to a lower contribution to GDP, and ultimately to low productivity. At the same time, this realization price is at least by 20-25%, and in many cases even by significantly more, lower than the price of a comparable competitor product.

The stated finding, that the lagging behind the productivity level of less developed countries – and especially the Czech Republic – is to a decisive extent caused by the lagging of prices achieved, was also indirectly confirmed by a unique STEM survey in 205 selected enterprises, of which 74 were export-dominant. This survey estimated the level of productivity at roughly 72% of Germany and Austria, and the rate of price lag achieved at 75%.²⁴

However, when evaluating productivity and its relation to the level of wages, we must not forget the long-term low exchange rate of the CZ crown, the difference between the official exchange rate and its purchasing power parity. Its undervaluation may not only be a consequence of price discounts, but also their cause. A typical example of this influence is that of the Czech method of transformation and, after all, the recent steps of the CNB, which led to the devaluation of the Czech currency in 2013–2017.

According to the creators of the economic transformation in the early 1990s, the transformational cushions – cheap labour and significantly undervalued exports that allowed us to sell our production far below its real value – were to provide the Czech Republic with a temporary transformational advantage, which was supposed to ensure the rise of competitiveness and subsequently the rapid growth of the Czech economy, and the rapid convergence of our living standards to the most developed countries of the European Union.

This, of course, was an illusion that perhaps holds true in textbooks, but not in real life. Therefore, these assumptions inevitably did not materialise, and their legacy remains in the economy to this day and will be one of the most difficult obstacles to overcome for generations to come. Critics of the transformation have warned against this.

On the world or European market, our products have become cheap. Supposedly, this is their competitive advantage, but as such, they are compared to products from countries with a significantly lower standard of living. In addition, we lost markets and became a subordinate economy, i.e., an economy dependent on the supply of components and sub-supply to other economies.

²⁴ This survey was carried out in connection with the preparation of the study Social and Economic Impacts of the Integration of the Czech Republic into the European Union from 2001 and was followed by another survey (Sofres Factum) in 2002, which was prepared for the follow-up study of Social and Economic Context of the Integration of the Czech Republic to the EU. According to our information, these were also the last representative surveys done in the corporate sphere on this very serious topic.

Productivity versus Pricing

Labour productivity in a less economically developed country, such as the Czech Republic, lags mainly due to the significantly low prices of products achieved, primarily as a result of unequal valuation of products. Therefore, the path of price devaluation is extremely expensive under the current conditions in the markets of developed countries. In the long term, this path widens the gap in lagging prices achieved – it motivates businesses to take the easy path of price undercutting rather than increasing product quality and complexity.²⁵

The exchange rate commitment of the CNB, which lasted from 7 November 2013 to 1 April 2018, and its effect on wage convergence is discussed in more detail in the following chapters. In the context of this chapter, however, it should be emphasised that currency devaluation may mean an actual strengthening of the competitiveness of some companies through price undercutting on the market. These are companies that are outside the networks of multinational companies and are not involved in long-term contracts. Above all, however, this means a massive redistribution of GDP from the Czech Republic.

The reasoning that devaluation will encourage exports largely copies general lessons from textbooks. However, in the current economy, prices for exported products are set for a longer period of time and are essentially fixed, not infinitely flexible as the textbooks say, because the market is monopolised. It is practically impossible to increase their sales on the foreign market because an exact delivery schedule is set. In addition – with the current commodity structure of the main export commodities, especially in the supply of components – the selling price of the Czech supplier is based on an accurate calculation of costs and the need for working time on the customer's side. The foreign buyer has calculated exactly how much the delivered part or component can cost and will not allow the price to increase. Therefore, the idea that devaluation can stimulate export growth to a greater extent (in the sense of selling a larger number of units) is very questionable. As indicated above, the prices of supplies at the intra-group level are managed completely independently of price developments on the domestic market – primarily according to the needs of the group – and prices for other supplies are negotiated as long-term and at fixed prices, based on mutually agreed pricing rules. We must not forget that the exporters who were able to reduce their prices more significantly thanks to the devaluation, at the moment the devaluation is reflected in the costs, cannot actually return the prices back to the initial level. In this way, this path is harmful in its consequences, because over time it creates pressure for further devaluation.

The low labour productivity of the Czech Republic is nothing more than quantitative indicators of the success (failure) of the economic model of the Czech Republic promoted in previous years. In its essence, it is shocking that someone dares to blame this long-established low-cost economy model on employees, and even talk about what they deserve or don't deserve in wages. Václav Klaus's recent statement that Czechs do not deserve higher wages is worth re-emphasising.

Today, nominal labour productivity in the Czech Republic – productivity in its truest, but also most brutal, expression reaches approx. 37% of that recorded in Germany, while nominal labour costs derived from this productivity reach 33% of the value recorded in Germany. This is the truest picture of the consequences of thirty years of “successful” transformation and reforming of the Czech economy. This is not a consequence of the low performance of Czech employees. This is the true face of the capabilities of the management structures of the Czech Republic – starting with the state and ending with companies. Unfortunately, these structures – in contrast to ordinary employees – are not really rewarded according to the achieved work productivity, and no one even thinks that this should be the case. Of course, such a demand would be “pure populism”!

²⁵ Multinational companies that have invested in the Czech Republic typically transfer the production of their least profitable products to the Czech Republic, which inevitably leads to lower productivity than in Western Europe. They also often reduce the price of these products when production is moved to the CEE, which again leads to seemingly lower productivity, even if the workers perform the same tasks as their counterparts in Western Europe. See Chapter 7 below.



New Cheap Labour Policy Model in CZ – Context and Consequences

Even if today, after thirty years of experience with the low-cost economy model, the effort to extend it further seems like a joke, the opposite is true. Even today, there is a strong effort in the business world to keep cheap labour as long as possible; still a little while to “enjoy the ride” on cheap labour costs and the cheap exchange rate of the Czech crown. Does anyone mind that the negative consequences of the low wages of Czech employees can be seen practically at every step?

However, the centre of gravity of the new cheap labour policy is shifting dangerously. From methods of direct containment (reduction) of wage growth and total labour costs, which was typical in previous decades,²⁶ to pressure for maximum openness to the influx of cheap labour, especially from non-EU countries.²⁷ Workers from the poorest member states of the European Union are also well suited for this purpose. The first case mainly concerns Ukraine, while the second case mainly involves Romania and Bulgaria.

The current model of cheap labour is becoming increasingly dangerous. Compared to previous models of “simple” wage withholding, its influence and especially its effects affect a much wider spectrum of social life and cause new problems unknown to previous models. These are primarily security risks associated with a significant territorial concentration of migrants, their demographically different structure compared to the majority society (significantly high proportion of young migrants and men), the activities of criminal groups related to migration, and the introduction of some previously eradicated diseases.

Economic and political risks, directly proportional to the increase in economic migration, are also not negligible. Currently, in addition to the strengthening of illegal migration,²⁸ there may be an outflow of a significant part of wages abroad (restriction in Czech demand). In the near future, however, much more serious questions may arise, mainly related to the strengthening of competitiveness of these very flexible employees on the Czech labour market in the event of a slowdown in the economy or the (already emerging) effort for the full participation of migrant families in the Czech

26 In summary, these processes are described e.g., in: Fassmann M., Ungerma J., [Vision of Economic Policy Changes in the Czech Republic] Vize změny hospodářské politiky ČR, Revue Pohledy 2/2015 (Dec 2015), Praha, 48 pgs., ISBN 978-8086846-61-3 section Labour Costs and Wages pgs. 35 –42 and further in Fassmann M., [Reducing Non-wage Labour Costs – Myths, Facts, Connections] Snižování tzv. nemzdových nákladů práce – mýty, fakta, souvislosti, Revue Pohledy 1/2016 (Feb 2016), Praha, 41 pgs., ISBN 978-8086846-63-7.

27 In addition to this trend, however, another line emerged during the coronavirus crisis – an equally dangerous line, namely the slowing down of wage convergence through the reduction of direct taxation (see the last chapter for more details).

28 It is often stated in professional literature that there is a direct correlation between legal and illegal migration, especially in countries where official migrants live for a long time and where ethnic enclaves are created. These enclaves create a favourable infrastructure for illegal migrants – a suitable linguistic and cultural environment (in which it is relatively easy to disappear), and often also an economic background. It is often precisely the legally settled immigrants who rent housing to illegal immigrants or become their direct employers. A summary overview is provided by, e.g., Fassmann M., [Shadow Economy and Illegal Work] Stínová ekonomika a práce na černo, Praha, Briggs and Co (Oct 2007), EAN-978-80-86846-21-7 pgs. 215–2017.

healthcare system on the same basis as families of Czech nationals.

However, the current cheap labour model does not only pursue the immediate goal of importing very cheap labour. From a strategic point of view, its second role is much more important, i.e., the eradication of excess demand for free labour over supply and prevention of pressure on wage growth in the Czech Republic.

New Cheap Labour

Therefore, we cannot assess the “cheapness” of labour only from the point of view of the current comparison of wages for a specific job position between a foreigner and a domestic employee. It is important to assess the role of employing foreigners in the overall context of the labour market. If we manage to bring enough foreign labour to our market to fill the current gap between supply and demand on the labour market, this will automatically mean a significant slowdown in wage convergence.

It might seem that our fears in this regard are exaggerated, and that the increase in migration is only a short-term process associated with an immediate imbalance in the labour market of the Czech Republic. The question of the rapidly growing labour migration in the Czech Republic cannot be viewed in such a simple way. **Nowhere, it has been said as the economy slows down and jobs decline, whether foreign labour migrant influx is to also “automatically” decline.**

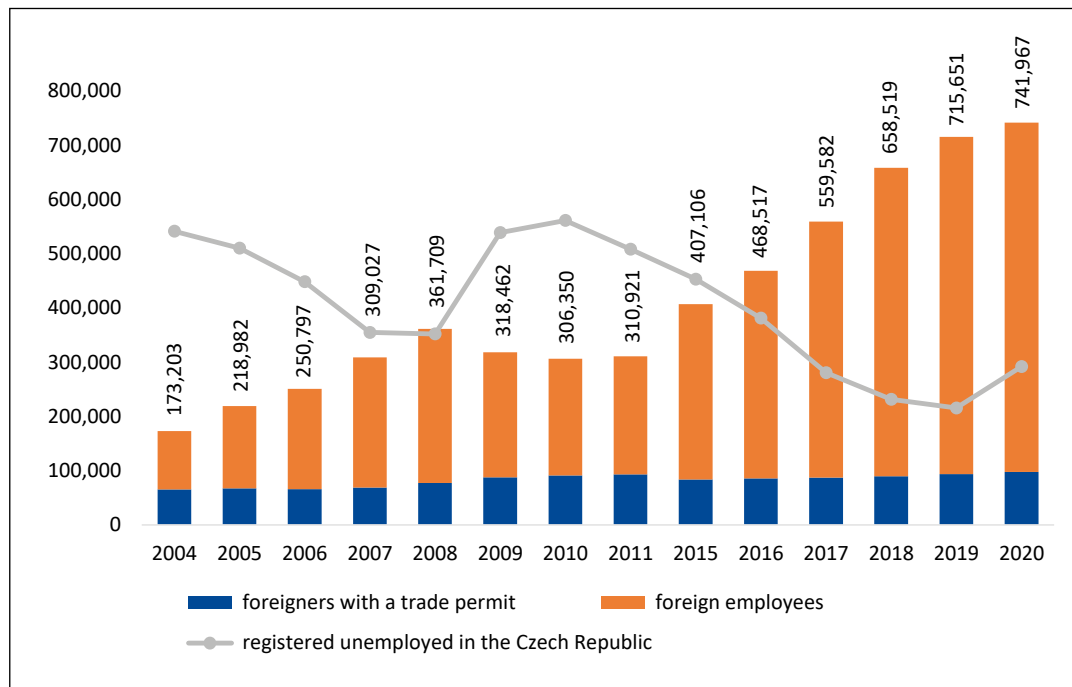
As the following Graph No. 10 shows, in reality, this “return home” did not even occur during the crisis period of 2009-2013. In those five years, there was a triple decline in the Czech economy, namely in 2009 by -4.5%, in 2012 by -1%, and in 2013 by a further -0.9%. Even in 2013, the Czech economy was - 2.2% below the level of 2008!

The number of registered unemployed workers rose from 324 thousand in 2008 to 564 thousand in 2013. However, the number of foreigners on the Czech labour market decreased only very slightly in the given period. This decline and subsequent stagnation meant that in the most critical years of 2009-2011, the number of foreign employees only stagnated at the level of 2007.

It turned out that the Czech labour market, with regard to foreigners, reacted only by stagnation to the significant decline of the Czech economy, accompanied by a significant increase in the registered unemployment of Czech employees. The Czech labour market thus effectively gave priority to foreigners over domestic employees. This only confirms the high competitiveness of these workers, who combine the advantage of their significantly low salary and very high spatial and temporal flexibility with the very considerable benevolence of the Czech state authorities towards their influx.

In terms of **foreign workers’ access to the domestic labour market, the Czech Republic is actually the most liberal of all CEE member countries.** Our very liberal approach is even set as a model abroad – most recently, for example, in Slovakia. In the Czech Republic, the reality of a very high and growing number of foreigners on the labour market is covered by a media smoke screen of “insufficiency, inflexibility, bureaucratic obstacles limiting business”.

Graph No.10
Total number of foreigners on the Czech labour market



Source: Czech Statistical Office and Ministry of Labour and Social Affairs (data for the years 2012–2014 for employees are not available, for the years 2015–2017, it is a qualified estimate of the number of records at the Labour Office).
Note: Employees (persons registered at the Labour Office) also include partners of commercial companies, members of cooperatives or members of the statutory bodies of commercial companies and cooperatives who, in addition to managing the company, also engaged in “ordinary tasks”.

The following data testify to **the exceptional position of the Czech Republic among all CEE states**. At the end of 2018, there were over **658 thousand foreign nationals**, on the Czech labour market, of which almost 569 thousand were employed, while the rest were self-employed persons doing business in the Czech Republic. The share of foreigners in total employment then reached 12.5%, which was by far the highest value among the CEE states.

As can be clearly seen from the previous graph, the number of foreigners on the Czech labour market is growing very quickly. Recently, it has been directly accelerating. While in 2016, the annual increase of foreigners on the Czech labour market amounted to 61 thousand individuals, in 2017 it was 91 thousand individuals, and in 2018 as many as 99 thousand people. Even though there was a slowdown in the previous two years (last year, quite naturally, significantly due to the coronavirus), growth also took place during those years. **The total number of foreigners on the labour market of the Czech Republic thus reached a value of almost three quarters of a million people in 2020.**

Table No. 1
Development of the number of employees – foreigners

	EU 28	Slovakia	Romania	Poland	Bulgaria	Hungary	Outside EU	Ukraine	Russia	Vietnam	Mongolia
2004	75,108	59,818	590	8,882	1,651	131	32,876	22,399	1,078	183	1,585
2005	96,563	75,297	929	12,635	1,732	165	55,173	40,060	2,447	256	1,800
2006	120,124	91,355	1,240	17,149	1,953	253	64,951	46,155	2,380	692	2,814
2007	144,807	101,233	4,313	23,642	5,393	457	95,435	61,592	2,488	5,425	6,897
2008	141,178	100,223	3,605	20,680	5,108	524	143,373	81,072	3,314	16,254	12,990
2009	139,374	98,192	3,780	20,278	4,578	601	91,335	57,478	3,612	3,670	4,205
2010	144,126	100,727	4,815	19,049	5,667	656	71,241	42,139	3,658	3,132	3,548
2011	154,733	106,425	6,372	19,718	7,007	709	63,129	35,250	3,931	2,776	2,827
2015	245,041	150,317	22,861	24,982	19,782	6,145	78,203	41,847	6,703	5,098	2,482
2016	283,844	161,559	31,522	31,355	25,784	10,766	99,045	54,571	8,290	6,565	3,178
2017	330,154	177,059	39,504	39,083	31,528	15,230	142,200	81,695	11,080	9,805	4,395
2018	366,190	191,818	44,099	44,896	34,543	18,051	202,486	121,086	14,597	12,558	5,640
2019	383,264	201,952	44,669	46,430	35,720	18,941	238,606	144,114	16,912	13,935	6,176
2020	389,597	204,294	45,363	46,567	37,145	20,350	258,929	159,468	17,236	14,401	6,724

Source: dtto.

Of the total number of **foreigners – employees** in 2020, 644 thousand belonged to the countries of the European Union (of which: Slovakia 204 thousand people, Poland 45 thousand, Romania 45 thousand, and Bulgaria 37 thousand individuals). Foreigner from outside the EU amounted to 258 thousand people, of which the vast majority were citizens of Ukraine (159 thousand people).

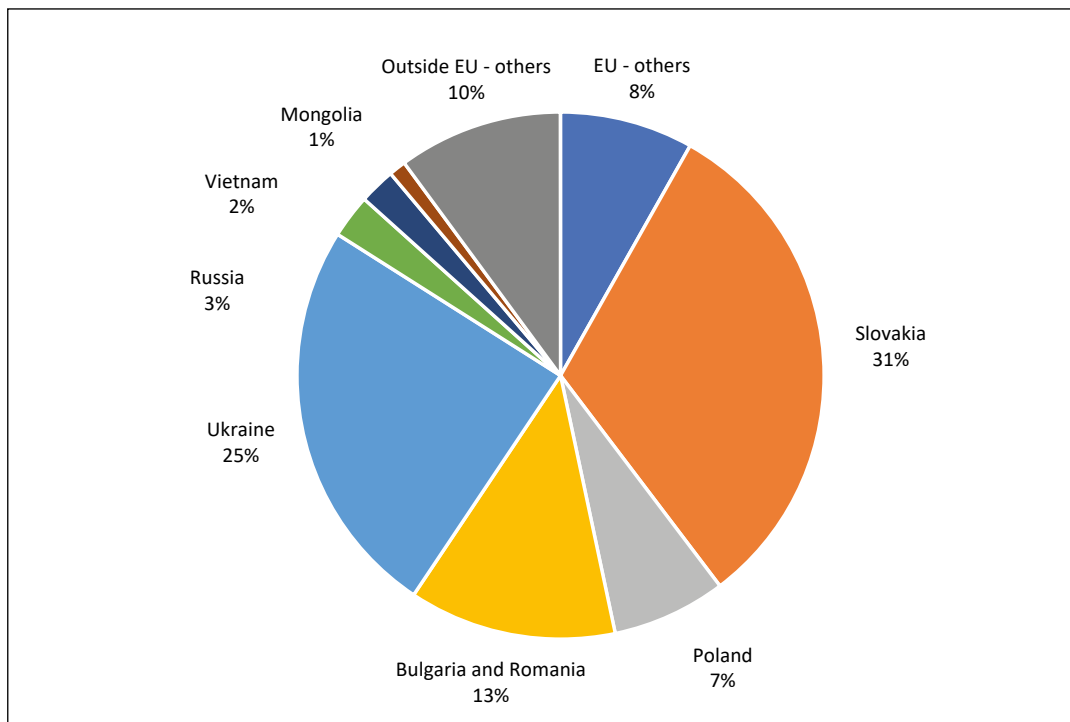
The numbers mentioned above greatly exceed the numbers of foreigners in other countries of Central and Eastern Europe. For example, in Poland, which is often given as an example of a country with a very large number of foreign nationals on the labour market, mainly Ukrainians, the actual numbers are significantly more conservative (unfortunately, we only had older data available here, but sufficient to create an overview). In 2018, there were 587 thousand foreigners (employees and entrepreneurs) legally registered in the national social security system ZUS²⁹ on the Polish labour market. About ¾ of them were Ukrainians. However, the Polish labour market is roughly three times the size of the Czech market, so foreigners make up only 3.6% of the total Polish employment. Significantly fewer foreign nationals also work in Hungary and Slovakia. In September 2018, according to official data, the Slovak labour market comprised 64,400 foreigners – employees, i.e., 2.3% of total employment. This means that the rate of employment of foreigners in the Czech Republic reaches multiples of the values of other V4 countries.

29 ZUS – Zakład Ubezpieczeń Społecznych, <https://www.polskieradio24.pl/42/275/Artykul/2261512,Rynek-pracy-po-raz-pierwszy-spadla-liczba-ubezpieczonych-w-ZUS-pracownikow-z-Ukrainy>.

According to Polish regulations, insurance is mandatorily paid for business entrepreneurs and workers cooperating with them, as well as employees and people working under an employment agreement (in some cases also under an agreement on the execution of work).

However, this – as it seems – is not enough. On the part of various business structures, in order to support the further influx of foreigners to our labour market, the need to cover the lack of qualified labour in a number of fields is always emphasised. **On the Czech labour market, “surprisingly”, workers with low qualifications are mostly in demand.** And those are actually what Czech entrepreneurs are after.

Graph No. 11
Structure of foreign employees in the Czech Republic in 2020



Source: Ministry of Labour and Social Affairs, own calculations.

According to some statements of the Chamber of Commerce of the Czech Republic, it would be necessary to place approximately half a million more people on the Czech labour market. **In that case, the total number of foreigners on the Czech labour market would reach almost 1.2 million people, and foreigners would thus make up almost 20% of total employment.**

On the other hand, these business structures are completely hostile to further increases in wages (especially the minimum wage) and salaries. So, it is absolutely clear what type of competitiveness these groups are talking about.

Whether the Czech Republic will really follow this path is not entirely clear today, but unfortunately it is not ruled out either. This is basically a very convenient “solution”. Nothing needs to be invented or changed. The continuation on this path – even if it may be comfortable for a while – would be a complete confirmation of the misery of the Czech Republic’s economic strategy, its hopelessness. **Such requirements are indeed an absolutely significant confirmation of the very strong extensive nature of economic growth in the Czech Republic.** It is worth remembering that the Czech Republic has actually experienced a period of “general labour shortage” once. It was in the 1980s (as part of Czechoslovakia). Even then, despite the ever-declining performance and the actual lack of perspective of the economic model, there was a “lack of people” everywhere, and labour for the Czechoslovak economy was imported from far-away places around the world (Vietnam, Cuba). At that time, however, no reasonable person doubted the brevity and senselessness of such actions.

The low-cost economy model is increasingly counterproductive and, as a result, destructive in relation to the Czech economy. **By de facto postponing the increasingly necessary (and of course also demanding) technical, technological, and organizational modernization of the Czech economy, it will surely destroy any chance of the Czech Republic for rapid convergence with the most advanced EU countries.** In addition, long-term, this model deforms the structure of the economy through the direction of strengthening productions based on cheap labour, and thus low qualifications, and ultimately leads to further technical and technological lagging.

Price competition, which relies on low wages and labour costs, only increases economic inefficiency as it supports an outdated production structure. By being able to increase the degree of undervaluation of their employees' rewards, firms can avoid more radical measures such as production restructuring, reorganizing corporate management, and replacing outdated management with modern technology.

In a market environment where competition is based on the product development process, a low-wage strategy whose main goal is to maintain the profitability of increasingly outdated equipment, production lines, technological procedures or inadequate management methods, can bring only temporary relief. It would therefore be good to emphasise that there is a floor for wages and labour costs in any labour market. On the other hand, in the long term, the limit for cost reduction as a result of technical, technological or organizational improvements is extremely low. If companies invest insufficiently in new technology, the fact may gradually cause the product to become so outdated that it won't be marketable at any price. In such an environment, firms and the economy are on a downward spiral, pursuing increasingly short-term goals and increasingly dependent on cost-cutting for survival. The result is a shift of the structure to low-sophisticated assembly-type productions that respond very quickly to economic developments or changes in external conditions.

Today, the Czech Republic is realistically faced – whether we realize it or not – with the choice of whether to continue and further promote the policy of cheap labour: a cheap exchange rate of the Czech crown, a policy of low wages, low social standards, and low taxes, or whether to follow the path of modern development.

The question remains: Is it at all realistic at present to fundamentally change the prevailing direction of the economic policy? Can we realistically consider a new government economic strategy in a situation where the “cards have already been dealt”, when the Czech economy has been profiled and is increasingly being profiled as a subordinate economy, as a dependent, low-cost area of developed economies, as a Central European developing country?

What ways would make it possible to get to the top in some modern and developing industries or fields, in fields where it is also possible to achieve equal prices and high labour productivity?

Without a doubt, it is very difficult to say whether the indicated change in the economic policy of the Czech Republic, which will be discussed in the following text, may succeed or not. It cannot be affirmed with certainty. However, we know with certainty how our position in the European economy will develop if we continue down the path of cheap labour policy. This is the path of technological backwardness and descent to lower levels of processing, with lower added value, with lower valuation, with lower productivity and, of course, with lower wages. It is the path of permanently locking the Czech Republic in the trap of middle income.³⁰

30 Given the position the Czech Republic occupies in the world context, we will rather refer to this phenomenon, which we used to call the “poverty trap” in the Vision, using this more precise term.

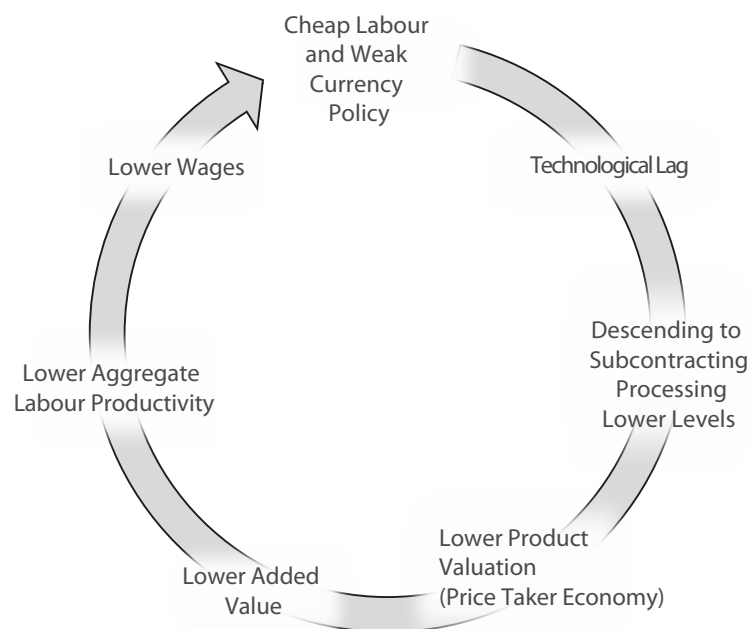
Due to the lack of accuracy of the volume indexes that are based on purchasing power parities, the OECD ranks countries according to the level of GDP per inhabitant into 6 groups: 1. high-income at 125% or more in relation to the average; 2. high-middle income at 100-124%; 3. middle income at 75-99%; 4. low-middle income at 50-74%; 5. low income at 25-49%; 6. very low income at less than 25% in relation to the average. Economies with very low income do not occur among EU countries. In Europe, these include Albania, Bosnia and Herzegovina, Moldova, and Ukraine.

Economic Growth Support

Low-cost Economy – Permanently Locked in the Middle-income Trap



Low-cost Economy – Permanently Locked in the Middle-income Trap





Low Wages and Long Working Hours – Two Faces of Low-cost Economy

From a long-term perspective, the economic development of modern Western societies can be characterised by two elements – a growing product rate per capita and a drastic reduction in the working time required to achieve it. While the growth of product per inhabitant is the most comprehensive indicator of the economic dimension of the society's development, it characterises the shortening of working hours, or extension of free time – the social dimension of social development.³¹

The reduction of working hours has two causes. The effect of technical progress is the objective cause of the process of shortening working hours. This is reflected in the intensive growth of labour productivity, based on increasing the technical level of basic funds, higher valorisation of starting raw materials and materials, new forms of work organization, and a relative reduction in requirements for the equipment of production by the workforce.

The subjective cause of the shortening of working hours is the long-term pressure of employee representatives (mainly trade unions, but also social democratic parties) to shorten working hours without reducing remuneration. The following table No. 2 provides a unique view of the development of working hours in developed countries in the years 1870 –2017.³²

Primarily, it shows that over the monitored 145 years, working hours in developed European countries fell by roughly half. However, the reduction of working hours did not occur smoothly. It is possible to trace certain moments associated with technological changes that significantly accelerated the process of gradual shortening of working hours. Our generation has experienced two such turning points.

The first turning point, which began at the turn of the 1950s and 1960s, was connected in developed Western countries with the transition from an extensive to an intensive type of economy (the 3rd industrial revolution). The second is related to the beginning of the 1990s with the onset of the digital economy (the 4th industrial revolution).

31 However, it cannot be said that due attention is always paid to this quantity in particular. Economic “success” is usually evaluated through the one-sided prism of the growth of the gross domestic product or national income, without taking into account what instruments or at what cost the economic growth was achieved.

32 The table is based on the long-term time series contained in the OECD studies by Maddison A., *Monitoring the World Economy 1820–1992*, OECD 1995, and Maddison A., *The World Economy*, OECD 2001. In recent years, it has been supplemented with Eurostat data.

³⁾ **Angus Maddison** (1926–2010) was a British economist, professor at the Faculty of Economics at the University of Groningen (Netherlands). He specialised in quantitative macroeconomic history, including the measurement and analysis of economic growth and development. In this field, he was considered the world's most important scholar of his time.

Table No. 2

Working time in hours per year per employed person in developed European countries and the Czech Republic in the years 1870–2017

	1870	1913	1950	1973	1995	2005	2010	2015	2017
Belgium	2964	2605	2283	1872	:	1565	1546	1545	1549
Czech Republic	:	:	:	:	1858	1817	1800	1756	1784
Denmark	2945	2553	2283	1742	1419	1451	1422	1407	1405
France	2945	2588	1926	1771	1591	1527	1528	1509	1522
Italy	2886	2536	1997	1612	1856	1812	1777	1718	1719
Germany	2841	2584	2316	1804	1528	1411	1390	1368	1360
Netherlands	2964	2605	2208	1751	1479	1434	1421	1424	1435
Austria	2935	2580	1976	1778	1 774	1 752	1 666	1 599	1617
United Kingdom	2984	2624	1958	1688	1726	1672	1630	1657	1671
Sweden	2945	2588	1951	1571	1640	1605	1635	1610	1609

Source: A. Maddison, The World Economy, OECD 2001, Eurostat database, own calculations.

If we focus on individual countries, we can see that the rate of reduction of working hours was not the same for all. Global trends were not implemented across the board. In addition to economic factors (which form a necessary condition for working hour shortening), the specific rate in a given country depends on many additional external and internal country-specific factors.

The actual rate of shortening of working time and its distribution over time (and thus the potential increase in the accumulated “free time” for workers) is not simply the result of purely economic and technological parameters of the economy. It is also determined by the historical, cultural, social, institutional, and other characteristics of the given country or region. Naturally, we cannot ignore the power of the “subjective factor” – the power of national trade union headquarters in enforcing the reduction of working hours.

We Are 50 Years Behind

Let us now look at the situation in the Czech Republic. Of course, it did not exist in 1870. However, we probably won't make too big a mistake if we assign it, as the direct successor of the Czech Kingdom, the average values of Austria at that time, for the period before WW I, i.e., 2,935 hours for the year 1870 and 2,580 hours for the year 1913.

The overview formed in this way offers two messages for the Czech Republic – as usual, one good and one bad. The positive news is that even in the Czech Republic, in the long term, the global trend of shortening working hours, typical of developed European countries, is gaining grounds. The negative piece of news is that this trend is taking hold much more slowly and the Czech Republic lags significantly behind these countries in the length of working hours – currently by around 50 years. The length of working hours in the Czech Republic is at the level reached by developed Western countries around 1970.

Table No. 3**Differences in working hours between the Czech Republic and developed EU countries in 2015–2017**

	Number of hours per year worked less than a Czech.		Number of workdays per year worked less than a Czech.		Number of years needed to work a year less than a Czech.		How many extra years will a Czech work in their work life?	
	2015	2017	2015	2017	2015	2017	2015	2017
German	388	424	48.5	59.4	5.2	4.2	9	11
Dane	349	370	43.6	51.8	5.7	4.8	8	10
Dutchman	332	349	41.5	48.9	6.0	5.1	8	9
Frenchman	247	262	30.9	36.7	8.0	6.8	6	7
Belgian	211	235	26.4	32.9	9.5	7.6	5	6
Austrian	157	167	19.6	23.4	12.8	10.7	4	4
Swede	146	175	18.3	24.5	13.7	10.2	3	5

Source: Eurostat database, own calculations.

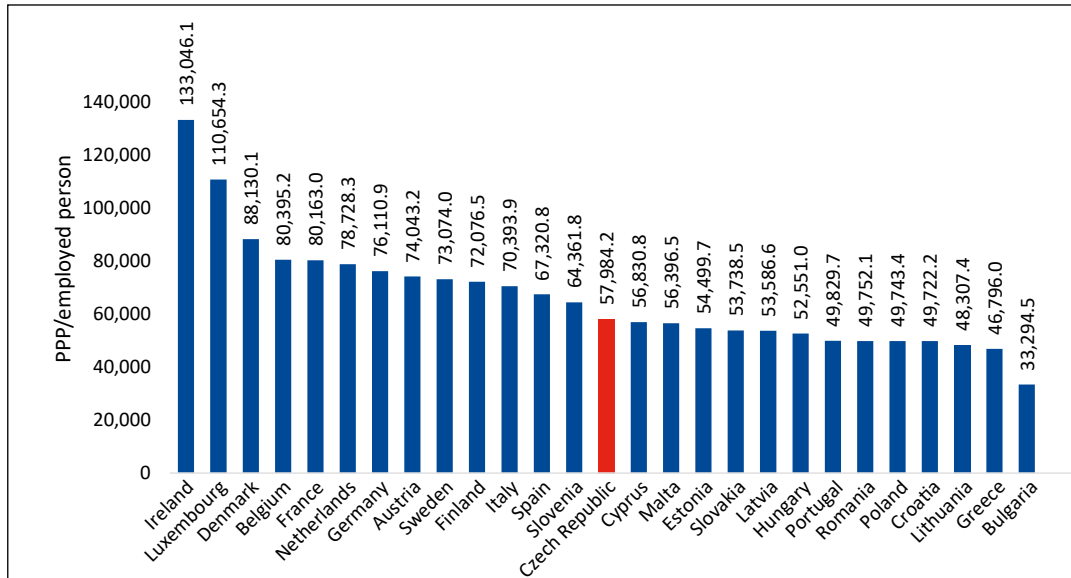
Note: The calculations in columns 3–6 were carried out in the conditions of the Czech Republic, i.e., working days or years mean “Czech” working days and years. “Working life” in columns 7–8 refers to the period of 18–65 years of age.

It is by no means surprising. Other EU member states from Central and Eastern Europe are also at a similar level. Both for these countries and for the Czech Republic, the established greater range of working hours (compared to developed countries) is completely normal. This is a typical characteristic of less developed economies. Countries of our type are forced – due to their technical and technological lagging behind of the most advanced countries – to increase their output in an extensive way, i.e., by higher employment per unit of product created and by increasing working hours.

As we have already demonstrated in our previous study *Vision*, the infamous “first place” among the CEE states in this regard is occupied by the Czech Republic. In terms of the labour productivity indicator (measured as GDP in purchasing power parity per hour worked), it has long been lagging behind both the EU 28, and its most advanced members. The Czech economy in aggregate output is not able to keep the ratio of the created product to other countries – both developed countries and countries with a lower economic level. An hour worked in the Czech economy creates relatively less value than in other countries, and therefore, if the Czech economy wants to maintain a relationship with these countries, it must spend a greater number of hours to achieve such a result.

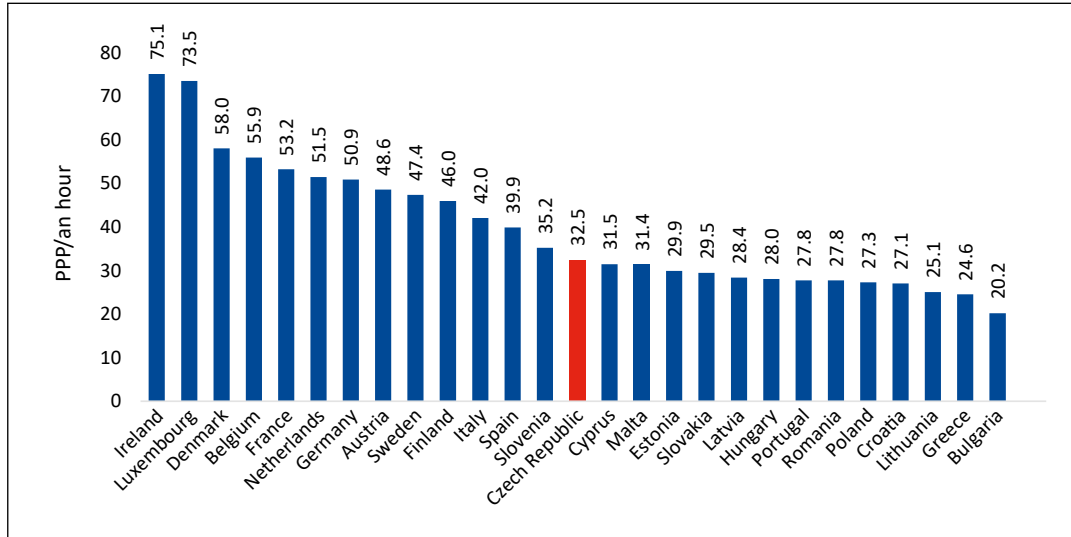
Indeed, if we examine the relationship between labour productivity indicators (GDP in purchasing power parity per employee and per hour worked) between the Czech Republic and developed European countries, the difference is very significant.

Graph No. 12
GDP per employed person in purchasing power parity in 2019



Source: own calculations, Eurostat (29/06/2021).

Graph No. 13
GDP per hour worked in purchasing power parity in 2019



Source: own calculations, Eurostat (29/06/2021).

At the level of the EU 28 and Euro 18, the difference is around 10 percentage points, while between the Czech Republic and Austria it is less than 7 pp., but in the case of Germany, it is an incredible 18.6 points (the hourly productivity of the Czech Republic vs. Germany is approx. 63.8%, while the productivity per employee is 82.4 %).³³

It is clear that the differences between the indicators are caused by the differences in the extent of

³³ When expressing GDP in current prices, these differences are noticeably smaller – in the ratio of the Czech Republic to the Federal Republic of Germany, in 2017, the difference between GDP per employee and per hour worked was 11.5 percentage points (with the ratio of productivity per employee of 48.4% and productivity per hour worked of 36.9%).

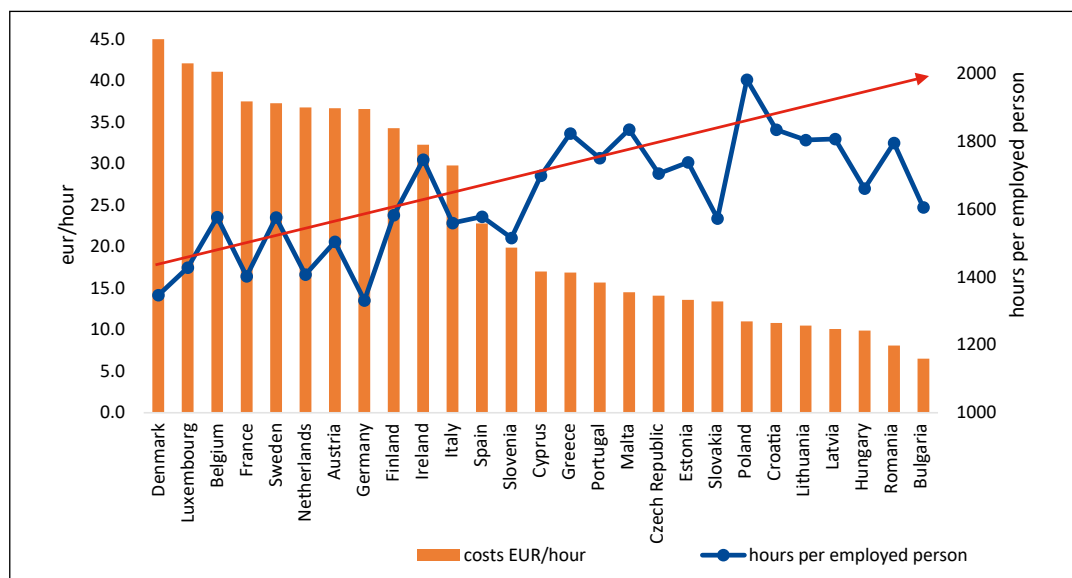
working time in individual countries. With its low reported productivity³⁴ and low wages derived from it, the Czech Republic ensures (compared to most developed countries, including our neighbours) GDP growth by an extensively higher number of hours worked.

However, there are also other interesting facts illustrating the position of the Czech Republic in the field of labour productivity, or rather the situation on the labour market. In the years 2008-2012, significantly affected by the economic crisis, all developed EU countries used the reduction of the number of hours worked as a relatively important tool to support employment, because by reducing the number of hours worked per employee, more people could be employed.

In only a few countries during the observed crisis period, there was an increase in the number of hours worked, i.e., a preference for earnings over employment; it was primarily the Baltic EU member states. Of the CEE 5 countries, only the Czech Republic joined them. Even this somewhat atypical behaviour of the Czech Republic – a further increase in hours worked per employee at an already high level – was just another manifestation, in fact quite desperate in the economic crisis, of the very low level of wages in the Czech Republic.³⁵

This example is just a confirmation of the well-known truth that **the indicators of the length of working hours and the amount of wages are not independent variables**. In fact, they are just two sides of the same coin, i.e., labour productivity. If work productivity is high and the wages derived from it are high, then the employee free time is also of high value. The physical limitation of this factor leads to pressure to shorten working hours. And conversely, low labour productivity and the resulting low hourly wages reduce the value of an employee's free time. This leads to pressure to increase working hours. In both cases, maintaining or even increasing the number of hours worked serves as a cushion, softening the still extreme relations of the remaining two indicators (productivity and wages) officially reported in the Czech Republic against the most advanced developed EU countries. This obvious dependence is very well described by the following comparison for the 28 countries of the European Union.

Graph No. 14
Labour costs and hours worked in EU countries in 2020



Source: Eurostat database, own model.

³⁴ In this context, of course, referring to the officially reported labour productivity. An analysis of the causes of low reported labour productivity is presented in the second chapter.

³⁵ Eurostat, Labour Cost in the EU No. 56/2015, 30 March 2015.

It is therefore quite evident that the effort to shorten working hours in the Czech Republic, of course without reducing wages, is currently running into the problem of very low officially reported labour productivity on the one hand, and a very low level of wages on the other hand. **The very high number of working hours in less developed countries dampens the social impact of very low labour costs to some extent.**

The roots of this condition run of course much deeper. They are directly related to the structure of the economy, specifically to the method of valuing the product and labour productivity (see the second chapter for more detail).

Current economic growth, with the structure of the Czech economy focused on production with a lower degree of processing, manifests itself as an extensive pressure on the increase in employment and on the extension of working hours. It is therefore indisputable that any efforts to shorten working hours in the current reality of the Czech Republic will immediately come into conflict with the acute shortage of labour in a number of fields and will increase the pressure on the influx of labour from abroad and the effort to maintain low wages. On the other hand, pressure to further extend working hours is very likely. Today, it appears that in a number of specific examples, efforts to further extend working hours are hitting the physiological limits of tolerability.

The pressure to further increase working hours is unfortunately not a fiction in the Czech Republic. As the tables (Nos. 1 and 2) at the beginning of this chapter show, there is currently a relatively substantial increase in the number of hours worked per employed person and, at the same time, a significantly different development trend in relation to advanced members of the European Union.

In the economy of the Czech Republic, completely opposite tendencies are clearly taking place. We are actually at a certain crossroad. Whether we will “the next time around” move towards shortening working hours, as all developed European countries have experienced and are experiencing, or on the contrary, continue to maintain already long working hours, is not dependent on our willingness or unwillingness. In fact, it is a reflection of much deeper and more serious questions about the necessary change in the direction of the economic policy of the Czech Republic. It is nothing of lesser importance than whether the policy of cheap labour will continue to be promoted in the Czech Republic – a cheap exchange rate of the Czech crown, a policy of low wages, low social standards, and low taxes – or whether the Czech Republic will go down the path of developing efficiency, rapid growth, and monetising the results of science and research on competitiveness. The choice of the direction of economic policy and the shortening or lengthening of working hours are in fact “connected vessels” which cannot be separated from one another.

Table No. 4

The impact of collective bargaining on shorter working hours and wage growth 2013–2017

Year	Average Gross Monthly Salary (CZK)				Average Working Hours (h/month)			
	Collect. Agreement YES	Collect. Agreement NO	Monthly Difference	Annual Difference	Collect. Agreement YES	Collect. Agreement NO	Monthly Difference	Annual Difference
2013	29,383	26,636	2,747	32,962	146	150	–4	–45
2014	29,900	27,239	2,662	31,938	146	150	–4	–42
2015	31,231	28,241	2,990	35,882	145	149	–3	–39
2016	32,252	29,274	2,979	35,743	145	149	–3	–39
2017	34,387	31,568	2,820	33,834	144	148	–4	–46

Source: Trexima.

One more important note at the end of this chapter: A certain objective predisposition of the Czech economy in relation to relatively long working hours does not mean that, in principle, “nothing can be done about it”. It is not only possible, but it has already been done. It is the pressure of trade unions and collective bargaining which significantly contribute to the reduction of working hours in the Czech Republic.



Economic Convergence between CZ and Advanced EU Members – Theory Basis and Possible Development Scenarios

What does convergence mean?

If we are discussing the need to end “cheap labour”, or more broadly the end of the Czech Republic’s economic model, based on laziness and geographical proximity to Germany, it is necessary to pay attention to the topic of convergence. Considering the anchoring of the Czech economy in the European area, whether in terms of trade flows or the ownership of companies in the Czech Republic, it is important to evaluate the development of the convergence category within the EU.

The current results of the convergence process monitoring in the European Union are contained in the Eurofund’s report on convergence, issued at the end of last year.³⁶ This is the first summary report on the topic, which also deals with the methodological definition of the concept of convergence. The concept of economic convergence can be found in the basic EU treaties, but it is not clearly defined. The report states that the convergence debate is important both for the necessary reform of the European monetary union and for the social pillar of the EU. Moreover, convergence is necessary for the cohesion and political legitimacy of the EU as such.³⁷

While in a simplified view convergence was perceived through the category of economic growth, after 2008 the situation changes. The so-called criteria of nominal convergence, used in connection with the introduction of the euro and membership in the Eurozone, did not prove to be sufficient, according to a report by Eurofund.³⁸ Convergence must therefore also be seen in the social dimension within the EU (see also the European Pillar of Social Rights).

The original ideas of European integration counted on the fact that social convergence “will come” with economic convergence. However, as emphasised by the European Pillar of Social Rights, it is also necessary to assess convergence more broadly in the area of social rights and wage development. The economic and social categories are thus connected.

36 Mascherini M., Bisesello M., Dubois H., Eiffe F., Monitoring Convergence in the European Union. Upward Convergence in the EU: Concepts, Measurements, and Indicators, European Foundation for the Improvement of Living and Working Conditions, Luxembourg 2018 ISBN:978-92-897-1797-7, pg. 65.

37 While cohesion can be understood as a state, convergence is a dynamic process that should lead to cohesion.

38 Finally, what appeared in our analyses 15-20 years ago was “officially” recognised. At that time, we pointed out the problem that the so-called criteria of nominal convergence ensuring the stability of the common currency are in fact intended for the most developed countries, while their real convergence is essential for the new member countries, i.e., real approximation between the old and the new EU member countries, for details, e.g., Fassmann M., Vintrová et al., [Social and Economic Context of Czech Republic Integration into European Union] Sociální a ekonomické souvislosti integrace České republiky do Evropské unie, 1st ed., Praha, Rada vlády pro ekonomickou a sociální strategii, 2002, 375 pgs. ISBN 80-238-8699-1, pg. 60-91, Vintrová R., [Real Convergence – a Prerequisite for Smooth Integration into European Union.] Reálná konvergence – předpoklad plynulé integrace do Evropské unie. Politická ekonomie 2003, No. 1, pgs. 79-91 etc.

The basis of the concept of convergence lies in convergere, which means to have the same direction. The key questions in convergence include: what is to converge and where? It is particularly important for the Czech Republic that the Eurofund report deals with the topic of “upward convergence”, i.e., catching up with less developed countries rather than more developed ones. It is not limited to the traditional perception of GDP per capita, but also includes wages and other social categories.

In general, different adjectives are used in connection with the term convergence. Nominal convergence refers to the criteria of economic and monetary union, while real convergence refers to economic and social variables in real numbers, which typically includes GDP per capita or productivity.³⁹

Upward convergence is defined by the European Commission in terms of two concepts, either as the growth or improvement in performance towards a certain political goal, or as the reduction of disparities. “Growth ‘per se’ does not mean convergence. A country may improve its performance in a certain indicator, but at the same time disparities between countries may increase.”⁴⁰

In general, convergence can be defined as a reduction in the distance between two trends. However, it is important to analyse upward convergence as the term “convergence” can easily include “the convergence of countries in a certain indicator” but ignore the fact that their performance concurrently deteriorates. Therefore, for upward convergence, it is necessary to measure both improvement and convergence in performance.

Naturally, the time horizon is important, for example, data for one business cycle is not sufficient to assess convergence. Likewise, it is not enough to monitor only one indicator. The report assessed convergence across a range of indicators. For example, wages were measured by compensation of employees per hour with sources drawn from national accounts. During the given timeframe (2005–2017), all countries showed improvements, but at the same time differences between countries were increasing. Austria, Belgium, Denmark, Finland, and Luxembourg recorded an upward divergence (i.e., widening of the gap to the EU average) over the given period. Other countries diverged downwards, namely Greece, Croatia, Hungary, Poland, and Cyprus.

Political goals were not met per the EU as a whole in the working poverty category. Its significant increase occurred mainly in Germany and Hungary. Regarding the “popular” indicator of economic convergence, most often measured by real GDP per capita in PPP, according to Eurofund, it can be stated that this indicator has increased since 1995, but the variability between countries has also increased. There were greater divergences in the Eurozone. **One of the key conclusions of the report is that social convergence does not automatically occur with economic convergence, i.e., that the assumptions of the “founding fathers” of European integration have not been proven in practice.**

The emphasis on the issue of convergence is also shown by the speech of a former European Commissioner and Hungarian economist Laszlo Andor⁴¹, who believes that the dynamic period of growth of Central and Eastern European countries since the late 1990s is a compensation for the large loss of income in the early 1990s. He points out that the gap between East and West in terms of GDP per capita has narrowed very little since the mid-1990s. Within the framework of the separation of “the old” and “the new” member countries, Andor also draws attention to weak social dialogue, which negatively affects economic productivity and social cohesion.

From a theoretical point of view, the **question of wage convergence** (within neoclassical models) generally concerns the conditions necessary for comparing the prices of production factors. In

39 The Eurofund report also mentions legal, structural, and cyclical convergence (alignment of the cycle between countries). Different concepts of convergence lead to the preference of different measurement methodologies. The frequently used ‘beta convergence’ is used as part of catching up with leaders in a certain indicator, while ‘sigma convergence’ measures the reduction of performance deviations, ‘gamma convergence’ measures the ranking of countries with respect to a certain goal, and ‘delta convergence’ measures the distance of a given country from a certain model.

40 Eurofond, pg. 16.

41 Andor, L.: Cohesion and Convergence in Europe. European Commission, 2014. http://europa.eu/rapid/press-release_SPEECH-14-722_en.htm.

a dynamic sense, we can talk about the convergence of factor prices (not, of course, automatically upward convergence),⁴² whereas two main factors are fundamental, namely: free trade⁴³ and the mobility of production factors.

The Swedish economist Bertil Ohlin (see also the Heckscher–Ohlin theorem) stated that the free movement of goods in international trade can partially replace the free movement of factors (i.e., labour). This process should lead to a partial equalisation of the prices of production factors.

The reallocation of resources in both production and labour markets forms the basis for this process of “unbending”. Free trade is therefore one of the tools for changing the structure of the economy, which, however, may not be automatically desirable and may include large social costs. The Heckscher–Ohlin theorem builds on the theory of comparative advantages, i.e., it represents its generalization to all production factors. The mobility of the labour factor within the neoclassical theory assumes that the labour factor moves from sectors/areas with low wages to sectors/areas with higher wages, which should equalise income from labour, i.e., equalise the wage level.

There is a single market in the EU, which postulates the free movement of factors, including labour. **Despite strong links between free trade in goods and services, there are significant wage gaps in the EU.** The neoclassical explanation of the insufficient wage convergence within the EU focuses on barriers of another type: language, cultural differences, etc., which contribute to the fact that the mobility of the labour factor is insufficient within the EU.

The importance of the convergence of real wages is highlighted by Williamson,⁴⁴ who states that real wages are the appropriate measure for estimating long-term convergence. **Wage convergence will be more fundamental than convergence in output per worker.** Indeed, the convergence of labour productivity does not reveal the real sources of this convergence.

A study by Naz, Ahmad, and Naveed⁴⁵ has concluded that convergence is visible between regions within a single country, less so between border regions. **Average wages in European regions do not converge. Borders continue to matter – meaning labour markets are segregated despite mobility and free trade.**

Goecke and Hüther⁴⁶ have concluded that the processing industry and also the direction of EU subsidies play a role in regional convergence. Both increase the likelihood that the region will converge. Geographically, by applying these two factors, one realises that GDP per capita (the convergence indicator used) decreases from north to south and from west to east. De facto, this claims that the **EU has two peripheries – the eastern one, of which the Czech Republic is also a part, and the southern one.**⁴⁷ Naturally, the manufacturing industry and its size must be perceived from the perspective of its historical development, which brings us to the problem of “path dependency”, i.e., how the model of the Czech economy was set up and developed after 1989.

The same is confirmed by the research of Borsi and Metiu.⁴⁸ They come to the conclusion that,

42 Naz, A., Ahmad, N., Naveed, A.: Wage Convergence Across European Regions: Do international borders matter? *Journal of Economic Integration*, Vol. 32. No. 1, March 2017, pgs. 35–64.

43 Naz, A., Ahmad, N., Naveed, A.: Wage Convergence Across European Regions: Do international borders matter? *Journal of Economic Integration*, Vol. 32. No. 1, March 2017, pgs. 35–64.

44 Williamson, Jeffrey G., 1995, “The Evolution of Global Labour Markets since 1830: Background Evidence and Hypotheses”, *Explorations in Economic History*, 32(2), pgs. 141–196

45 Naz, A., Ahmad, N., Naveed, A.: Wage Convergence Across European Regions: Do international borders matter? *Journal of Economic Integration*, Vol. 32. No. 1, March 2017, pgs. 35–64.

46 Goecke, H., Hüther, M.: Regional Convergence in Europe. *Inter Economics*, 2016/3. pgs. 165–171. <https://archive.intereconomics.eu/year/2016/3/regional-convergence-in-europe/>.

47 However, a comparison of income values (e.g., wages or labour costs) shows that there are quite significant differences even between these peripheries. In some of our studies, we therefore labelled the new EU CEE member states “Central European Developing Countries” for differentiation, and we use this term in this study as well (see Chapter 6).

48 Borsi, M., T., Metiu, N.: The Evolution of Economic Convergence in European Union. Deutsche Bank, Discussion Paper, 28/2013.

as far as **real income is concerned, there is no overall convergence within the EU. They see rather “convergence clusters”, which, however, create a clear separate line between the old and the new EU members. Since the 1990s, the division of South – East and North – West has been evident. The Europe of “many speeds” has therefore existed for a long time. Convergence is given geographically, but with a separation between the new and the old countries. The countries of Central and Eastern Europe are generally on a lower trajectory.**⁴⁹

CEPS⁵⁰ reminds us that in the EU, convergence was viewed as a basic economic mechanism and as a condition for achieving socio-economic cohesion. Even CEPS confirms the importance of a geographical perspective. The convergence process is led by the countries of Central and Eastern Europe, while the southern countries prosper below average, so they diverge downwards, and their relative position deteriorates. **In the case of the countries of Central and Eastern Europe, the authors explicitly draw attention to significant regional differences within the countries. Typically, capital cities accelerate the convergence process, while the rest of the country lags behind.**

The World Bank study⁵¹ acknowledges the EU’s historical role as a “convergence machine”, but dwells on the “opening of scissors” between EU regions, especially with regard to the position of southern countries. **Productivity gaps are growing both between and within countries. While the World Bank praises the convergence of CEE EU countries in general, it points to the importance of technological changes and corresponding changes in knowledge that could threaten this convergence.**

The World Bank reports a decline in total factor productivity in all EU regions, but this decline in dynamics is particularly severe in the countries of the southern wing. The Czech Republic belongs to the “CEE Continental” category, which also recorded a significant decrease in total factor productivity.

As a number of studies show, geographic location is important for the convergence process. The World Bank⁵² further confirmed that spatial labour mobility in the EU is very low and “does not serve as a major adjustment channel for labour relocation”. Labour market integration is low and so is labour mobility. Only a small part of the population of the EU28 countries is mobile “across the borders of different countries”. Mobility within the EU cannot be compared with American or Australian mobility. The World Bank concludes that it is similar to that in Canada, between Quebec and other provinces, highlighting the importance of the language barrier. Nevertheless, the mobility of labour and the final figures conceal that the main part is concentrated in the countries of Central and Eastern Europe as sending countries. **They cover not only the differences between individual countries, but also between qualifications. For example, the departure of Czech doctors abroad puts pressure on domestic doctor demands for “equalisation” of salaries, which can serve as an “ice breaker” in the entire Czech economy for a further increase in wages in other professions.**

The situation of the **Czech Republic in terms of wage convergence** is specific due to its geographical proximity to Germany, the main driver of European economic integration. The Czech Republic thus does not belong to the countries of the geographical periphery, such as Greece, and at the same time is a country with a significant share of the manufacturing industry in GDP. Significant

49 Until 2010, the Czech Republic belonged to the 3rd convergence club in this breakdown, where Central and Eastern European countries with faster convergence were grouped together with countries that were diverging. It was a “mix” of Italy, Spain, Greece, the Czech Republic, Lithuania, Latvia, and Slovakia.

50 CEPS: Income Convergence in the EU: A Tale of Two Speeds. 2018. <https://www.ceps.eu/publications/income-convergence-eu-tale-two-speeds>.

51 Bodewig, C., Ridao-Cano, C.: Growing United. Upgrading Europe’s Convergence Machine. World Bank Report on the European Union. 2018.

52 Bodewig, C., Ridao-Cano, C.: Growing United. Upgrading Europe’s Convergence Machine. World Bank Report on the European Union. 2018.

wage differences persist, however, even though the Czech Republic is not one of the countries from which the labour force is leaving in large numbers, such as Hungary. **The wage curtain runs right along our western (and partly also southern) borders.**

However, the question of what such a position as a “westernmost country in the east” can bring for the economy of the Czech Republic prevails. Intensive ties to Germany can be perceived as our western neighbour’s support of a stable socio-economic situation in the Czech Republic, but in no case does it mean a support of upward wage convergence. Maintaining wage (or cost) differences so that the geographically close production in the Czech Republic continues to remain attractive may support the “middle-income trap” policy, which will inevitably come under pressure along with technological changes such as digitization and the development of automation.⁵³ **It is the change in mobility, which vehemently affects the future of the automotive industry, that can mercilessly prove that “capital has a home” and the Czech Republic can drop down within countries where old technologies “survive”.**

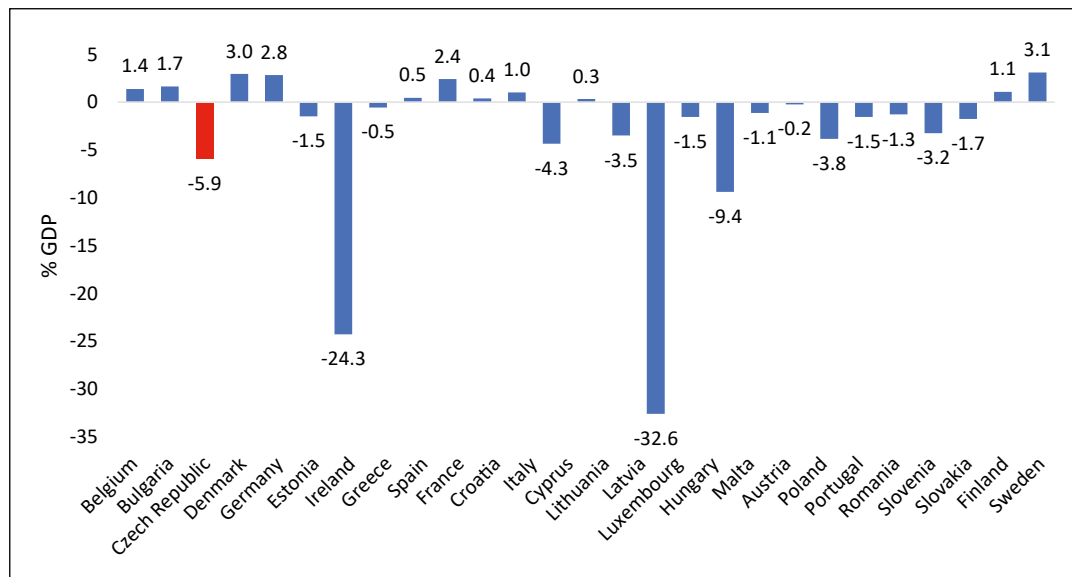
Based on the above and empirical experience in the Czech Republic:

First – Geographical location is important. The EU contains two peripheries – eastern and southern. While the southern periphery diverges downward, the eastern periphery under converges upward.

Economic convergence traditionally measured by real gross domestic product (GDP per capita) may not be a sufficient convergence indicator or may not be reflected in sufficient upward wage convergence. The Czech Republic is one of the countries in which the difference between the economic level measured by GDP and the wage level is one of the largest in Europe. GDP “overvaluation” plays a role in this, as massive and long-term outflows of profits from the economy create a significant difference between gross domestic product (GDP) and gross national income (GNI).

Graph No. 15

Difference between GNI and GDP as a percentage of GDP in 2020



Source: Eurostat, AMECO, own calculations (02/07/2021).

⁵³ Similar to what the World Bank points out, see above.

Czech Statistical Office 2018 data from 2 April 2019 state that the balance of primary incomes (creating the difference between GDP and GNI) was negative in the amount of CZK 270.8 billion.⁵⁴ Profits of foreign corporate owners reached CZK 414 billion (7.8% of GDP), CZK 294 billion were distributed in dividends and over CZK 120 billion were reinvested. According to the Czech Statistical Office, this reflects the high profitability of foreign direct investments in the Czech Republic (or all investments, see chapter 1 for more details). These resources are then missing in the economy – both for consumption and investment. At the same time, outflows of profits are linked to the cycle of maturing foreign direct investments. Last year, the ratio of GNI to GDP was below 95%.

An extreme case of differences between GDP and GNI is recorded in Ireland. It was Irish statisticians who opted for the use of GNI, which better reflects the true reality of a country that serves as an attractive tax haven for global corporations. The motive for creating a “more realistic indicator” was the fact that in 2015 the Irish economy showed a 26% growth in GDP due to the internal restructuring of global companies registered in Ireland. Ireland is a country where direct foreign investment creates huge distortions. In 2016, Ireland’s GDP reached 275 billion EUR, but only 190 billion EUR in adjusted GNI. Similarly, the balance of the current account needs to be perceived differently, not to mention the public debt. In the case of GDP per capita, Ireland would be richer than the US, but in the case of modified GNI, it would be poorer. Using an indicator that “washes off” the effect of globalization offers a somewhat more sober picture of the Irish economy and real living standards.⁵⁵

Second – Insufficient upward wage convergence is perceived as a pan-European problem, which has received attention after 2008 and after the trends of insufficient convergence were manifested at the political level. As the Eurofund report states, the legitimacy of the EU is threatened by this.

Third – The neoclassical approach postulating the equalisation of factor incomes under the assumption of mobility of trade in goods and services in the EU has not proven to be effective. Borders are significant, labour markets are separate. Wage differences cannot be explained by barriers of another type either, such as cultural and language differences.⁵⁶

Possible Development Scenarios

Recently, some older conceptual documents drafted by ČMKOS were confronted with several new forecasts, or better said, considerations about the convergence of the Czech Republic to developed countries in a longer time horizon. In this context, it is necessary to mention, above all, the New Fiscal Outlook of the Czech Republic, prepared by the Ministry of Finance, or the Report on Long-term Sustainability of Public Finances, presented by the National Budget Council. In response to the relatively significant economic growth in the last few years, very optimistic considerations have even begun to appear, claiming that the Czech economy is able to “catch up” with the German economy in 15 years.

From the perspective of the recent past, marked by convergence overstepping rather than long-term systematic convergence, such statements may appear somewhat exaggerated. However, they

54 Profits from foreign investments exceeded CZK 414 billion. Profits of foreign owners of corporations reached 7.8% of GDP. In the form of dividends, foreign owners distributed almost CZK 294 billion and over CZK 120 billion was reinvested. This development reflects the high profitability of foreign direct investments in the Czech Republic. On the other hand, the outflow of income from profits was partially offset by the inflow of income from abroad, especially interest and income from employment. The negative balance of primary income with foreign countries improved by CZK 40 billion year-on-year and reached CZK 270.8 billion.

55 Boland, V.: Ireland’s ‘De-globalised’ Data Calculate a Smaller Economy. Financial Times, 18/07/2017. <https://www.ft.com/content/dd3a6f1c-6aea-11e7-bfeb-33fe0c5b7eaa>.

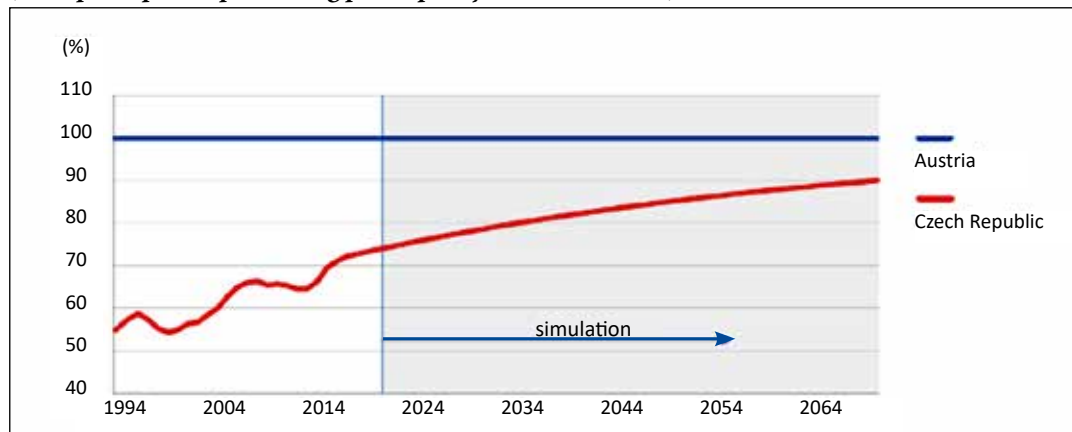
56 A separate topic is the relevance of the neoclassical Solow model, which, based on a number of assumptions regarding the development of savings, demographic development, etc., assumes that all countries are approaching a steady state. The results of the application of this theory are not convincing, therefore theories of endogenous growth are also developed with an emphasis on technology, institutions, and human capital. One of the key differences from Solow’s model is not falling but rising returns on capital.

require a more detailed assessment.

Any foresight model is always based on more convincing, sometimes less solid, starting points. It has to deal with a number of problems and bridge a number of conditions and questions of both substantive and methodological nature associated with an unknown future. The identification and wording of key questions and problems associated with the convergence of the Czech Republic was what interested us the most at the beginning of our modelling. The key to the solution is always the right question asked.

Graph No. 16

Convergence of performance of the Czech Republic to Austria according to the National Budget Council (GDP per capita in purchasing power parity, Austria = 100%)



Source: OECD and NRR calculations.

Basically, it is about finding answers to two fundamental questions: how to monitor and measure convergence? How to achieve convergence? In this chapter, we will deal with the first “technical” group of questions. The answers to the second question are discussed in detail in the next chapter.⁵⁷

The general question of how to monitor and measure convergence can be divided into the following four sub-questions:

No. 1 – With which entity should the Czech Republic be compared? This initial question is not as simple as it might seem at first glance. The correct choice of the compared subject can clarify the phenomenon under investigation, while an inappropriate one can obscure it. The selection of the compared country or the grouping of countries should be very closely related to the investigated problem, however, in the final stage it is always an arbitrary decision of the analyst depending on their goals and experience. Certainly, a bad decision in the selection can mean either an unexpected or a deliberately confusing result.

⁵⁷ Answers to questions regarding wage convergence were discussed in chapter No. 2 (“Can wages grow faster in the long term than labour productivity? Will there be a fundamental restructuring of added value in the Czech Republic during convergence? What will be the consequences?”) A link between convergence and adoption of euro will be dealt with in chapter No. 6. (How can the adoption of a common currency affect the convergence of the Czech Republic with developed European countries?), and finally, questions connected with the acceleration of convergence and the vision of economic policy change are discussed in chapter No. 7. (Should convergence be “the goal of goals” for the Czech Republic, or just a by-product – a statistical sum – of what somehow results from other policies? What chance does the Czech Republic, with its economy and property structure significantly profiled as a dependent state, have of catching up with the most developed countries of the European Union, or at least the most developed neighbours? Is there a space in the Czech Republic for an autonomous economic policy? What should this policy look like?)

There are a number of options here. We can either choose the entire European Union, or we can choose its individual member states. We can choose the most developed states or, conversely, the most lagging states. We can also choose states of a similar size, with a similar structure of the economy, with a similar history, development trends, etc. Each of these measures has its pros and cons. In our estimates, we chose Austria and Germany. The reason for this choice was that they are our immediate neighbours, relatively well known in the Czech Republic, and a part of our common history. Therefore, Czech citizens could imagine quite easily and quite precisely what it might look like in the Czech Republic when it reached the level of those countries. Of course, another view is also possible. It must even be admitted that our approach is rather exceptional. Quite often, in various comparisons, the entire EU or some part of it, e.g., EU15, Eurozone countries, etc., is used as the “benchmark”.

No. 2 – What is a convergence indicator? Naturally, this is in relation to the national economic level. The number of indicators is directly related to the interpretation of the results. The more indicators tracking different factors we use, the more difficult it is to find a common platform for their overall interpretation and, of course, the more difficult it is to draw the conclusions. Although we are aware of this problem, we have chosen to analyse five basic macroeconomic indicators. In our opinion, they quite accurately characterise the country’s economic and social development, and what is important for interpretation, they are interconnected: an indicator of economic performance (GDP/capita), two indicators of labour productivity (GDP per employee and GDP per hour worked), and two wage indicators (labour costs per employee and labour costs per hour worked).

No. 3 – Should convergence indicators be expressed in nominal or real units? In which ones? Isn’t it all the same? Is it appropriate to use purchasing power parity? For example, the above-mentioned National Budget Council convergence model is expressed in purchasing power parity, which looks very effective and clear. But as is very well known, the comparison of values in purchasing power parity in fact only has its relevance when spatial comparison is done at a given time and not when development is the compared subject. Given these issues, we have chosen the simplest valuation (also perhaps the truest) in euros and current prices for our consideration.

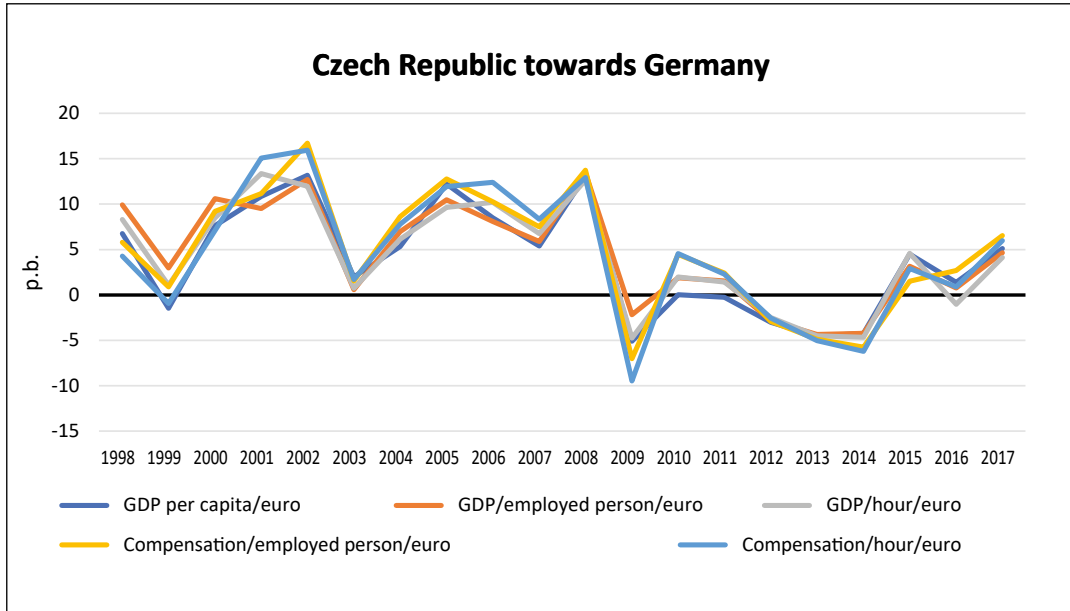
No. 4 – What foresight method should be used? Clearly, this is also a very problematic question, especially in our specific conditions. The trend extrapolation method is quite often used. This method is the most common and it was also used in the aforementioned document of the National Budget Council. We also use it in the presented material as, unfortunately, to our knowledge, there is currently no specialist workplace in the Czech Republic that would be able to create a more comprehensive view of our future based on a combination of various more sophisticated prognostic methods.

Based on the above-mentioned starting points, we constructed the following graphs and a table. The graphs characterise the convergence of the five monitored indicators to Germany and Austria in the years 1998–2017.⁵⁸ The values of the individual indicators express the difference between the development of the given indicator in the Czech Republic compared to its development in the monitored country. The resulting difference is expressed in percentage points. Thus, if the indicator is shown in positive values, then the Czech Republic has converged with the Federal Republic of Germany (or Austria), if in negative values, then it has diverged.

⁵⁸ This interval, which unfortunately does not include the entire transformation period, was chosen due to the absence of internationally comparable data.

Graph No. 17

Convergence of five indicators between the Czech Republic, Germany, and Austria in years 1998–2017 (euro, current prices)



Graph No. 18

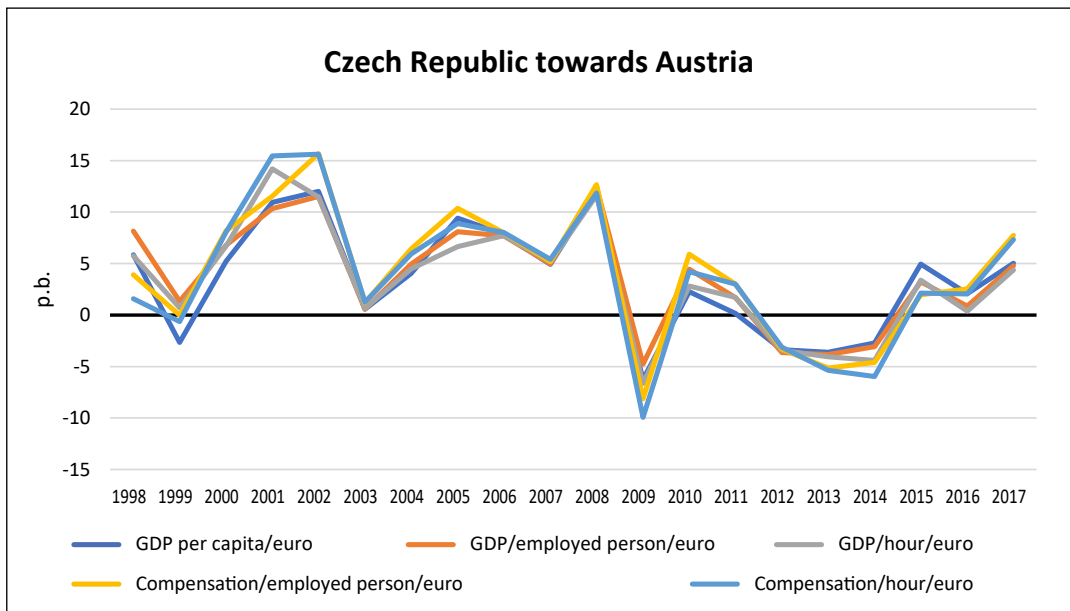


Table No. 5
Convergence of selected indicators of the Czech Republic to Germany and Austria depending on selected development trends of 1998–2017

	No. of years at average pace achieved during the given period			
	1998–2017	2004–2017	2009–2017	2014–2017
Czech Republic / Germany				
GDP per capita in euros	22	31	We Diverge	49
GDP employed EUR per person	17	25	We Diverge	71
GDP per hour in euros	25	37	We Diverge	148
Compensation of employees EUR per person	21	28	We Diverge	71
Reimbursements per hour in euros	29	39	We Diverge	152
Czech Republic / Austria				
GDP per capita in euros	26	34	We Diverge	37
GDP employed EUR per person	23	33	We Diverge	60
GDP per hour in euros	29	48	We Diverge	109
Compensation of employees EUR per person	25	35	We Diverge	55
Reimbursements per hour in euros	31	48	We Diverge	86

Source: own calculations.

The graphs are followed by a table with calculations, which, based on different variants of the development of the five indicators selected in different periods of 1998–2017, estimates in how many years, by extrapolating the trend achieved in that period of development, we would be able to match the level of Germany or Austria.

Each monitored indicator was assigned the average value of the trend achieved in the four monitored periods, namely: in the entire monitored period of 1998–2017, in the period of the Czech Republic's membership in the EU (2004–2017), in the period from the onset of the global economic crisis to 2017 (2009–2017), and in the period from the beginning of the resumption of economic growth in our country (2014–2017). (The year 2017 was chosen because during our own foresight work, we had a complex set of data available for this year. Indeed, these calculations can be performed continuously for each year for which there will be available data during such works. However, in this case, we mainly focused on the development of methodological starting points.)

Although the above graphs and data provide us with a number of not only expected, but also relatively unconventional views on the convergence of the Czech Republic with developed European countries, they cannot be taken quite literally. It must always be remembered that it is nothing more than a simple “projection of the past into the future”. So, it is only a certain mathematical exercise that can serve as a certain warning at most.⁵⁹ That is why we present only a few remarks here.

Firstly – the very publication of multiple variants of extrapolations of various convergence indicators, and thereto associated in some cases significantly different trends, shows how tricky the method we used is and how cautious one should be with unequivocal judgments.

⁵⁹ We will return to this table in the next chapter when it will be used as the basis for modelling the effects of a change in the nominal exchange rate of the CZK against euro on the speed of convergence.

The main thing is that the graphs and the calculation table show a non-negligible influence of *the choice of the convergence indicator* on the final result (vertical view). Very significant differences between individual convergence indicators are particularly noticeable when using the time interval for the entire observed period of 1998–2017.

However, that is not all. The fundamental differences of the individual variants clearly show *the fatal influence of the choice of the convergence trend* on the projection result (horizontal view). The interpretations of the results must be treated very carefully and conditionally (with an irresponsible approach, practically anything could be proven in this way). If, for example, we look at the growth in employee remuneration in 2017, it is obvious that if it were extended, 15 years would really be enough to equalise the wage level, for example, between the Czech Republic and Germany!

Secondly – in both groups of graphs, it is possible to follow the course of the previous twenty-year period – a similar development – until 2008, a relatively significant convergence, and, conversely, in 2009, a relatively protracted divergence (with a hint of re-convergence in the last period). From another point of view, even this simple example can demonstrate how the choice of interval can distort the view of the past. The point is that this view significantly conceals the consequences of the economic transformation in the early 1990s. If it were included, the economic convergence of the Czech Republic with developed European countries would not be as impressive as these graphs suggest.⁶⁰

Thirdly – it is obvious that the above calculation table actually only mirrors the trends used. It is therefore absolutely necessary to know very well what is hidden behind these trends in individual time periods during the analysis. So, let's at least look at them briefly.

At first glance, the most favourable variant of future development appears to be the extrapolation of development from the entire observed period of 1998–2017. This is due to the fact that this time interval contains two strong convergence periods during 1998–2009, marked by significant increases in the compared quantities (and, conversely, it does not include the significant period of the early 1990s). It is a period after the initial decline at the beginning of the economic transformation and a period associated with preparation and accession to the EU. This variant of future development is basically the least likely. It is strongly influenced by two unique factors that will not be repeated.

For the same reason, we have to set aside the second variant of development, obtained based on the extrapolation of the trend from 2004–2017. This option is also strongly influenced by the preparation for the entry and the entry of the Czech Republic into the EU.

The third option is divergent. Thus, basically, we are left with a fourth option based on the extrapolation of indicator trends from 2014–2018. It is a rather interesting option. It shows that despite relatively high (by Czech standards) growth rates of basic indicators, the Czech Republic is converging rather rigidly. For example, we have roughly a century's journey ahead of us to equalise wage levels with our closest advanced neighbours, i.e., Germany and Austria. Whereas, neither Germany nor Austria are among the countries with the highest level of labour costs in the EU. Within the European Union, Germany currently ranks seventh with its hourly labour costs, and Austria even ranks eighth.⁶¹ We should also note that this was a period of significant inflow of funds from the EU, when there was a significant increase in wages, which stimulated the GDP growth.⁶²

60 See [Vision 2015] Vize 2015, pg. 17 and further.

61 Ahead of them are Denmark, with hourly labour costs 26% higher than Germany, Luxembourg (+17%), Belgium (+15%), Sweden (+6%), the Netherlands (+4%), and France (+3.5%).

62 The following period, i.e., the end of 2019 and especially the year 2020, is again marked by a unique event, this time the Covid-19 crisis and the so-called anti-virus measures adopted, which, among other things, have a significant impact in the area of wage convergence – see chapter 9 for more details.



Exchange Rate and Euro Adoption Impacts

Employment and growth – these are the basic goals of economic policy, promoted in lagging countries in particular; countries catching up with the level of economically more advanced ones. All of the new EU member CEE (11) states are in the position of countries lagging behind. Their economic level, measured by gross domestic product per inhabitant in purchasing power parity, reaches on average only less than 60% of the level of the “old” member countries of the European Union EU (15). The presented figure is a simple arithmetic average of CEE countries (11).⁶³ If we also took into account the number of inhabitants, this ratio would be even lower, due to the significant weight of countries with lower economic performance (i.e., Poland, Romania, and Bulgaria). We can therefore collectively characterise these countries as less developed “catching-up economies”.

It is absolutely evident that the new member countries (even some old, less developed members of the so-called southern wing of the EU) do not form a homogeneous unit with the developed countries of the Eurozone. Therefore, the priority of the economic policy of the new countries is rapid economic growth, enabling the economic level (usually measured by the GDP per capita indicator in purchasing power parity) to approach that of the developed countries.⁶⁴ This approximation process is referred to as real convergence. In a broader context, this process is based on overcoming technological backwardness and requires flexible adaptation of the production structure.

The process of real convergence of the CEE countries has actually been going on for more than a quarter of a century. According to the results so far, it is evident that it will take several more decades, even with the expected advancement of economic growth in the converging countries. Unfortunately, this does not have to be the case and it is not the rule, even after the entry of these countries into the Eurozone.

“In reality, it is neither the most backward nor the most developed countries that are growing the fastest, but a small group of countries with a relatively low (but not the lowest) income. Convergence is taking place and poorer countries are growing faster than rich ones in accordance with the neoclassical theory only with prevailing constant factors (demographic, economic, political, and institutional). However, all these factors are undergoing diverse changes, influenced by wider political and social contexts. In economic practice, to clarify the speed of real convergence, it is necessary to take into account the whole complex of factors, including the institutional arrangement and incentives leading to productive cooperation”⁶⁵

63 In this context, we are talking about all 11 countries from the 6th, 7th, and 8th waves of European Union enlargement, namely the Czech Republic, Slovakia, Hungary, Poland, Slovenia, Estonia, Lithuania, and Latvia, as well as Romania and Bulgaria, alongside Croatia. Five of these countries, i.e., Slovakia, Slovenia, and the Baltic countries, are already members of the Eurozone.

64 With this ratio indicator, the priority of change is of course primarily in the area of the numerator, i.e., economic performance and not the denominator, i.e., the decrease in the number of inhabitants. This phenomenon mainly concerns the Baltic countries. As a result, the population has decreased by a total of 23% (1.8 million people) from 1990 to the present time. Lithuania had 3.7 million inhabitants in 1989 and 2.8 million in 2017, i.e., the population has decreased by more than a quarter in 28 years. The neighbouring Latvia reports similar figures, with the population decreased from 2.5 million in 1990 to 1.9 million in 2018, while the population of Estonia decreased by at least 17% (over 260 thousand people).

65 Vintrová, R.: [Real Convergence – Prerequisite for Smooth EU Integration.] Reálná konvergence – předpoklad plynulé integrace do Evropské unie. Politická ekonomie, 2003, No. 1, pgs. 79–91, pg. 83.

The Czech economy is also undergoing real convergence despite a whole series of difficulties and temporary fluctuations, and even temporary divergence. The fact that the restructuring of the Czech economy related to its entry into the common market of the European Union significantly stimulated the process of convergence cannot be overlooked. However, this process stopped during the economic crisis after a sharp reduction in investments in the Czech Republic by multinational companies, and the Czech economy began to move away (diverge) from developed countries. The restoration of real convergence was difficult, and the Czech economy did not start to converge in real terms until 2014. It practically collided with the start of the office of the government coalition of ČSSD-ANO-KDU/ČSL and the subsequent increase in wages, after the introduction of higher minimum wages and higher wages in the public sector.

The consequence of this development was that the gap in wage levels on the level of total household income, which is a synthetic indicator of the population's overall standard of living, was not closing, but in some years, it was even widening.⁶⁶

However, the adoption of a common currency represents a qualitatively higher degree of economic interconnection of EU countries. Countries that are members of the Eurozone must give up their own currency, lose exchange rate independence and the possibility to implement their own monetary policy as they are subject to the common monetary policy of the European Central Bank. They must also adhere to the so-called Stability and Growth Pact, which limits the possibilities of their fiscal policy.⁶⁷

Countries preparing to join the Eurozone must meet strict conditions before joining; the so-called **nominal convergence** i.e., they must, above all, meet the Maastricht convergence criteria in a long-term sustainable manner.⁶⁸ Furthermore, they must be able to fulfil other institutional and financial conditions associated with the adoption of the euro.⁶⁹

The basic parameters of nominal convergence were outlined at the time of the creation of the monetary union based on the conditions of advanced, stabilised economies that formed its basic membership and had already completed the process of convergence. For most of them, convergence was not the main issue, i.e., convergence of economic performance.

Therefore, these rules mainly reflect the conditions of these developed countries and are still evolving and being tightened under the influence of the economic crisis of 2008-2009. **Compliance with these rules does not, however, answer the question of at what point the adoption of the euro is advantageous for individual specific economies. The condition for achieving a certain degree of real convergence is not formally established anywhere in the rules of entry into the Eurozone. Undoubtedly, it is an important factor in relation to all considerations. However, this assessment is left to the governments of acceding countries.**

66 For a more detailed analysis of the convergence process see: Fassmann M., Ungerman J.: [Vision of Economic Policy Change in the Czech Republic] Vize změny hospodářské politiky ČR, ČMKOS, 2015.

67 The Stability and Growth Pact (SGP) is an agreement between Eurozone members regarding the coordination of their budgetary policies so that possible high state budget deficits or high public debts do not threaten the stability of the euro and do not increase inflation in the Eurozone. The pact is directly related to the fulfilment of the Maastricht criterion on the sustainability of public finances. Even within this key tool for ensuring the stability of the euro, during the economic crisis and its effects, the conditions for observing budgetary discipline were significantly tightened, with an emphasis on preventive measures. For more details, refer to: Dědek, O.: [The Era of the Euro, the Common Currency Successes and Failures] Doba eura, úspěchy a nezdary společné měny, 1st Edition, Linde, Praha 2014, 336 pgs. Monography. ISBN 978-80-7201-933-5, str. 284–288.

68 These are four (4) Maastricht criteria – price stability criterion, long-term interest rate stability criterion, public finance sustainability criterion (public deficit criterion + public debt criterion), and exchange rate convergence criterion.

69 Currently, entry into the Eurozone is conditioned by the mandatory participation in the European Stabilization Mechanism (the Euroval) and in the banking union. The participation of new states in these institutions entails additional expenses and obligations in the order of hundreds of billions of CZK (e.g., Fassmann M., Ungerman J., [Benefits and Costs of the Czech Republic's Eurozone Accession] Přínosy a náklady přistoupení ČR k eurozóně, pg. 45–49).

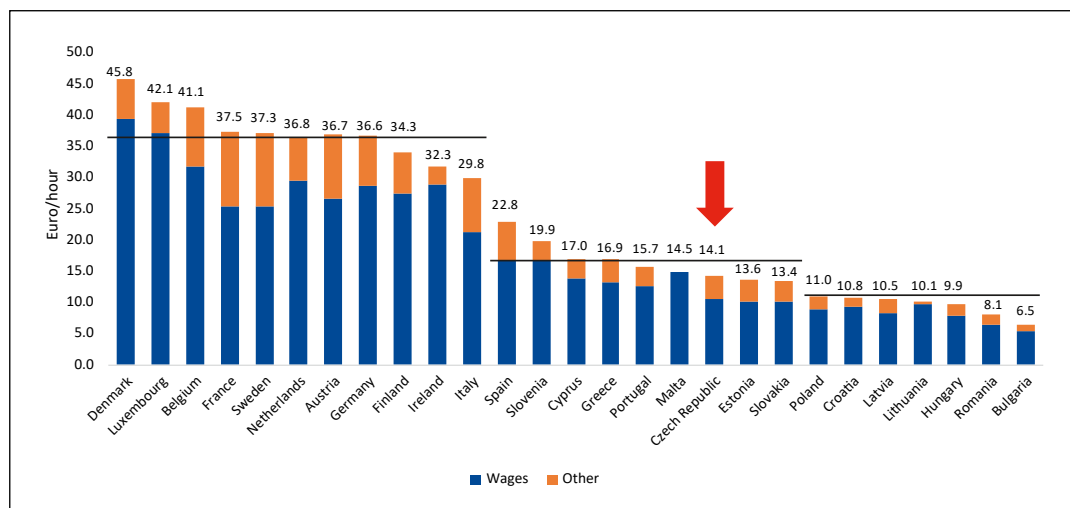
Analyses by government and EU institutions usually focus on the ability of individual countries to meet the Maastricht convergence criteria. The real “economic maturity” in relation to economic growth and the pursuit for bringing the economic level and thus the overall living standard of the population closer to that of developed countries is not considered more thoroughly. Somehow it is “automatically” assumed that the obvious advantages of a common currency, which can be attributed mainly to the elimination of exchange rate risks, outweigh the disadvantages, which comprise the loss of an independent monetary policy and an adjustment exchange rate mechanism.

However, the binding of countries of unequal economic levels within the monetary union may cause certain risks. It is a sad fact that this long-term problem is only recently being seriously discussed at the level of the European Union, after the economic crisis and the shock of Brexit. At the same time, the problem of indebtedness of the “southern” countries of the Eurozone is surprisingly not attributed to the fact that by joining the Eurozone these countries lost the possibility to flexibly use their economic policy to react to changing conditions for their economies.

The prerequisite for a trouble-free process of integration is therefore economic equalisation, i.e., the achievement of the highest possible degree of real convergence of the economic level and thus the income level and the overall standard of living of the population with the integration core of the most developed countries of the European Union. So, at what level are the countries of Central and Eastern Europe, and therefore the Czech economy, currently?

Perhaps the most eloquent, and closest to general perception, characteristic of the real position of the Czech Republic within the EU and the success of its convergence efforts to date can be provided by the following graph of an international comparison of labour costs per hour worked.

Graph No. 19
International comparison of labour costs of EU countries in 2020



Source: Labour costs in the EU, Eurostat/news release 62/2019 – 11 April 2019.

Note: average of group I – 34.1 euros, group II – 15.9 euros, group III – 9.7 euros.

At first glance, this graph shows the **vivid inhomogeneity of the European Union** – the distance between the poorest and the richest EU countries. For example, the ratio between “the richest” and “the poorest” countries of the European Union, i.e., Denmark and Bulgaria, is 7 : 1. The value of labour costs per hour worked – primarily in terms of the level of wages and ultimately the real potential of the standard of living – in half of the EU member states does not even reach half of the labour costs paid

in the most developed countries. Currently, it concerns about 120 million people, i.e., about a quarter of the EU population. In member countries with the level of labour costs per hour worked equal to or lower than a third of the labour costs achieved in the most developed countries, 90 million EU citizens are thus affected.

According to the amount of labour costs achieved, we can divide the EU member countries into three distinct groups, namely 'the most developed EU countries' with an average labour cost of 37

Table No. 6
Convergence of selected indicators of the Czech Republic with Germany and Austria depending on selected development trends of 1998–2017 and three variants of strengthening the CZK exchange rate

	the number of years at the average pace achieved during the given period																			
	1998–2017					2004–2017					2009–2017					2014–2017				
	Real.	10% apprec	20% apprec	30% apprec	Real.	10% apprec	20% apprec	30% apprec	Real.	10% apprec	20% apprec	30% apprec	Real.	10% apprec	20% apprec	30% apprec				
Czech Republic / Germany																				
GDP per capita in euros	22	19	17	14	31	27	24	20	Diverg	Diverg	Diverg	Diverg	49	43	37	32				
GDP employed EUR per person	17	15	13	11	25	22	19	16	Diverg	Diverg	Diverg	Diverg	71	62	53	45				
GDP per hour in euros	25	23	21	19	37	34	31	28	Diverg	Diverg	Diverg	Diverg	148	133	121	109				
Compensation of employees EUR per person	21	19	17	15	28	25	23	20	Diverg	Diverg	Diverg	Diverg	82	73	66	59				
Reimbursements per hour in euros	29	27	24	23	39	36	33	31	Diverg	Diverg	Diverg	Diverg	151	139	128	118				
Czech Republic / Austria																				
GDP per capita in euros	26	23	20	18	34	30	27	24	Diverg	Diverg	Diverg	Diverg	37	33	29	26				
GDP employed EUR per person	23	21	18	16	33	30	26	23	Diverg	Diverg	Diverg	Diverg	60	54	47	42				
GDP per hour in euros	29	26	23	21	48	43	39	35	Diverg	Diverg	Diverg	Diverg	109	98	88	79				
Compensation of employees EUR per person	25	23	21	19	35	32	28	26	Diverg	Diverg	Diverg	Diverg	55	49	45	40				
Reimbursements per hour in euros	31	28	26	23	48	44	40	37	Diverg	Diverg	Diverg	Diverg	85	78	71	65				

Source: own calculations.

euros per hour of work, European peripheral countries with an average group cost of 16 euros / h, and European developing countries with an average cost below 10 euros per hour.

The Czech Republic is among the weaker members of the second group, where it reaches the third lowest level of labour costs, ahead of Estonia and Slovakia, but behind Spain, Slovenia, Cyprus, Greece, Portugal, and Malta.

In other words, the Czech Republic has returned to the position it occupied completely sovereignly until the so-called exchange rate commitment (that is, the devaluation of the Czech crown) was implemented. It is still more than 60% away from the border country of this group, i.e., Spain, in terms of hourly labour costs. **However, this is not the only problem.** Equally serious is the fact that these essentially extreme differences are being erased only very slowly. **One of the key problems of European integration, which is the source of many distortions both within the EU and the Eurozone, can be characterised very well by the example of the Czech Republic.**

For this purpose, we used the already familiar calculation table from the previous chapter. We gradually projected a 10-30% strengthening of the Czech crown exchange rate into trends based on developments in individual time intervals. The results of this comparison are so succinct that perhaps they do not need further extensive comments.

It turns out that even the strengthening of the exchange rate by 10-30%, when extrapolating the trend of 2014-2017, actually does not offer a time-comprehensible perspective of equalising the costs of working with our advanced neighbours during one human lifetime.⁷⁰

Equalising wage levels with the nearest advanced neighbours, which even at current rates would take at least 80 years, would probably not even be experienced by today's new-borns. In other words, this perspective is so distant that its realization is highly improbable.

Convergence of the Czech Republic with the most developed EU countries has no meaningful starting point in the area of labour costs, given the current direction and structure of the Czech economy. Strengthening the exchange rate of the Czech crown can of course help wage convergence, but not fundamentally, from the point of view of such long periods of time.

In our opinion, the above model calculations clearly indicate that the Czech economy is, without a doubt, in a middle-income trap.

Based on this simple example of ours, it is clear that, in addition to the debate on the fundamental change of the Czech Republic's economic policy (which we will deal with in the seventh chapter), one of the important questions for the new EU member states is the **mutual relationship between Eurozone membership and real convergence.**

One of the key questions of the state economic policy is whether the fulfilment of the Maastricht criteria and other conditions for our participation in the Eurozone will support a real convergence of economic performance based on growth in the competitiveness of companies, labour productivity, monetary income (including wages and salaries), including public and private consumption, and, ultimately, whether it will support the convergence of the living standards of the population of the old and the new members, or whether these adaptation processes will slow it down.

Previously drafted studies dealing with the adoption of the euro in the Czech Republic always assumed that entry into the Eurozone would accelerate growth. This belief was derived from the assumption of a reduction in exchange rate volatility upon adoption of the euro and its effect on the increase in foreign trade. It must be added, however, that all these estimates come entirely from the previous decade and mainly from the period before the outbreak of the global financial crisis.

Economic performance is dependent on a wide variety of factors, among which membership of the Eurozone hardly plays a predominant role. In general, it can thus be concluded that Eurozone

⁷⁰ Unfortunately, this thesis is also valid in case of a possible – but in fact only theoretical – strengthening of the Czech crown against the euro by 30%. However, such a strong strengthening is very unlikely because the nominal exchange rate would fall below the parity level, which is practically impossible for countries of our type.

membership may not have a large positive effect on economic performance, and that the effect appeared to be more negative after the 2008–9 crisis, when the Eurozone as a whole performed worse than the EU average and the EU as a whole performed poorly compared to the main competitors. During this period, Eurozone rules led to a reduction in public spending and left investments below the pre-crisis levels. European trade unions and other stakeholders therefore argue for changing the criteria to allow investment in productive activities (including research, education, and infrastructure), which would also appear to be necessary to support the convergence of Eastern and Central European countries.

The effects of Eurozone membership can be examined by comparing countries that are still “outside” with those that have already joined the Eurozone. However, it is necessary to work with these examples very carefully. Their use is conditioned by a good knowledge of all the conditions (and above all, the differences) of the monitored countries when they entered the Eurozone. At the same time, it is not only a matter of good knowledge of the country in question, but also of the overall economic and above all political context on the side of the Eurozone. This also applies to the countries of Central and Eastern Europe. The conditions and, above all, the motives leading a number of CEE countries to adopt or make a real effort to adopt the euro are not, and have never been, the same in these countries. Countries differ not only in terms of the economic level achieved, but also, for example, in the degree of price convergence, monetary and exchange rate policies, and last but not least (and sometimes first) political motives.

In this context, in our opinion, we must also read a very interesting study by Slovak analysts Branislav Žúdel and Libor Melioris, dealing with the contribution of Slovakia’s entry into the Eurozone to economic growth.⁷¹

They used the ‘synthetic control method’ in their evaluation of the effect of Slovakia’s entry into the Eurozone on economic growth, comparing the actual development of GDP in Slovakia with the development of a control sample of CEE countries. The sample was compiled from countries that have not yet adopted the euro and their development was similar to that of Slovakia before the adoption of the euro. The development of this control sample in the model simulated the development of “Slovakia without the euro”.⁷²

The result of their modelling showed that, between 2006 and 2011, GDP per capita increased by 10% due to the adoption of the euro, while 2/3 of this increase was already realised by 2008 (i.e., before joining the Eurozone), which corresponds to the average annual pace for a five-year-period in the amount of 1.58%.

We can repeat that membership of the Eurozone is only one of many factors influencing the performance of the economy. The growth rate of Slovakia’s GDP (also GDP per capita) since joining the Eurozone is slightly higher than the growth rate of the Czech Republic. However, Eurostat data also shows that Slovakia grew faster before and after joining the Eurozone. The rate was 15% higher in the period 2000–2009, but only 8% higher in 2009–2018. It is also significant that Slovakia’s faster growth was associated with a larger budget deficit, a larger increase in public debt, and a larger current account deficit. The paradox is that Slovakia chose a different approach to economic policy and, as a member of the Eurozone, violated the rules regarding the budget deficit, while the Czech Republic, not a member of the Eurozone, pursued a policy of (unnecessarily) stricter fiscal discipline, dampening growth potential.

In addition, it must be added that Žúdel’s and Malioris’ estimate has its pitfalls. Above all, it includes only a very short comparative period, and the actual effect of economic growth is concentrated

71 We discuss this study here in more detail mainly because parts of these models are often used to prove the significant influence of Slovakia’s entry into the Eurozone on the significant acceleration of its economic growth.

72 In practice, this “artificial Slovakia” was created as a weighted average of growth in the Czech Republic and Romania, with the weight of the Czech Republic being 66% and of Romania 33%. Žúdel B., Melioris L. Five Years in a Balloon: Estimating the Effects of Euro Adoption in Slovakia Using Synthetic Control Method, OECD, Economic Department Working Papers No.1317, 7, Jul 2016, ECO/WKP (2016) 41 (20 pgs.).

in the period before the adoption of the euro (mainly before the start of the economic crisis). The authors themselves draw attention to the obvious fact that the growth effect of Slovakia's entry into the Eurozone is virtually unparalleled in other countries that have joined the euro. In addition, they show that if Slovakia had delayed its entry into the Eurozone by one year and therefore kept its own floating currency during the crisis, economic growth could have been 2% faster.⁷³

For the sake of completeness of the discussion on the topic of economic growth, it is necessary to mention the conclusions of an interesting analysis by Miroslav Singer, the governor of the CNB at that time. Based on a comparison of annual GDP growth rates in the Eurozone and in EU countries outside the Eurozone between 1999 and 2014, he demonstrated that before the economic crisis and after the economic crisis, EU countries outside the Eurozone grew faster than the Eurozone itself. The only period when both groups of countries developed at a similar pace was the period of 2008–2010, i.e., the period of the economic crisis. Average annual GDP growth over the period 1999–2014 was 1.3% in the EMU, and 2.2% in the non-EMU, countries.⁷⁴

It must be admitted that this is still a very short period that separates the CEE countries that joined the Eurozone. In view of the economic crisis, which for a long time fluctuated the economic parameters of individual countries, it is very difficult to confirm the relevance of older assumptions about the acceleration of growth after the entry of the CEE countries into the Eurozone.

Without relatively complex modelling, which would eliminate the influence of other specific factors (including the economic crisis), it is essentially impossible to seriously assess the effect of the adoption of the euro on economic growth after the accession of new member states. Unfortunately, it seems that even the significantly atypical example of Slovakia – and apparently only a short-term factor of accelerating the rate of growth – does not give a clear answer to the question of whether and to what extent the actual act of the Czech Republic's entry into the Eurozone would accelerate the country's economic growth.

Older studies from the last decade predicted a number of effects associated with a possible acceleration of economic growth, mainly the effects resulting from the reduction of transaction costs, interest rates or exchange rate volatility. For the Czech Republic, given its situation, the third factor that came into consideration in theory was the expected significant increase in the share of Eurozone countries in our exports and imports, as well as a significant impact on the acceleration of economic growth in the Czech Republic after the adoption of the euro. However, since the entry of the Czech Republic into the EU to the present, there has been such a significant increase in the share of EU countries (and later the Eurozone) in the Czech Republic's foreign trade that further significant growth is not very likely. It is becoming more and more obvious that we will not be able to find the answers using various estimates that are ten to fifteen years old. It is necessary to include in these considerations, which, although tragically outdated, have the inherent tendency to be repeated over and over again, the factor of time. Then, the reality will show itself in a somewhat different light.

73 In our opinion, this significant and virtually unique growth leap of the Slovak Republic can be explained to a large extent by the fact that Slovakia's growth opportunities were limited by the political environment for a long time after the division of Czechoslovakia. Slovakia had a bad image, which was reflected in all directions in terms of slower economic growth, higher inflation rate, high interest rates, and an extremely undervalued exchange rate of the SK against the euro. Only through fundamental changes on the political scene, economic reforms, and signing up to the euro did Slovakia, especially for foreign investors, get a sufficient stamp of credibility. Slovakia's long-term restrained growth, however, had one more important aspect in addition to its own growth – a very low-price level in relation to developed EU countries (or a very high difference between the nominal exchange rate of the Slovak crown and purchasing power parity). This fact significantly influenced Slovakia's transition to the euro.

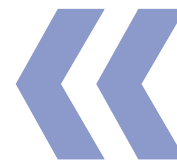
74 Singer, M., *The Czech Republic and Euro Through the Eyes of CNB*. Speech by the CNB Governor: Adoption of Common European Currency in the Czech Republic – Benefits and Risks. National Convent, Prague 29 January 2016 (Panel II – Macroeconomic Perspective on Common European Currency Adoption), available at: www.narodnikonvent.eu/1487/konference-7.

Virtually every minute, through mutual trade, the operations of multinational corporations and banks, the abundance of harmonisation regulations, directives, and recommendations of the single internal market, the economies of old and new member countries are intermingled, connected, and harmonised. In EU member countries – non-Eurozone members – there are “spontaneous” processes happening that were attributed “to the effect” of the euro in older studies. In another words, 10-15 years ago expected significant effects of the adoption of the euro, due to the simple effect of time and the natural growing interconnection of the Czech economy with the economies of the EU – primarily Germany –, were actually enjoyed by the Czech economy even without the adoption of the euro.

Moreover, as it is becoming increasingly clear, it is difficult to expect that the microeconomic benefits can outweigh the significant macroeconomic losses caused by the restrictive nature of the Eurozone architecture. In fact, in a situation of asymmetric shock, the latter offers the member country no other way out than to correct the external imbalance by slowing down or decreasing GDP and, in fact, also wages – i.e., economic divergence.

The question of accelerating economic growth after the adoption of the euro in the Czech Republic will therefore not be discussed further in our following analysis – due to its speculative nature. On the contrary, from the point of view of the necessary convergence of the Czech Republic, it appears that the participation of the Czech Republic in the Eurozone would rather hinder this process. Not one of the CEE states that joined the Eurozone has yet achieved long-term the economic growth rate it recorded before the adoption of the euro. (Their GDP growth rates today remain at roughly a third to a half of their original rates.)⁷⁵

⁷⁵ We remind you that the problem of the Czech Republic’s accession to the Eurozone is analysed in great detail in the study by Fassmann, M., Ungerma J., [Benefits and Costs of the Czech Republic’s Accession to Eurozone]



Ways of Transforming CZ into the Country for the Future

CZ Economic Policy Change – Vision Basis

The Czech Republic has exhausted the potential of its current growth model, which is based on low wages, an undervalued exchange rate, the limited role of the state, and a high degree of dependence on foreign multinational companies. This is evidenced both by the everyday reality of the Czech Republic and by a number of international studies.

The European Bank for Reconstruction and Development has concluded that, **the former socialist countries are stuck in a “middle-income trap”**, arguing that the restoration of upward convergence will depend on the establishment of a new growth model based on local innovations and technological progress.⁷⁶

According to the opinions of influential international agencies and governments of the more successful countries in the world, the key role of innovation and technological progress in achieving a high economic level cannot be questioned. It is a recognised fact that the Czech Republic and the CEE states in general lag behind their Western European neighbours in these fields.

Moreover, Czechia achieves a high economic level predominantly in areas where the result is due mostly to activities of foreign companies. However, this does not de facto form an economy that could become a source of innovation.

Multinational companies use innovations developed elsewhere to fuel their activities in the Czech Republic and CEE countries, and at the same time drain significant profits from the country. Achieving full convergence of the economic levels of different countries would require innovations to be developed and their effects retained within the country, predominantly by locally owned businesses. All in all, it is not just about investing more in research, even though it is also important. It is necessary to replace the model of dependent development based on low relative wages with a model of development based on the internal innovative capabilities of national economies.

In reality, it is not just about defining the new Czech Republic's economic policy, but mainly about convincing individual business entities of its suitability, naturally, with the use of appropriate tools. Unfortunately, this is not such a trivial question as it might at first seem. As discussed above (see Chapter 3), there are very strong tendencies in the Czech business sphere to follow up on the “economic transformation success”; just for a little while longer, to “keep afloat” by banking on cheap labour costs or the cheap exchange rate of the Czech crown (preferably both!), despite the fact that the negative consequences

⁷⁶ EBRD (European Bank for Reconstruction and Development) (2018), EBRD Transition Report 2017–18: Sustaining Growth, London, EBRD, pg. 7.

of this policy are already evident everywhere – not just in terms of the low wages of Czech employees.

Therefore, before we focus on our own outline of the Vision of Economic Policy Change from the Point of View of the Czech Trade Unions – ČMKOS, we must dwell on three key factors that will without a doubt significantly influence the effort to change economic policy in the Czech Republic. The first, long-term factor is the question of the level of education in the Czech Republic, the second is the current character of the Czech economy as a subordinate economy, and the third factor is the control of key positions in the Czech economy by multinational companies.

Czech Republic Education Level

It is quite an issue for small Central European economies to find a specific production profile and such a focus of activities in which they could apply their strengths in new conditions. The Czech economy currently comprises an already permanently declining workforce potential with a long-term industrial tradition and a relatively high level of qualification and education.

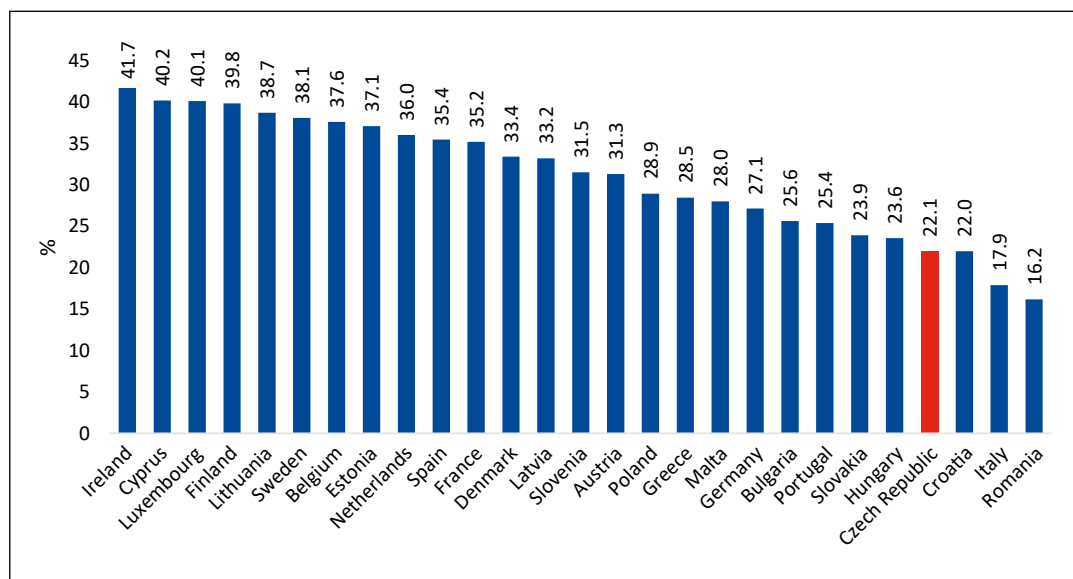
Data on the educational structure of the population, in which the trend of broad education at the secondary school level prevails, with an (internationally) extremely low share of the population with the lowest-level education, can be a certain guide for assessing the existing prerequisites. The share and dynamics of employment in skill-intensive professions are also strongly above average.

However, in tertiary education, the Czech Republic still lags significantly behind the most developed countries, as can be seen from graph No. 20. Although the situation in younger age groups has been improving rapidly in this regard in recent years, the low proportion of technical graduates remains, which will undermine innovation capabilities of the economy.

It is therefore necessary to emphasise that most of the emerging tertiary education capacities are focused on the humanities and will therefore not lead to immediate overcoming of the shortage of technical professions.

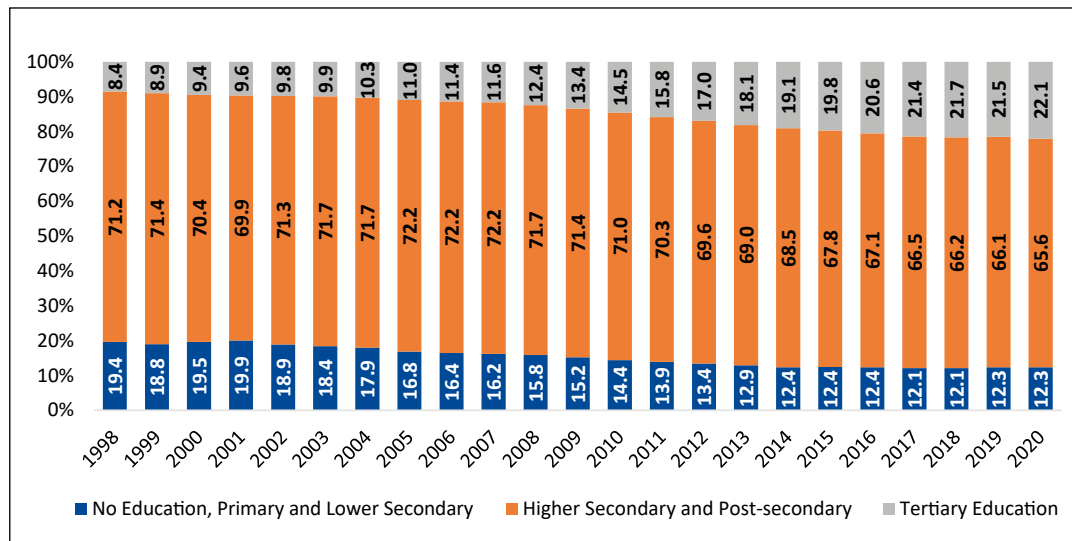
Graph No. 20

Share of people with tertiary education in the population aged 15–64 in 2020



Graph No. 21

Population of the Czech Republic aged 15–64 by level of education



Source: Eurostat (02/07/2021).

Approximately 12% of the population aged 15-64 in the Czech Republic **have no education or only primary or lower secondary education**, while the average for EU 28 or Euro 19 is almost 26% (e.g., even in such a developed country as Germany, the share of people with this level of education is about 20%). The value of this indicator (in 2020, 12.3%) is the second lowest in the Czech Republic of all EU countries after Lithuania (with 12.0%).

Conversely, the share of the population in the same age group with higher secondary or post-secondary education in the Czech Republic was the highest in the EU, namely 66%, while the EU average was 20 percentage points lower.

In contrast, the share of the population with **completed tertiary education** in the Czech Republic is only 22.1%, ranking it the fourth from the bottom of the list. At the same time, it is necessary to take into account the non-negligible increase in this indicator in the last 10 years, when its value increased by about 1/3 (see Graph No. 21).

The favourable conditions of the qualification structure of the population are not sufficiently utilised when focusing on simple or only moderately technically demanding mass production of intermediate products. Facing the competition of new industrialising young economies with their insurmountable advantage of significantly lower unit labour costs is possible only by focusing on such original products and services that are still unavailable or distant to them. It is also about flexible adaptation to the individual needs of demanding customers. It is a transition to a quality-based competitive advantage.

The examples of Finland and Denmark, which have established themselves on the world market with innovative products and services of knowledge-intensive industries, show the possibility and feasibility of such a focus. At the same time, both countries are at the forefront of the lists of population share with the highest educational level.

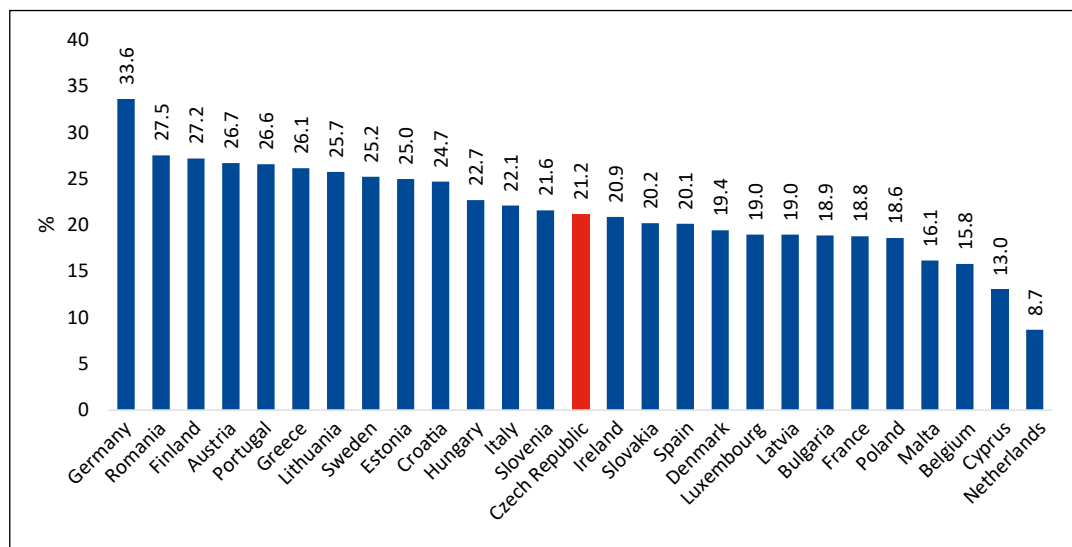
Within the EU 28, Finland and Denmark are among the countries with an above-average share of the population with tertiary education in working age. In 2017, Finland had this share of about 40%, Denmark over 33%.

Germany also has a higher proportion of people with tertiary education than the Czech Republic, by more than 4 p.p. However, it is interesting that Germany has the highest proportion of graduates with technical education out of the total number of tertiary education graduates, while the Czech Republic's rate is around the average.

The importance of tertiary education, especially in technical fields, can be seen from the example of Finland, Denmark, and also Germany.

Graph No. 22

Share of graduates of tertiary education in technical fields within the total number of graduates in 2020



Source: Eurostat (02/07/2021).

Technical education includes (according to ISCEDF13): biological sciences, chemistry, physics, mathematics, statistics, information and communication technology, engineering, manufacturing, and construction.

However, overcoming this situation and finding ways to more quickly closing the gap in the economic level compared to developed countries requires one more essential element. As the experience of European countries shows, it is about achieving cooperation of the main political forces and ensuring agreement in a nationwide effort to change existing conditions, taking advantage of new emerging opportunities. This was the case in some small economies that, in a difficult situation, were able to take advantage of the opportunity and their hidden strengths and succeed in the “Irish miracle” or the “Finnish modernisation” (whether it is possible to achieve such a national agreement in the Czech Republic is, however, “in the stars”).

Czech Model of Dependence and Its Brief Genesis

The transformation of the Czechoslovak, or the Czech, economy needs to be seen in the context of the development of the world economy at the time and dominant economic approaches. First of all, it must be stated that Czechoslovakia was integrated into the capitalist world economy during the phase of globalisation (in contrast to China, which managed to “catch” the beginning of this process). It was thus reintegrating into a world that was already divided in terms of the division of labour and in which multinational corporations played a key role. Ideologically speaking, this period was the peak for

‘neoliberalism’, which for transition economies was transformed into the principles of the ‘Washington Consensus (WC)’.

Although the WC was applied in transition economies with varying intensity, it influenced the overall economic debate and set the direction of economic policies. The WC based the integration of the transition economies on the basis of cheapness and the belief in a “benevolent and self-stabilising” market mechanism. The power relations (which are of course always present in the economy) were completely ignored, which in the era of globalisation equalled the importance of multinational companies, or parent companies that decided on the layout of the production process. Decision-making left to the “market” necessarily meant, in the absence of a clear industrial and development policy, the creation of a vacuum that was filled by a strong actor, which also happened in the case of the Czech Republic. At the end of the 1990s at the latest, it became clear that the “leadership” of the Czech economy was being taken over by foreign actors who were not interested in upgrading the natural comparative advantages of the Czech Republic (geographical proximity to Germany⁷⁷ plus experience with industrial production) together with the focus that “was acquired” at the beginning of 1990s and which was evidenced in an undervalued currency and low wages.

The initial setting of the economic transformation (i.e., the exchange rate cushions given by the deep devaluation of the Czech crown, the weakening of trade unions and wage negotiation mechanisms – officially presented as a policy that was supposed to prevent an inflationary wage spiral) has long-term effects. The Czech Republic carries this trajectory to this day, and the current development shows how difficult it is to “switch” to a higher economic model. The model of cheapness and geographical proximity to Germany led to a strong influence of multinational companies on the economy of the Czech Republic, which de facto defined the economic structure of the country not only in terms of ownership, but above all in terms of added value in the economy. The Czech Republic profiled itself as a “dependent economy”, i.e., an economy in a dominant subcontracting position. This position is reflected in a number of important macro categories, namely value added in the economy, the distribution of output between employee compensation and gross operating surplus and is very visible in the outflow of profits from the economy. It is the ratio between the outflow of profits from the economy and the reinvested profits that shows that, already in 2006, this model had “matured”. Growing outflows (with the figures officially reported by the CNB of the lower limit, as we must also consider the use of intra-company prices) signal that the model based on attracting foreign investment, based on lower average added value, is exhausted and is becoming an obstacle to further development and increased standard of living; not to mention again the failed privatisation, the problems in the banking sector that had to be solved through the state budget (and the subsequent sale of banks to foreign banking groups). It was the banking sector that contributed the most to direct transformation costs. After the privatisation of the state, there was neither state property nor sufficient resources left that could be used for an active industrial policy and modernisation of the country.⁷⁸ Convergence and structural issues were not at the forefront of economic policy. On the contrary, for a long time a purely accounting view of the macroeconomic situation dominated, when the priority was often expressed in an indicator such as the balance of the state budget. Economic strategy, if one can speak of such a thing

77 The Czech Republic was de facto integrated into the German economic area and is still in the German “orbit” today. From this point of view, it is possible to find certain similar features with the transformation process in the former GDR. The transformation process of the GDR was fully in the hands of West Germany, still causing a certain bitterness in East Germany with certain political manifestations. Even though the process of “unification” (ergo economic integration and restructuring of the East German economy) was accompanied by financial support (Solidaritätszuschlag), almost thirty years later the income division between East and West Germany is still visible. Not to mention that more than 1.2 million people left East Germany for West Germany between 1991-2014. <https://www.zeit.de/wirtschaft/2015-09/umzug-ostdeutschland-westdeutschland-abwanderung-ausgeglichen>

78 See in detail Fassmann, M., Ungerman, J., [ČMKOS Vision for the Czech Republic] Vize ČMKOS pro Českou republiku, Pohledy 2012.

at all, has in the past focused on two areas:

- Firstly, on the so-called reforms of public finances in a neoliberal guise, which focused on reducing taxes (and insurance premiums) for the richest income groups (until the complete abolition of the system of progressive taxation of natural persons). As a result of these constantly recurring “reforms”, a very specific tax structure was created in the Czech Republic, not dissimilar to the structure of developing countries. The tax burden rests mainly on VAT, i.e., on degressive taxes. Property taxes are completely absent and in recent years we have observed that collection from natural persons is even greater than from legal entities. It is therefore a serious question whether the tax system set up in this way (with an emphasis on social security premiums) allows for an active role of the state and provides sufficient room for manoeuvre for economic policy and for ensuring an adequate level of public services.
- Secondly, on **maintaining the model of cheap labour and the dependent economy**, which were described in detail in the previous sections. This category also includes the macroeconomically completely unnecessary policy of the CNB, the so-called asymmetric exchange rate commitment, which lasted from November 2013 to April 2017 and significantly distorted the exchange rate of the Czech crown against the euro. In the recent period, this policy has shifted to significant support of the inflow of very cheap labour from abroad.

Multinational Companies in Key Positions in Czech Economy

It will be very challenging to overcome the dependence on lower-value-added wage labour used by multinational companies because there is no strong foundation for the development of domestic firms. The economically key role of multinational companies is linked to the unsatisfactory performance of domestically owned manufacturing enterprises. Only a few of them were able to withstand international competition after the opening of the economy in the early 1990s. This results in a very small number of larger companies in private domestic ownership.

In the list of the ten largest companies per individual countries⁷⁹ according to the synthetic indicator of economic results, there are six foreign-owned manufacturing enterprises (four in the automotive industry), a foreign-owned retail company, two state-owned enterprises, and one foreign-owned company in the utility sector. The largest domestically owned private manufacturing company by revenue is the Agrofert conglomerate, which is neither a leading source of innovation nor a leading exporter of innovative products.

The low representation of private domestic companies is a consequence of the weak and underdeveloped environment after the period of state socialism and the chosen strategy of transformation. This has led to a weak legal framework, a weak structure of domestic enterprises, and limited state support for business activities and economic development.

The dangers associated with the central position of multinational companies in the Czech economy can be summarised in the following points.

1. Multinational corporations account for a very high proportion of the economic performance of the Czech Republic. The share of direct investment in GDP reached 78.3% in 2017, which is a very high level compared to the developed countries of Western Europe.⁸⁰ The key export sectors of the Czech Republic, i.e., industry (82.5%), and especially the automotive industry (97.8%), are particularly heavily dependent on multinational companies.

⁷⁹ Coface (2017) Coface CEE Top 500 Ranking, <http://www.cofacecentraleurope.com/News-Publications/Publications/Coface-CEE-Top-500-Companies-2017-edition>.

⁸⁰ See: <http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Country-Fact-Sheets.aspx>

2. Foreign businesses have been the main driver of economic growth since 1996. The years of high foreign-driven investments (FDI) inflows generally coincide with the years of the highest GDP growth rates and, consequently, the fastest convergence. Since 2008, the pace of FDI inflows has slowed down and remained at a low level in the following years. As a result, the rate of economic growth of the Czech Republic will not be sufficient in the future unless a new driving force appears. (For a temporary period, this role was played by the influx of funds from EU budgets.)
3. Foreign companies are able to propel research and development, but they carry out the majority of it at home. Foreign companies conduct only a small part of their research in the countries of Central and Eastern Europe. However, it is still more than the volume of research carried out by domestic enterprises. This is further proof of the weak position of domestic companies. It should be noted that unlike foreign enterprises, domestic firms cannot rely on research and development carried out in their home countries. Therefore, they inevitably lag behind in technology and productivity.⁸¹

Table No. 7
Expenditure on science and research by sector and ownership in 2019 (CZK million)

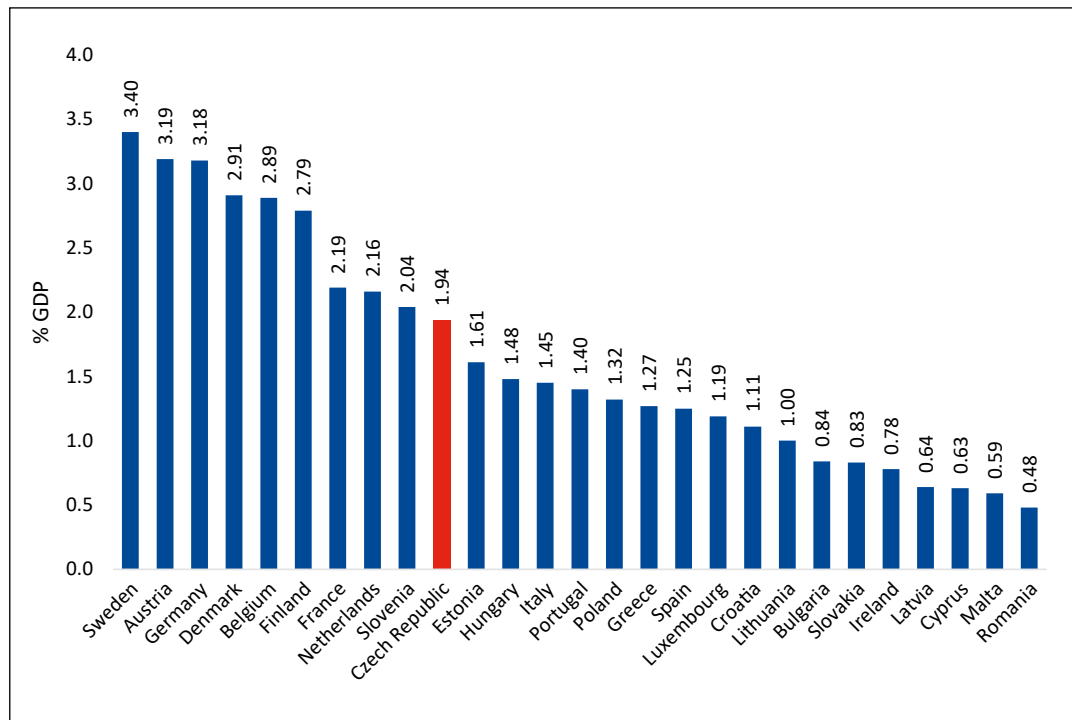
	SaR Expenditure (mil CZK)	Per Business Ownership		
		Public	Private Domestic	Private Foreign
MANUFACTURING INDUSTRY TOTAL	36,961	143	10,415	26,403
Food and Beverage Industry	316	2	144	169
Textile, Clothing, and Footwear Industry	402	–	151	250
Woodworking, Pulp and Paper, and Furniture Industry	123	–	103	20
Petrochemical and Chemical Industry	1,161	93	619	448
Pharmaceutical Industry	1,250	0	202	1,048
Plastic and Rubber Industry	1,106	–	353	753
Glass, Ceramics, Porcelain, and Building Materials Industry	648	–	210	438
Metallurgical Industry	217	–	102	114
Metal and Structural Metal Products Manufacturing	1,566	1	1,109	457
Computers, Electronic and Optical Device and Equipment Manufacturing	3,549	13	1,573	1,963
Electrical Machinery Manufacturing	4,627	–	1,179	3,449
General Purpose Machinery and Equipment Manufacturing	4,474	16	1,921	2,537
Automotive Industry	13,312	–	451	12,861
Production of Other Means of Transport and Equipment	2,898	–	1,152	1,746
Other Processing Industry	1,313	17	1,146	150

Source: Czech Statistical Office, 2021.

81 The dominant position of foreign multinational companies was somehow inadvertently confirmed by the government's selection of companies for consultations on the government's "Innovation Strategy of the Czech Republic 2019–2030" in 2018. The Government Council for Research, Development, and Innovation consulted with 17 companies, including 10 major multinational companies (which would otherwise have no particular interest in the development of the Czech economy). In contrast, only three Czech manufacturing companies were involved in these consultations, the largest of them (LIKO-S) had only 227 employees.

Graph No. 23

Expenditures on science and research in the European Union in 2019 (% of GDP)



Source: Eurostat (02/07/2021).

4. The benefits of FDI decrease over time while the costs increase. The FDI initially had a positive effect on the balance of payments, which, however, dried up over time. Net inflows of funds from direct investments were equal to 4.6% of GDP between 1993 and 2008. Between 2009 and 2017, they decreased to 1.6% of GDP. This helped offset current account deficits of 3.4% of GDP in the first, and of 0.8% in the second, of those periods. However, in 2005, for CEE countries, repatriated profits and other outflows associated with foreign direct investments were greater than new investments plus reinvestments of profits, and the gap continued to widen. The situation varies by sector. Enterprises in public services (public utilities) and banking, acquired mainly through privatisation without the need for significant new investments and often enjoying monopoly positions, were characterised by a high rate of profit and a very good return on the original investment.⁸²

Activities in the Czech Republic remain marginal for multinational companies in the context of global strategies. Although they transfer some modern production methods and products to Eastern Europe, most R&D (and therefore products and activities that require close contact with R&D) remain in higher-income countries. **Among the possible strategies mentioned above, the absence of the complete migration of the MNC or at least the migration of the most sophisticated innovation activities is notable. Without this or without the development of their own large enterprises, the CEE countries will not be able to catch up with the Western European economic level.** However, there are significant obstacles to any such process. They can be summarised in three points:

⁸² Chmelař, A., Pícl, M., Bittner, J., Volčík, S. & A. Nechuta (2016), [Profit Outflow Analysis: Implications for the Czech Economy and Proposals for Measures] Analýza odlivu zisků: Důsledky pro českou ekonomiku a návrhy opatření, Prague, Office of the Government of the Czech Republic, pg. 3.

1. **MNCs already have significant infrastructure in higher-income countries** (buildings, machinery and equipment, proven and skilled workforce, various networks, and contacts), so moving to another country would entail significant financial costs. The move could also incur huge political costs.
2. **For companies with production plants in several countries, it makes the most sense to maintain operations with guaranteed profitability in countries with higher incomes.** For example, smaller and less profitable cars are produced in the CEE countries, while the largest, most expensive, and most profitable cars are usually produced in countries with higher wages. Productivity therefore appears to be lower in CEEs due to lower product prices, even though production technology and employee work tasks are very similar in all cases.
3. **The transfer of research facilities is particularly difficult.** They represent a significant part of the expenses in the manufacturing industry. For example, in German companies, they equal more than 9% of added value. Obstacles to moving to CEE countries include the need to attract qualified employees, and it is unlikely that they would be attracted by the low level of wages and social services in the Czech Republic. Thanks to the provisions on the free movement of persons, these employees are likely to be tempted to move to countries with higher incomes, which is another important factor that discourages multinational companies from transferring research to the Czech Republic.

This causes even greater difficulties for any domestic company that would consider developing its own research facility. The problem with multinational corporations is not only research, but also the introduction of these new products and new production methods, which require close ties to research so that the manufacturer can test and adapt to problems. The pressure on multinational corporations to keep their most advanced activities in countries with higher wages is therefore strong, as shown by a study on the behaviour of German companies.⁸³

Vision of Change in Czech Republic Economic Policy – Topics

The middle-income trap, in which the Czech Republic probably already finds itself, is a non-prospective phenomenon. On the other hand, economic history and the present offer us examples of countries that managed to “jump” forward in development and open up space for a long-term increase in the standard of living of their citizens. From the point of view of economic theory, the industrial policies of the USA at the beginning of its existence, which were theoretically followed up by the German economist Friedrich List, have been documented.

If we look at the experience of the 20th century, we find the largest concentration of successful examples in Asia – from Singapore (with which “state capitalism” is first associated), Japan, South Korea and, last but not least, China. Different development models are also offered by Ireland and Finland.

Automatic adoption of economic policies is not possible, not only because of “path dependency”. However, foreign experience shows that there are ways to reconcile with a dependent position in the world economy and can at least inspire foreign policy makers. Sufficient manoeuvring space for economic policy is a key prerequisite for any successful strategy.

83 Krzywdzinski, M. (2017), “Automation, Skill Requirements, and Labour Use Strategies: High-wage and Low-wage Approaches to High-tech Manufacturing in Automotive Industry, New Technology”, *Work and Employment*, Vol. 32, No. 3, pgs. 247–67, pg. 261.

The new economic policy should primarily aim at an economy capable of creating and using innovative activities. This is considered a key objective. The World Economic Forum concludes: “Innovation has become an imperative for all advanced economies and a priority for a growing number of emerging countries. And yet the vast majority of them are struggling to make innovation a meaningful engine of growth. The results show that there are only a few innovation powerhouses in the world, including Germany, the United States, and Switzerland. ... In the vast majority of countries, innovation capacity remains extremely limited, very localised and/or restricted to very few sectors.”⁸⁴

How can the Czech Republic transform into an innovation centre, the country for the future?

1. Wages as a comparative advantage?

One way is to continue with low wages on the grounds that wages should only rise as productivity increases. We have already dealt with this question in detail in the opening two chapters of the study. **At this point, therefore, it is worth simply summarising that low wages attract activities with low productivity and at the same time create obstacles to its increase. This strategy will never lead to full convergence.**

On the other hand, in view of the unprecedentedly high profitability of companies in the Czech Republic, there is some room for faster growth in wages than in labour productivity (see chapter 1). Higher wages would also contribute to the development of an innovation-based economy by making it easier to retain the most skilled workers.⁸⁵ However, rising wage levels would become counterproductive if they reached such a level that MNCs would shift a significant portion of their operations to countries with even lower wages (despite all the costs associated with such a shift). **It is therefore not possible to achieve wage convergence without additional measures that would either encourage multinational companies to locate higher-level activities in the Czech Republic, or that would support the development of innovative domestic companies.**

2. East Asian Model

Experience from countries outside Europe shows that rapid modernisation of economies is possible through completely different policies than those applied in CEE countries. It is impossible to replicate this experience exactly, but there are important lessons to be learnt. The key difference is the active role of the state. But this does not mean a return to central planning. It means helping public and private enterprises in various ways to take advantage of opportunities for their development. Japan’s economy grew rapidly until 1991, when it was targeting Austria’s level of GDP per capita, but then underwent relative stagnation. **An important element of the catch-up was the active role of the state, including the provision of information on promising markets and technologies, advice, investment support, and protective tariffs so that the sectors with the best prospects could develop.**⁸⁶

This model was followed by South Korea. GDP per capita compared to the Austrian level increased from 43% in 1990 to 72% in 2016. (The Czech Republic moved from 65% of the Austrian level in 1990 to 68% in 2016.) The government strategy was to help selected sectors, especially motor vehicles and electronics, by way of selective protectionism, provision of information, advice to key businesses, support of necessary education and training, and support of the research base for basic and applied research. **Not one of these countries was dependent on incoming multinational companies for their development.**

Taiwan started from a lower relative level (GDP per capita 42% of Austrian level in 1990, reaching

84 World Economic Forum (2018) The Global Competitiveness Report 2018, Geneva, <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf>.

85 An increase in public spending on improving social conditions would also contribute, for example, making sure that parents, and especially women, can more easily combine family and work life. The OECD and other commentators point to the wasted potential of low employment of working-age women, which can be seen as a result of low levels of services for families with children.

86 Tsuru, S. (1993), Japanese Capitalism: Creative Defeat and Beyond, Cambridge: Cambridge University Press.

46% in 2014). The state also played an active role there, supporting the development of modern sectors. **Domestic firms in some fields, especially electronics, replaced foreign companies, probably because foreign firms were unwilling to pay rising wages.**⁸⁷

China grew even faster. GDP per capita grew from 5% of Austria's GDP per capita in 1990 to 30% in 2016, with a significant catch-up after 2008. **Low wages in basic production processes as well as selective protectionism and support for 'strategic enterprises' contributed to this.**

These strategies cannot be replicated in the Czech Republic due to the extent of foreign multinationals in the economy, as protectionism within the EU is impossible, as well as due to restrictions arising from the EU's competition policy. However, significant elements of a greater role of the state are accepted and applied in other EU member states and may become part of the solution for the Czech Republic

3. German Industrial Strategy

A significant change in economic thinking, which represents a chance for the "upgrade" of the Czech economy, is represented by the **German Industrial Strategy**.⁸⁸ It is crucial to note that while Germany is still a powerhouse in a number of "traditional technologies", it lags behind in modern technologies, especially in artificial intelligence and digital technologies. One of the reasons for this lagging, apart from naive reliance on "market forces", is also wrongly set priorities. In the last ten years, Germany has ordered the reduction of debt to GDP as a clear priority for itself and for the countries of the Eurozone. The result is a restrictive policy anchored, for example, in the Fiscal Compact,⁸⁹ which significantly limits the room for manoeuvre of fiscal policy. The economic results of the Eurozone, the world's slowest growing interconnected area, show that this policy was wrongly chosen.

The strategy acknowledges the European dimension and the need to analyse the weaknesses and strengths of all EU economies. Unlike many other documents, the German Industrial Strategy envisages a growing role for industry in gross added value. As the German Ministry of Industry admits the "need to catch up" (Nachholbedarf) and defines the US and China (to a lesser extent Japan) as the main competitors in modern technology, there is room for an active economic policy that could help modernise the Czech economy.

The strategy recognises that the transition of the economy to a higher stage does not happen "by itself",⁹⁰ but is of course controlled and directed by the state, although it takes its specific form in each country. China is named as an example of a very successful industrial policy.⁹¹

It is important for the Czech Republic that the strategy leans towards strengthening the role of the state in the development of new technologies in which the EU as a whole lags behind. The first move is defining the fields in which Germany / EU still has a chance. Mobility, distance learning, and the healthcare industry are specifically mentioned. Timing is also key, because it is now that a lead is gained that may not be possible to equal and overcome in subsequent periods. The strategy warns that the countries that "miss this train" will later become just "workshops for products". In a way, this postulates that even Germany could end up like the Czech Republic today compared to competitors such as the USA and China.

In modern industrial policy, according to the new German strategy, it is necessary to maintain

87 Amsden, A. (2003), *Beyond Late Development: Taiwan's Upgrading Policies: Upgrading Policies in Taiwan*, The MIT Press.

88 https://www.bmwi.de/Redaktion/DE/Downloads/M-O/nationale-industriestrategie.pdf?__blob=publicationFile&v=12.

89 The Fiscal Compact is actually a toughened version of the Stability and Growth Pact. It generally obliges governments to observe a balanced or surplus budget and assumes the establishment of an independent institution to monitor the development of public finances.

90 Literally, on page 8 of the document, we read: "Industrial policy strategies are experiencing a renaissance in many parts of the world, it is difficult to find a successful country that relies exclusively on market forces to cope with tasks."

91 On page 8 of the German Industrial Strategy document, we read: "From the point of view of industrial policy, the People's Republic of China is a particularly successful country, which, in 2015, approved its 'Made in China 2025' policy. ... The strategy of combining the principles of a market economy together with a prudent and supportive policy bore fruit."

industrial and technological sovereignty (in the case of the Czech Republic, to restore it). For this, a political framework needs to be created so that national and European champions can emerge. Large and key companies must receive support and protection from the state (perhaps even through nationalisation). It is necessary to closely monitor foreign mergers and not allow key industries to fall into foreign hands. It is also possible to form state consortia in key sectors (for example in car batteries) and acknowledge that there is a need to change European competition law to allow the creation of companies large enough for global competition (which obviously hints at the banned merger between Siemens and Alstom).

All these topics / proposals are important for the Czech Republic both from the point of view of timing (it is not possible to wait, we need to act now), and because they can lead to a strengthening of the state's role in the EU within the framework of industrial policy. It is necessary for the Czech Republic to grasp these proposals and, above all, to ensure that the initiative to modernise economies is not limited to just a few countries, e.g., Germany and France. The Czech Republic must not become an open-air museum of "traditional" industries.

Consequences of EU Competition Policy

*The goal of competition policy is to prevent unfair competition, in other words to prevent any firm from having an unfair advantage. This includes limiting state aid to specific firms. However, there are exceptions if state support contributes to sustainable growth or social cohesion. Among the exceptions are certain forms of aid to banks in times of financial crisis, state subsidies to support investment and modernisation in regions with lower incomes (in the case of the Czech Republic, the entire country except Prague can receive maximum aid), the development of transport and research infrastructure, to help small firms and start-ups, to improve access to the Internet, to support digitization and a number of social goals. The EU thus recognises the benefits of the development role of the state, which is also supported by EU institutions, including ESIF subsidies and loans from the EIB. However, subsidies for specific companies that are not tied to recognised development or social goals are not acceptable. **China's strategy of supporting "strategic enterprises" would therefore not be compatible with EU competition rules. Protecting domestic firms through tariffs and other barriers to international trade, as used in East Asian development strategies, is not allowed in an EU member state against others. In some ways, the EU thus limits the freedom of the Czech Republic to develop its own economic policy, but it can also promote certain possibilities under certain conditions, as described below.***

4. Innovation Strategy of EU Member States – Entrepreneurial State

Innovation does not emerge spontaneously from a market economy. As recognised by the World Economic Forum: "... a country's capacity to innovate depends on the quality of a vast and complex ecosystem."⁹² The OECD reached a similar conclusion a few years ago, stating this process is complicated. Governments are therefore adopting "national strategic plans", although they were previously rather sceptical of active industrial policies. "A co-ordinated, coherent, 'whole-of-government' approach is required."⁹³ Innovation depends not only on individual entrepreneurs or individual firms,

⁹² World Economic Forum (2018), The Global Competitiveness Report 2018, Geneva, <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf>.

⁹³ OECD (2007) innovation and growth: rationale for an innovation strategy, <https://www.oecd.org/sti/inno/39374789.pdf> str. 3.

but on “innovation systems” that require coordination among many actors. An important actor, as well as an important coordinator and stimulator of other actors, is the state, as demonstrated by Mazzucato with the term ‘entrepreneurial state’.

“This concept on an entrepreneurial state encapsulates the risk-taking role adopted by the state in the few countries that have managed to achieve innovation-led growth. It is through mission-oriented policy initiatives and investments across the entire innovation process – from basic research to early-stage seed financing of companies – that the state is able to have a greater impact on economic development.”⁹⁴

It also includes basic research, which is the riskiest part of the innovation process. It has the least prospects for a quick financial return, and therefore it is not pursued by private companies unless they are supported by the state. The OECD recognises the importance of public investment in science and basic research.

“Many high-technology commercial successes and fundamental innovations with deep and positive social impacts had their roots in public research and came from findings that were impossible to foresee. Fundamental innovations such as the World Wide Web and the Web browser emerged, not from competitive market processes, but largely from government-funded research conducted in universities, industry, and government laboratories. Much of the R&D was conducted as part of government programmes, in some cases after the market had abandoned the research.”⁹⁵

The iPhone, which was largely built from government-funded research, is another practical example.⁹⁶ Elon Musk reportedly received guaranteed loans from the US Department of Energy. The LA Times estimates that his three companies (Tesla, Space X, and Solar City) have collectively received roughly \$5 billion in public aid. This is more than the total annual expenditure on science and research in the Czech Republic.

The ‘entrepreneurial state’ is also important for financing innovation in high-tech areas where initial risks are high. Experience across high-income countries shows that most innovative, high-growth companies receive high-risk, early-stage funding from public sources. Private venture capital plays a role but is risk-averse and seeks faster returns. Public authorities emerge as “an investor of first resort ... absorbing the high degree of uncertainty during early stages of innovation.”⁹⁷

Two other areas are important. A big problem, according to businesses large and small – for many of them even the biggest problem – is “finding and retaining quality people at all levels,” including but not limited to management and technical fields. Part of the solution lies in the hands of the state in the form of public education and training. A second problem is the need for networks and various contacts for advice and financial support that can contribute to creating links between research and business.⁹⁸ Development and investment banks and regional development agencies play such roles in a number of Western European countries. In the Czech Republic, however, they occur only marginally. In comparison, in Denmark, regional development agencies are strongly embedded in all regions. The largest of them have significant financial resources and in several cases more than 200 employees.

Involvement of the state in supporting innovation requires setting certain goals. Austria’s policy is

94 Mazzucato, M. (2017) ‘Mission-oriented Innovation Policy: Challenges and Opportunities’, UCL Institute for Innovation and Public Purpose (IIPP) Working Paper Series, (IIPP 2017-01). <https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/moip-challenges-and-opportunities-working-paper-2017-1.pdf> (Mazzucato, 2017, pg. 30).

95 OECD (2007) innovation and growth: rationale for an innovation strategy, <https://www.oecd.org/sti/inno/39374789.pdf> pg. 19.

96 Mazzucato, M. (2017) ‘Mission-oriented Innovation Policy: Challenges and Opportunities’, UCL Institute for Innovation and Public Purpose (IIPP) Working Paper Series, (IIPP 2017-01). <https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/moip-challenges-and-opportunities-working-paper-2017-1.pdf>. (pg. 47)

97 Mazzucato, M. (2017) ‘Mission-oriented Innovation Policy: Challenges and Opportunities’, UCL Institute for Innovation and Public Purpose (IIPP) Working Paper Series, (IIPP 2017-01). <https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/moip-challenges-and-opportunities-working-paper-2017-1.pdf> (pg. 23)

98 National Commission on Entrepreneurship (2002) Entrepreneurship: A Candidate’s Guide, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1260382 (pgs. 23, 13).

focused on several strategic goals, the intention of which is to achieve a leading position in the field of innovation. It focuses on areas where there is already a research base (universities and research institutes) and develops further conditions for innovation thereto.

Another strategy would be to offer businesses flat-rate support through tax breaks. This can be beneficial for very general goals, such as using computers, but does not substitute the active supporting of the innovation process. A comparison as per 2005 shows that the rate of tax subsidies for R&D in large firms and SMEs was quite high in some countries, with no apparent positive results. The results were even negative in Germany, Denmark, Sweden, Finland.⁹⁹ Tax subsidies are therefore apparently not a substitute for a comprehensive policy and their effect is ambiguous.

These observations highlight the weak points in the Czech Republic. Incoming foreign companies do not need a strong scientific and research base for their activities in the Czech Republic, because they conduct research and development elsewhere. However, the weakness of this base means that they will not transfer higher-level activities to the Czech Republic and that Czech companies cannot develop their own innovations. The comparisons show that in addition to the level of research activity, there are also problems in the lack of manpower, poor access to finance, the absence of support and advisory services, and the lack of ideas and information. The Czech Republic cannot rely on the free market. On the contrary, compared to Western Europe, the Czech Republic needs more support, because the basic conditions for the development of an innovative economy are poorly developed.¹⁰⁰

5. EU Membership

As long as the EU promotes policies supporting growth, convergence, and cohesion, it represents the most promising basis for Czech economic development. The EU provides direct benefits to the Czech Republic through financial resources from European Structural and Investment Funds. These arrived at a time when direct investment was falling, which contributed to strengthening the level of GDP and the balance of payments. In the period 2007–2013, the inflow was 2.46% of GDP. For the period 2014–2020, it was to be 1.96% of GDP with the expectation of substantial decrease in the next budget period. Support for research, development, and education for the period 2014–2020 was to be roughly 0.35% of Czech GDP, in which support for research and innovation infrastructure amounted to 0.1% of Czech GDP (Ministry of Education, Youth and Sports, 2015, pg. 120). **But the key question is whether this influx has helped create a new growth model that can contribute to convergence.**

According to the EU assessment, the results of past programmes from the period 2007–2013 show shortcomings that are the result of the weakness of the Czech environment. The EU was important for maintaining public investment in general (34.3% of the total). The most significant financial support for small and medium-sized enterprises in terms of the volume of funds comprised the enterprise and innovation programme, alongside which there were also less significant national funding sources.

Its impact on the promotion of innovation was limited by the weakness of existing small and medium-sized enterprises, the wide occurrence of the so-called branch plant syndrome (that is, SMEs that are part of national and transnational value chains are oriented exclusively towards the assembly of standard goods). **According to a detailed analysis of the Czech experience, innovation was very limited. The analysis highlighted several reasons, including highly fragmented regional innovation systems and insufficient coordination of innovation policy.**

Financial support was mainly directed towards machines rather than research and innovation. Almost half of the supported enterprises were foreign multinationals. At the same time, the

99 OECD (2007) Innovation and Growth: Rationale for an Innovation Strategy, <https://www.oecd.org/sti/inno/39374789.pdf> (pg. 21).

100 Malerba, F. (2010), Knowledge-intensive Entrepreneurship and Innovation Systems: Evidence from Europe, London, Routledge, pg. 308.

support of larger enterprises was not the aim of the programme.¹⁰¹ In other words, EU funding effectively supported the existing model of dependent development and did not create the basis for a new model of innovation-based growth.

There is, however, a question as to what extent the developed EU countries were even interested in having their competitors grow up. The interest of foreign companies relates to the use of advantages in the form of cheap labour and geographical proximity, or a certain stabilisation of the region, but they are hardly interested in the modernisation of less developed countries. Even though the EU, and especially the Eurozone, is supposed to promote convergence, as shown by the current EU policy, after the Great Recession, two de facto peripheries (Eastern and Southern) have been consolidated, while a number of policies within the Eurozone fundamentally limit the room for manoeuvre for an expansionary fiscal policy. The vacated space is then occupied by foreign investors (viz. Italy and the Memorandum of Understanding with China on the Belt and Road Initiative).

The Czech Republic can also benefit from loans from the European Investment Bank (EIB), which finance investments linked to development goals including transport infrastructure, renewable energy, education, research, healthcare, and certain areas of social policy. These loans are particularly advantageous because of the extremely long repayment periods (sometimes 50 years) and as EIB financing is a process that usually leads to a higher volume of private co-financing, which increases the total investment by up to three times the original EIB loan. Loans in the Czech Republic in the period 2013–2017 amounted to 0.44% of GDP. (Compared to 0.24% in Germany and 0.49% in Austria. However, this means that the volume of loans per capita was considerably higher in Austria and slightly higher in Germany.)¹⁰²

Among the loans to Germany were loans to designated businesses for specific research projects including energy storage, telecommunications, pharmaceuticals, and software. However, the loans to the Czech Republic were mainly to support the general development of small and medium-sized enterprises.

The EU's contribution to Czech development is thus limited by the weak development of Czech business sector, the Czech public sector, and the institutional environment. It is not a replacement for the 'entrepreneurial state', but it can be a useful addition.

6. New Economic Policy

The legitimate question nowadays is what the defining element of the Czech economy should be. In doing so, we must take into account the global interconnectedness of production and trade, the historical and cultural context of the economy, and the existing potential of the knowledge base of the workforce. The political reality, which affects how conceptually and strategically the state's economic measures will be developed and applied, cannot be neglected either. **The state plays and will play – as can be seen from the already mentioned examples of other economies – a fundamental role.**

In order to make a political decision regarding in what we want to excel and what direction we want to take, it is necessary to prioritise which product the Czech economy wants to finalise and export to the world. **Unfortunately, current government strategic documents¹⁰³ failed to explicitly determine the direction of specialization of the economy and are limited to a descriptive analysis of production sectors with potential, or to recommendations for the development of a large**

101 European Commission (2016b), Ex Post Evaluation of Cohesion Policy Programmes 2007-2013, Focusing on the European Regional Development Fund (ERDF) and the Cohesion Fund (CF), Task 3 Country Report Czech Republic, https://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2013/wp1_cz_report_en.pdf

102 EIB (2018b), European Investment Bank Statistical Report 2017, <http://www.eib.org/attachments/general/reports/st2017en.pdf>

103 Namely the National Research and Innovation Strategy for Intelligent Specialisation of the Czech Republic (RIS3), the Concept of Industry 4.0 and the last strategy of The Country for the Future.

number of sectors of the economy, thereby bypassing the issue of narrow specialization.

The development of the domestic economy is largely determined by objective external opportunities. In addition to megatrends, such as aging, climate change, digitization, robotization and automation, the strategic thinking of the largest trading partner – Germany – is of course also important for the Czech economy. It is also necessary to include the context of the goals of the European Union, which can feel first-hand that it is already lagging behind the economies of the Far East in the areas of innovation and development of new technologies.

The ambition of the Czech Republic should be to contribute to the global economic race with its high added value, which will guarantee sustainable growth in living standards.

Prerequisites for Industrial Production Qualitative Leap

In order to identify products with a strong potential for specialization of the economy, it is necessary to look at those sectors that already produce (mid) high-tech products, their ownership structure, available infrastructure, geographical distribution, the ability to invest their own funds in science and research,¹⁰⁴ growth added value, and above all, the development of already acquired knowledge in production.

The knowledge base of the Czech economy stems from the following fields: advanced materials, nanotechnology, microelectronics and nanoelectronics, advanced manufacturing technology, photonics, industrial biotechnology, aviation, optics, technological services, knowledge for the digital economy, cultural and creative industries, and social science knowledge for non-technical innovations.¹⁰⁵ For production with high added value, this base is a good starting point, it is applicable in today's development trends of machine autonomy, IoT,¹⁰⁶ artificial intelligence, new intelligent surfaces, etc.

In addition, a window to deepen the knowledge is currently opening, as the European Union's financial schemes are oriented more towards the development of soft skills and new technology. The financially extensive Horizon Europe Programme,¹⁰⁷ which will finance science and research with a budget of 100 billion euros (European Commission, 2019) will become one of the key instruments in this quest. An opportunity for production with higher added value can provide, for example, the intention to build and finance centres of excellence in member countries,¹⁰⁸ with the Czech Republic actively striving for a centre of excellence in artificial intelligence, which would be followed by the building of the entire necessary infrastructure, including regional structures (regional hubs).

The geographical location of the Czech Republic is also important. Due to the relatively good accessibility from all corners of Europe, it could be used for the organization of professional colloquiums and conferences, which are a good means for the diffusion of innovations. The position of the Czech Republic on the map can also influence whether foreign scientists and experts, bringing in new methods and procedures, would wish to live here. However, the Czech Republic uses its position mainly for transit and logistics, which is also confirmed by the fact that it is one of the cheapest countries in the EU for freight transport (Centre for Economic and Market Analysis, 2019).

104 BERD – Business Enterprise R&D is Being Followed.

105 (RIS3, pg. 15).

106 Internet of Things or Cooperative Systems of Machines.

107 The Programme Follows-up on the Horizon 2020.

108 It is a scientific and research unit that is unique in its budget and management policies. It is supposed to become a centre of cutting-edge research that educates a new generation of scientists.

Production Potential with Higher Added Value

If we look at the past post-crisis years, we can note that there are roughly six (mid-) high-tech branches in the Czech economy, which have approached investments and innovations in different ways, and had their added value and profit develop differently. These six sectors mainly produce automobiles, (industrial) machinery, chemical products, computers, electrical equipment and electronics, and other means of transport, among which products for the space industry stand out (especially recently).

Naturally, these sectors are distinguished by their significance in the economy. The share of added value is highly variable, with the largest share in cars (4.76%) and the smallest in the production of other means of transport (0.55%). Corporate spending on science and research is slightly less variable among the mentioned sectors, in which electrical equipment manufacturers were the leaders (15.91% growth between 2009-2015), with computer and electronics manufacturers at the tail end of the ranking (0.58% growth between 2009-2015¹⁰⁹).

The common denominator for high-tech fields is that innovation takes place mainly in two types of enterprises: large foreign and small / medium ones owned by domestic capital (ČSÚ, 2019), which is an important fact for the country's economic policy when trying to support domestic enterprises. What technologically demanding products do we produce in the Czech Republic? And what trends can we follow?

Automotive

It is no surprise that the main sector of the Czech industry is that of automotive. The largest company on the Czech automobile market is ŠKODA Auto, a.s., of the Volkswagen group, which is the only firm with fully developed facilities in the Czech Republic, i.e., including science and research, and its own specialised education.

The world trends in regional individual mobility are driving autonomy and ecological sustainability. Škoda reflects these trends in its Strategy until 2025, which focuses on the digitization of processes both in production and in the product itself. It calls its innovative car series 'VISION'. So far, two (in fact, three) concepts have been presented: 1. VISION E, which aims to be a fully electric car (based on lithium batteries charged "remotely") with level 3 autonomous driving¹¹⁰; 2. VISION X and VISION RS, which are models based on hybrid drive that use new environmentally friendly materials (Škoda.cz, 2019).

Škoda chose a strategy of low-emission and low-carbon products. Only time will show the company's competitiveness, but there is already quite a lot of competition, for example, in autonomous mobility. Škoda faces the question of its comparative advantage. What will it be? The consistency of Škoda Auto's attitude towards environmental sustainability is also a challenge. The Czech Republic is still energy-dependent on coal, which will naturally also be the energy source for production in Škoda's factories, and unlike the product, the production process itself is not yet low-carbon.

Mechatronics

The production of machinery and equipment, primarily of industrial machines, has a long tradition in the Czech Republic. From the point of view of innovation, it is an interesting fact that domestic capital spends such a volume of funds on science and research (CZK 1,803 million in 2018), which is not much different in volume from the funds spent by foreign capital (CZK 2,414 million). This sector has one more interesting feature, and that is the regional coverage of the Czech Republic, which is relatively even.

Due to the regional fragmentation and the high number of small and medium-sized enterprises

109 Based on own calculations from OECD and Eurostat data.

110 At this level of autonomy, the driver is still needed to drive the car, but can only make decisions in critical situations and does not have to fully monitor what is happening on the road.

in the sector, industrial clusters (Mechatronics in Western Bohemia, the Precision Engineering Cluster in the Vysočina region, the Additive Manufacturing Cluster, and the National Engineering Cluster in the Moravian-Silesian Region plus a few interdisciplinary clusters) were established, which aim to minimise costs on infrastructure and information transfer for businesses, including the involvement of academic institutions, universities, and state administration.

The clusters do not have a defined narrow specialization, but in general, it can be said that production is very often focused on Precision Engineering, where, for example, technologically advanced lasers or 3D printing are used.

Artificial intelligence and biotechnology also open a window of opportunity for this sector, where there could be a focus on robotics with self-learning and self-determining systems. The challenge for the field will be sustainability and greater involvement of the metallurgical industry. For example, in the Moravian-Silesian Region, smelters and foundry are already part of the National Engineering Cluster.

Computers, Electronics, and Electrical Engineering

The field of electronics and electrical engineering is dominated by foreign-owned companies, which mainly produce intermediate products here (albeit with a higher added value). The sector shows both a high share of the Czech Republic's exports (approx. 14%) and a high share of imports for export (63%) (RIS3, pg. 22). It is also a sector in which corporate spending on science and research has stagnated in recent years.

Up until now, the industry excelled in the production of electric motors, generators, accumulators, and batteries. Recently, the production of optical and electrical cables and lighting equipment has become more important. As a complete product, computer processors and data units are exported from this sector (MIT data, 2017). However, there is also the finalisation of production by domestic companies, namely Robodrone. Its production of drones in Olomouc serves as an example of this relatively advanced production. However, similar SMEs are lost in the overall data due to economic significance.

Data storage and computing process components play a key role in collaborative robotics, which is a major innovation challenge for the industry. However, it is necessary to take into account the motivation of the company owners and their (un)willingness in the qualitative development of production or the relocation of other parts of production necessary to finalise the product to the Czech Republic.

Chemical Products

Another – already almost traditional – field of production is the chemical industry. Although the share of gross added value of the sector in total is small, the chemical industry has a privileged position in the Czech Republic, as it is mainly owned by domestic capital (out of approximately 1,200 companies, only three dozen are under foreign control). The ratio of large vs. small/medium enterprises, where the large ones completely dominate the entire sector, is also interesting.

Nevertheless, research and development is propelled by medium-sized enterprises with up to 250 employees (447 million crowns). Large companies innovate less – 297 million (ČSÚ, 2019) and the entire sector is primarily oriented towards profit (in the period 2014–2017, the average profit rate was approx. 50.73%). (Own calculations based on Eurostat data, 2019.)

Geographically, the chemical industry is concentrated in the Ústí nad Labem region and Central Bohemia. It mostly focuses on the basic processing of substances (mainly oil), petrochemicals or pharmaceuticals. However, Czech chemistry also brings new innovative end products that confirm the current knowledge base of the economy. The company FN Nano, which uses nanotechnology to produce durable coatings for building facades, can serve as an example. These coatings reduce the environmental impact as their active substance cleans the air from smog and prevents mould and wear.

The big challenge of the chemical industry is mainly advanced materials, e.g., nanomaterials, materials for 3D printing, medical purposes, energy storage, etc. **From a business perspective, it is**

necessary to focus on sensible investments in new production methods and intellectual property as soon as possible.

Other Means of Transport

The smallest of the high-tech industries (representing only 0.3% of the added value of the entire industry) deals with the production of railway vehicles and space components in the Czech Republic. The added value of the sector has so far been created mainly by the production of railway vehicles, but production for space-industry purposes is developing dynamically and will probably become more dominant in the coming years. The Czech Republic is even becoming one of the top countries in the world that specialises in the aviation industry.

The space industry in the Czech Republic is also strengthening thanks to the planned EU Space Programme, which has chosen Prague as its capital (also due to the fact that GSA is already based here¹¹¹ and the ESA BIC operates here¹¹²).

The Czech space industry is particularly prominent in software solutions, but it also produces physical components. To provide an example, there is the production of subsystems for satellites and test modules for the mission to Phobos (a moon of Mars) at Frantech Aerospace. Similar small and medium-sized enterprises with a relatively wide range of production operate under the ESA.¹¹³

The main challenge of this sector is strengthening its relevance. Although it can manufacture products with high added value based on the current knowledge base, it is still a marginal part of the Czech economy. However, this is changing rapidly, and the importance may increase due to the objectives of the European Union.

Challenges for Czech Economy and State

We tried to indicate the Czech Republic's potential for an "economic leap" in several examples. The window of opportunity to change will not be open forever, so it is necessary to make this decision as soon as possible. Production with high added value already exists here, so it is only necessary to make a fundamental decision regarding narrower specialization from the point of view of economic policy.

This in itself means that several large infrastructure projects will have to be implemented, created by none other than the state. For example, we face the question of what will happen to energy. Fossil fuels are not a suitable source of energy due to environmental sustainability, however they currently provide power for industry that cannot be replaced from day to day. The solution for the Czech Republic must be the development of nuclear energy combined with other environmentally friendly projects (e.g., the discussed Lipno-Danube pumped storage power plant).

For the development of new technologies, it is necessary to arrange a sufficient information transmission network, i.e., a high-quality 5G network or a developed optical network throughout the country. A software solution in which the Czech Republic already has experience (mainly in the field of cyber security) will also be important. However, there is a significant lack of programmers on the market, so it is necessary to focus on more intensive development of this competence.

The state administration cannot afford to let the train pass. It is still not possible to digitize, interconnect, and facilitate services for citizens and entrepreneurs. The private sector is outrunning the public sector at a speed that cannot be levelled with the current approach.

Investments in the academic sphere is an important momentum. The state already plays an

111 European Global Navigation Satellite Systems Agency.

112 ESA Business Incubation Centre is an innovation hub for budding startups.

113 European Space Agency.

important role in research because business investment in innovation is relatively low, especially when we look at basic research. The potential contribution of the Academy of Sciences is demonstrated by examples from the recent past. Just one of its institutes (the Institute of Organic Chemistry and Biochemistry) earns around CZK 2 billion a year from licensing patents for antivirals. Such are the direct benefits of basic research. Strengthening the patent policy could lead to even higher profits. Thus, a state fund to support patenting, which would help protect Czech know-how, could be an interesting solution.

The connection of technical universities is relatively successful, which can also be seen in their activities in clusters. However, even here it is necessary to strengthen their role and recruit more experts from abroad, which would largely depend on raising the level of wages and social services. It is necessary to ensure a high level of qualification starts at pre-school and primary education level. It is important to work with the potential of each child, which means making every effort to avoid certain forms of discrimination and social exclusion. It will also be essential to support quality lifelong education, which will ensure the smooth movement of people between different professional qualifications and thus the growth of their productivity.

In order to ensure the good running of public services, it is necessary to accept the fact that the state will have to significantly invest its financial resources and not, for example, let them flow abroad or give room for tax optimisation. Participation in the financial schemes of the European Union can be a certain relief on the income side, but we can no longer afford to spend these funds inefficiently. In order to effectively spend public money, it is necessary to create financial structures – regional banks that will promote development in individual regions and thus help to reduce regional differences.

To not miss the chance for the Czech Republic to make an economic leap...

The Czech Republic does not exist in a vacuum. The key question not only for the Czech Republic, but for all CEE states is how to fundamentally change their economic policy and thereby achieve significantly faster convergence of their economies. In our opinion, **the Czech Republic, as a medium-developed country with a long industrial tradition**, must take advantage of the maximum use of new directions and opportunities for the development of science, technology, digital technologies, and new management systems and skip the entire development stage, thus reaching the level of the most advanced countries much faster (as it was done in the past, for example, in Finland or Denmark). It is precisely the question of “rearmament” – changes in the structure of the economy, the role of the state in these processes.

Naturally, this change in economic policy will not be possible without close cooperation and collaboration both with the EU authorities as a whole and with individual states. In our opinion, it is necessary to internally combine two, thus far relatively separate, processes. Even the most developed EU countries are not problem free. They are currently facing increasingly strong global competition from China, Japan, the United States, and other Southeast Asian countries in the field of cutting-edge technologies, artificial intelligence, digitization, new telecommunications technologies, biotechnology, autonomous driving, robotics, etc. and are looking for ways to counter this global trend.¹¹⁴ In our opinion, it seems absolutely necessary to involve new countries more closely and comprehensively in these global challenges, to include them in a comprehensive solution, and not to leave them behind “to wrap something or to screw a handle onto something”. We are convinced that we will all benefit from this procedure.

114 The New ‘German Industry Strategy’, Nationale Industriestrategie 2030, Bundesministerium für Wirtschaft und Energie (BMWi), Berlin, February 2019, is very inspiring in this regard. (https://www.bmwi.de/Redaktion/DE/Downloads/M-O/nationale-industriestrategie.pdf?__blob=publicationFile&v=12).

In these processes, the European Union and the European Commission must have an irreplaceable initiating role of a coordinator and driver. In our opinion, it faces a number of tasks that are already relevant today. Without aiming to provide an exhaustive overview of such tasks, at this stage, we consider the most important ones:

- To process an independent, comprehensive, and impartial analysis of the strengths and weaknesses of all economies in the European Union. (We need to know where we stand to handle the future together.)
- To initiate a detailed discussion on the position and role of the EU common budget in this area.
- In order to strengthen innovative technologies and protect strategic areas, it is important to fundamentally redefine the question of the position of the state and its role in the economy and the rules of economic competition (e.g., the possibility of state involvement in the economy, state interventions or the transfer of ownership of key companies to the state in the event of a hostile takeover by competitors, temporary state support in the field of innovation, relaxation of rules in the field of company mergers in areas where size is a condition for business success, etc.).
- More effective measures against dumping and abuse of a dominant position.¹¹⁵

However, the entire consideration of economic policy must be outlined by the need for raising the standard of living. Even if manufacturing with high added value develops rapidly, it does not guarantee higher wages and better working conditions for employees. Therefore, it will still be important to promote social dialogue and collective bargaining. Therefore, it will be necessary to strengthen the role of employees in the very running of companies and thereby strengthen economic democracy.

115 The final part is based on the official ČMKOS document: ČMKOS Input on Determination Czech Republic Priorities for the Sibiu Summit, which was drafted by ČMKOS based on a request by the Office of the Government of the Czech Republic and subsequently presented at the round table of the EU National Convention on 29 March 2019. Unfortunately, the National Convention's recommendation of 17 April 2019 contains none of the points discussed in the paper (www.narodnikonvent.cz).



Summary and Recommendations for CZ Economic Policy

The Czech Republic Economic Model Implausibility

The thirty-year development of the Czech Republic has shown very clearly that the long-term strategy of the Czech Republic cannot be built on low wages, a low level of labour law and social protection, low taxes, and a weak exchange rate of the Czech crown. Such a path causes us to permanently lag behind the developed countries of Europe and has serious socio-economic and socio-political consequences for current events in our country and our readiness for future challenges.

A very cheap workforce seriously limits the necessary replacement of living labour with advanced technology (automation, robotization, new technologies), but above all, long-term, it shapes the structure of the economy in the direction of strengthening production based on cheap labour, and thus low qualifications, and inevitably leads to technical and technological lagging behind.

Currently, this extensive concept of economic development leads to the demand for more and more low-skilled workers who work with low productivity. Therefore, it currently leads to an increasing import of labour from more distant and cheaper destinations.

The current system has formed two groups of companies.¹¹⁶ The first group includes companies that have foreign owners and are part of multinational concerns. These, usually larger companies, benefit from their involvement in international trade, work with high natural labour productivity, and pay their employees above-average wages in relation to the overall average of the Czech Republic. However, these wages still remain at roughly a third of the wages paid in their parent companies in Europe.

The second group of companies – usually smaller companies with Czech owners – work either for the domestic market or as subcontractors for large foreign companies. Oftentimes, they also work for the first group of companies. The second group companies are usually in a subordinate position in relation to large foreign companies and their performance level is thus determined by this relationship. That is why they also provide significantly lower wages – sometimes up to half compared to parent companies in Europe. Moreover, their possibilities to increase the technological level of production and to innovate are limited, because their realization prices are low and do not allow them to achieve an adequate profit.

116 Naturally, this division is very rough; there still are some intermediate forms between these two groups.

Price competition that relies on low wages and labour costs actually increases economic inefficiency because it supports an outdated production structure. By being able to increase the degree of undervaluation of their employees' rewards, firms can avoid more radical measures, such as restructuring production, reorganizing corporate management, and replacing outdated management with modern technology.

In a market environment where competition relies on the product development process, a low-wage strategy aimed at maintaining the profitability of increasingly outdated equipment and production lines can only bring temporary relief. It is good to emphasise that there is a floor for wages and labour costs in any labour market. In contrast, in the long term, the limit for cost reduction due to technical improvements is extremely low.

In theory, if companies invest insufficiently in new technology, they can gradually get to the point where the product becomes so outdated that it cannot be sold at any price. In such an environment, firms and the economy spiral downward, increasingly pursuing more short-term goals, and their survival increasingly depends on cost cutting. The result is a shift in structure to low-sophisticated assembly-type production (among other things, reacting very quickly to economic developments or changes in external conditions).

These processes can be precisely observed in the Czech Republic, which today is realistically faced with a clear choice, whether to continue to promote the policy of cheap labour, a cheap exchange rate of the Czech crown, low social standards, and low taxes, or whether to follow the path of modern development. Even though it may not seem likely, this key question is actually “already on the table” and does not only concern the Czech Republic. According to the European Bank for Reconstruction and Development, former socialist countries as a whole are in a “middle-income trap” and the resumption of their upward convergence with developed countries will depend on the emergence of a new growth model based on domestic innovation and technological progress.¹¹⁷ That is, on the changes that will bring these countries from the inferior place of complementary subordinate economies of more developed European states to the forefront in some modern and developing industries and fields, where it is possible to achieve equal prices and high labour productivity.

The first key condition for a successful change in the economic model of the Czech Republic – nationwide agreement and cooperation on fundamental economic and social changes

It is clear that considering not only the current state, structure, but also the development trajectory of our country, this is a very difficult task. It is made more difficult by the fact that even the most developed countries of the European Union face a similar challenge, albeit at a significantly different level, from the point of view of the globalised economy. The questions arise of, whether after thirty years of promoting and supporting the policy of a low-cost economy, this long-term trend can still be fundamentally changed in a historically short period of time, whether it is possible to realistically **outline, prepare, and implement a Czech strategy of economic change** in a situation where the “cards have long been dealt” and where it is, naturally, infinitely more convenient to ride the current growth wave for a while longer and only deal with problems when their solution becomes inevitable.

Only then will there be a possible opportune time to fulfil the **fundamental and key conditions for any change of this magnitude. This condition is a nationwide agreement and cooperation of the main political parties, social partners, and the majority of society on the necessity of fundamental economic and social changes.** This was also the case of some small economies, which, in a

¹¹⁷ EBRD (European Bank for Reconstruction and Development), 2018, EBRD Transition Report 2017–18: Sustaining Growth, London, EBRD, pg. 7.

difficult situation, were able to take advantage of the opportunity and their hidden strengths and succeed in the “Irish miracle” or the “Finnish modernisation”.

However, a stalling attitude is unacceptable for us – there is nothing to wait for. Let’s learn from our own history – there is a lot to build on. After all, the basis of the prosperity of today’s (often uncritically) admired first Czechoslovak Republic was already established under the Austrian-Hungarian Empire.

At that time, Czech businessmen and especially industrialists understood that if the Czechs wanted to break free from their subordinate role and become a strong, recognised, and truly equal nation with the leading nations of the monarchy of that time, they had to succeed economically. They understood they had to create a strong national economy, which they could only have if they offered the world something the others were unable to.

Some of what became the top Czechoslovak companies originated at that time. Just briefly – there were, for example, high-end arms factories, firms of large-scale electrotechnical production, i.e., capacities capable of producing investment units. But there was also a developed consumer industry – we were, after all, a world shoe powerhouse, etc. This is from where the successes of people like Lanna and Hlávka, or later Křížík, or Kolben, Baťa and others stem. These were people who devoted themselves to what we now call the real economy. They were also people with whom leading politicians and economists of the time – Mr. Rašín, Mr. English, and also Mr. Preiss, the director of Živnobanka, the largest Czech bank – could cooperate or follow up on their legacy. They too were important in creating what we now call an economic environment and, concurrently, a strong banking sector supporting domestic industry.

Therefore, we should start a discussion between representatives of Czech companies, employee organizations, trade unions, and other interested parties about the future of Czech society and the Czech economy, and about the place of the Czech state and its economy in the European and world economy. Such a discussion has not yet taken place in Czech society, or it only marginally touched on these topics.

Isolated documents called sub-strategies, which were created from time to time or are still being created by some government institutions, cannot fulfil such a task. They are primarily an expression of the interest of the relevant institutions to “defend” their competences and are often ideologically biased – entirely without respect for the opinions of social partners and the wider societal consensus. That is why we consider it extremely important to start a debate on such topics and to find a new trajectory for the Czech economy to follow for the next decade.

On the other hand, we should be aware that the world around us and the Europe we are a part of has changed significantly since the war. Economic groups have emerged here, which today set the rules for all their members – and, as usual, – for some, these rules are more flexible. This is something we have to acknowledge if we want to navigate the real world.

Today, it is not entirely easy to find such a strategy that would allow faster economic development. There are rules for the size of the state budget deficit, there are rules for state support. Customs protection against dumping imports cannot be enjoyed, and there are a number of other restrictions.

Creating a faster growth strategy for today’s economy is a more difficult task than ever before. Nevertheless, such a task is ahead of us – otherwise we would have to accept the fact that we are to remain in the category of developing countries – “the poor relatives” of Europe.

The second key condition for a successful change in the economic model of the Czech Republic – the fight against corruption

As a step that should precede all real considerations on designing a new economic policy of the state, ČMKOS has always emphasised and continues to emphasise the necessity of fighting corruption and other negative social phenomena.

In fact, corruption is only the tip of the iceberg, one of the tentacles of a multi-layered system of

negative socio-economic phenomena. Thus, an equally intensive fight against organised crime, tax evasion, money laundering, and illegal work must be a part of the “fight against corruption”. Without these measures put forward, ahead of all measures in the economic and social sphere, the effectiveness and efficiency of the adopted economic policy measures cannot realistically be guaranteed.

These phenomena undermine the functioning of market principles, the equality of rules and, as a result, the decision-making of market entities. Massive tax evasion, including “semi-legal” or “legal” tax optimization¹¹⁸, erodes the integrity of the tax system by draining funds from the official to the unofficial economy, and destroys the state’s economy, especially the financial system. In these conditions, it is difficult to achieve and permanently maintain macroeconomic stability.

Crouching corruption, booming tax evasion, general theft, more and more corruption scandals reaching the highest levels of politics, non-compliance with agreements – all this disrupts the stability, efficiency and, above all, the credibility of institutions, the legal system, and the system of the whole society.

In the formal and informal fabric of social relations in Czech society, changes are evidently being established that are almost irreversible, and after they are gradually institutionalised under the influence of pressure groups, i.e., become part of the daily life of citizens and companies, they quite naturally disrupt the basic pillars of the functioning of the state and democratic establishment. The growth of corruption, as one of the most prominent manifestations of this system, discourages the entry of foreign capital, while attracting the entry of money (and influence) of mafias and criminal organizations, resulting in distortion of markets and overall lower efficiency.

In addition to the fight against corruption, it is absolutely necessary to draft and link with this document an action plan to fight tax evasion, money laundering, illegal work, and other negative economic phenomena. This means, among other things, not only consistently continuing and deepening and, most importantly, using for control activities the tools and processes adopted in this field in the previous period, such as control reports, EET, and property declarations¹¹⁹, but also looking for other ways and directions to fight these negative phenomena.

Unfortunately, what is very worrying is the apparent effort of a part of the current political spectrum to avoid such measures or reduce them to a form that would not be effective enough. Therefore, the urgency of the fight to suppress corruption is no less pressing than in the past.

The fight against usury and usurers

From the point of view of short-term measures, the fight against usury and moneylenders is of a definite priority, forming an absolutely indispensable part of this plan (and at the same time one of the key measures in the fight against poverty). We are convinced that usury can be significantly reduced by a fairly simple regulation, i.e., by enforcing a maximum limit for interest on loans including all fee¹²⁰ for example, by stating they may not exceed five times the official consumer price inflation index, i.e., rates

118 Unfortunately, this also includes moving companies’ headquarters (for tax reasons) outside the Czech Republic, even in the case of companies whose owners emphasise that they are Czech companies. It is a shame that a certain pride that they run a Czech company, and therefore logically keep its headquarters and pay all taxes in the Czech Republic and thereby contribute to the development of Czech society, has disappeared among some Czech owners.

119 It is interesting how much attention has been paid to VAT control reports (and the disclosures derived from them), or how much attention is still paid to a completely standard tool like the EET, while basically no attention is paid to the law on evidence of assets. It is possible that this law has a preventive effect, but in our opinion, it has failed to reveal the “extraordinary” enrichment of some people in the past.

120 It is not just about the RPSN, i.e., the annual percentage rate of costs (for a loan), which contains its own interest rate as well as other costs associated with the loan, charged to the client. However, it must be added that the RPSN regulation is insufficient to determine the maximum rate as the RPSN does not contain sanctions for breach of contract – commonly (very popular with usury companies) late payment interest and a contractual penalty.

set by the relevant regulator – e.g., the MoF CR in cooperation with the CNB.¹²¹

Interest rate ceilings are set in 13 EU countries. In the Federal Republic of Germany (the Supreme Court set a ceiling at the level of a maximum of twice the interest rate applied on the market), in Poland (a maximum of 4 times the Lombard rate), in France (a maximum of the market rate multiplied by a coefficient of 1.33), in Switzerland (15%), in Hungary (35%) etc. Maximum rates are also set in the USA and parts of Australia.

Other measures in the fight against usury: enact the obligation to state in all credit contracts in a clear and visible table all the data relating to the given contract, including impending sanctions, and to enact the obligation to state in all contracts a warning against irresponsible borrowing, which can lead to personal bankruptcy (following the tobacco system).

It is also necessary to ban television advertisements for consumer credits and loans. Television advertising is in direct conflict with the interests of the consumer and gives the impression that going into debt to buy consumer goods is normal, or even a beneficial thing that brings a solution in case of financial difficulties. Additionally, to support the teaching of financial literacy early on during the lower level of elementary schools and to abolish arbitration clauses in consumer loans as well as clauses of directly enforceable records drawn up by a notary or bailiff. It is a direct protection against foreclosure mafias, which are in this way (and in many other ways directly) connected to various financial entities engaged in lending money through agencies.

Three Strategic Problems of the Czech Republic

Let us now return to the question of the possibility of a precise formulation of the economic strategy change for the Czech Republic. It cannot be denied that this question has many levels and problems.

The Czech Republic – as far as strategies are concerned – does not have such a bad reputation. Currently, more than 100 different documents, called strategies, are approved (i.e., both the government and the state administration should follow them). They are strategies of various focus – from the strategy of energy policy or raw material policy to strategies narrowly focused only on a certain section of social policy, such as the strategy of social inclusion. However, there is no such thing as a comprehensive strategy that would define the really essential goals, or rather the key national interests, of the Czech Republic.

Previous attempts to establish a strategy for the entire national economy mostly failed at the very beginning. Within a year or two after their approval or processing, the situation of the Czech economy was different than the strategy had predicted or there was a change of government, which decided to follow a different path.¹²²

The reasons why such strategies could not yet be drafted are essentially simple. If we turn back to the period before the establishment of an independent state, we can see that the entire political scene of that time had only one task – to establish an independent state. It was only after its creation that

121 One of the first such offices established during the first Czechoslovak Republic (in 1919) was the Office for the Suppression of Usury. It was a reaction to the difficult post-war situation, when due to the post-war shortage moneylenders (referred to by a Czech pejorative term of “kefas” derived from German Kettenhändler) thrived and, due to post-war inflation and the devaluation of money, usury took place in kind (mainly food, coal, metals, etc.).

122 The penultimate attempt was made sometime in 2005-2006. It too had a number of problems and was certainly not comprehensive. Moreover, a deeper discussion did not even develop around it. Maybe because the next election was just around the corner and maybe because even the authors didn't want to discuss it too much, convinced of their truth. In another words, this attempt did not appeal much to the general or professional public. The last attempt to formulate a comprehensive economic strategy for the Czech Republic took place in the fall of 2019, when the economic strategy was supposed to build on the Innovation Strategy adopted at the time (which, however, was more of a marketing project than a real plan in this area). Characteristic for this stage was a very extensive approach signalling the “gathering method” and a striking absence of summarising and cross-cutting passages. Work was interrupted at the beginning of 2020 in connection with the onset of the Coronavirus crisis and was not resumed until the end of the election period.

internal political struggles began, because everyone had their own image of the state.

The situation is essentially the same today. If we do not reach basic agreement on some fundamental goals, documents – strategies – will still only be created to remain “on paper”. If we associate the future with, for example, suppressing tax evasion with the help of EET, there will be a sufficiently large group of people who will explain that it is not necessary, etc. In the case of tax evasion, we should not forget that tax evasion permitted by the state in the case of light heating oils, worth tens of billions of crowns, happened as the independent Czech state was being established.

Similarly – the demand to limit the interest on consumer loans will immediately provoke a reaction from the entire banking sector controlling the media, and it will be explained that it is not realistic or possible, and that it will actually lead to an increase in fraudulent illegal loans, etc.

Therefore, any attempt to create a more comprehensive economic strategy is conditional on having wider political support and, of course, on being supported by citizens as well.

Any attempt to formulate a more global solution to the current and future problems of the Czech Republic and the direction of its economic policy will have to deal with three strategic problems that have been created in the Czech economy due to the influence of the contemporary economic model and which will fundamentally influence the real implementation of the necessary changes in the Czech Republic’s economic policy.

The first strategic problem of the Czech economy is the **permanently diminishing potential of a workforce with a long-term industrial tradition and a relatively high level of qualification and education**. Unfortunately, most of the emerging tertiary education capacities are focused on the humanities and will therefore not lead to immediate overcoming of the shortage of technical professions.

The second strategic problem of the Czech economy is its **dependence**. The Czech economy has transformed from a finalising economy to a dependent economy, i.e., an economy in a dominantly subcontracting position, as is reflected in a number of important categories, primarily in the **added value in the economy, in the division of the product between wages (employee compensation) and profit (gross operating surplus), as is very clear from the outflows of profit from the country**.

The third strategic problem of the Czech economy is the **very high participation of multinational companies in key positions of the Czech economy**. The low representation of private local companies is a consequence of the weak and underdeveloped environment after the period of state socialism and the chosen strategy of transformation. This has led to a weak legal framework, a weak structure of domestic enterprises, and limited state support for business activities and economic development. The consequence of this is the marked inhomogeneity of the Czech economy, where a large number of “multi-speed entities” operate, which of course significantly limits the outlining of common economic policy measures.

Economic Strategy Change Outlook

1. Strengthening the State Role and Outlining Key Infrastructure Projects

Past unsuccessful attempts to define comprehensive economic strategies of the Czech Republic led us to believe that the formulation of a change in economic strategy based on large projects is far more feasible. And not only because it could be more independent of changes in the political environment, although some attempts to modify the strategy based on changes in the conditions of economic development cannot be ruled out. **Large projects could be the framework from which other considerations can be derived, while corporate or regional strategies can also be derived from large projects.**

Why do we not have large projects today? Maybe because we are not able to define them, maybe because we even cannot realize them, and perhaps because we do not realize their significance. It is as if our politicians or businessmen were not aware of the importance of such big challenges and big plans for the development of every economy. When President Kennedy declared the conquest of the

moon as a national mission years ago, it meant a great challenge to the entire economy. We can also mention a more modest goal – the establishment of a high-speed railway system – the well-known TGV system in France and subsequently the high-speed railway system in Western Europe, which meant a revolution in an industry that was already “depreciated”. There is another example from the early 1970s, when Western European countries founded the Airbus association, which is today the world’s largest manufacturer of passenger aircraft even though it started from a very backward aviation industry.

Such a large project could be the accelerated completion of the motorway network in the Czech Republic. However, it is not a project that would significantly improve the performance of the economy – to the contrary, it is a project that can be used to demonstrate the inability to implement and complete it.

The establishment of a sufficient *develop water transport in the Czech Republic*, looks significantly more promising. A software solution in which the Czech Republic already has experience (mainly in the field of cyber security) will also be important.

The energy sector is also very important. The development of nuclear energy and related energy engineering is key for the Czech Republic.

A project to *develop water transport in the Czech Republic* could follow in this area. The completion of the weirs on the river Elbe would make it possible to develop transport along the Elbe and the Vltava rivers, launching the Prague – Dresden, or Hamburg, route to support tourist influx. The Danube – Odra canal would not only enable the creation of another important European transport route and the development of tourism, but also positively affect the worsening situation in the field of water supply in the important regions of Moravia and Silesia.

In this way, this project would be linked in part to another key infrastructural project, namely the *retention and economical management of water*.

The long-discussed *network of high-speed railways* ensuring the connection of our main centres with the European high-speed rail transport system would undoubtedly represent a significant challenge for domestic manufacturers of the necessary technology.

2. Support of Education, Research, and Development

Naturally, it is not just about large infrastructure projects. The time has come to extend our attention onto the development of long-term growth factors. Practical steps to develop innovation capacity and technological absorptive capacity relate to a wide range of activities, including investments in the knowledge and adaptability of the human factor (lifelong education, increasing the share of tertiary education, general computer literacy, language training). It is about improving the transfer of research findings into economic practice, easing access to risk capital, and overall professional and territorial mobility on the labour market. The prerequisite is, among other things, overcoming the separation of universities and technical colleges from the business sphere and strengthening the previously traditionally developed technical and apprenticeship education.

The following are considered to be the key here:

- ***To substantially increase support for technical education*** – from apprenticeship schools and secondary technical schools to universities. The lack of well-trained and prepared technical university graduates experienced by Czech companies is becoming a significant barrier to their development. Substantial support for apprenticeships – the lack of qualified craftsmen is a barrier to further development of services, etc. This means the support for technical education and apprenticeships in a modern form, aimed at the adoption of new modern technologies and not an outdated type of education, which unfortunately still persists in certain institutions. We consider the restructuring of education towards higher support for the real economy to be extremely urgent. On the other hand, greater support for modern technical education should not lead to the suppression of social

science education at all educational levels. In an era that will be ground-breaking in terms of technology, we need both technically educated people who understand the wider social impact of their actions, and humanistically educated people who will accompany society through this transformation – perhaps even in the form of thinking about and implementing complex economic strategies;

- **To substantially increase support for research and development** with the aim of increasing the share of technology exports in Czech exports and the role of Czech companies as final – general – suppliers of large investment units – power plants, food technology, chemistry. This means increasing this export to the markets of developing economies, i.e., also to places where Czech companies were present in the past – to the market of developing countries, namely BRICS and CIS countries. To devote resources to research and science where it really brings a real effect. Not to support what only pretends to be science. Some results, for which millions of subsidies are drawn, only represent paperwork with minimal benefit for the Czech Republic. It is not possible to allow some to make a new business out of such “science”, while just “milking the state”.
- **To establish a state export company to support the export of Czech technologies to the markets**, that would ensure comprehensive exports with a state guarantee. This is of great importance for countries with a state-controlled economy.
- **To increase the share of research and development**, to coordinate the development of science and technology parks and innovation centres, to direct a significant influx of money into the development of science and research – above all to change the current way of its management, making it significantly more efficient.

3. Support of Other Key Areas

- **To completely change the current support of Czech agriculture** with the aim of increasing the share of domestic food in consumption to 80-90%: it concerns meat, vegetables, fruit, and milk. The question of self-sufficiency in food production will become crucial for the security of the state in the coming years. We must understand the development of agriculture as a resource for revitalising the rural area and creating job opportunities in the countryside. To do this, we need to support the development of the cooperative movement – the association of producers – as a counterweight to sales monopolies and trade chains and a possible source of regionalization of production (use of local resources).
- **To support small and medium-sized businesses** – to do this, the existing Czech-Moravian Guarantee and Development Bank (ČMZRB) needs to be transformed, or a new bank providing real support to start-up entrepreneurs and the segment of small and medium-sized companies needs to be established.
- **To support tourism**, this means ensuring a coordinated approach (resort, regions, municipalities) and a significant improvement in the quality of services.
- **To support the development of rental housing** – construction of at least 50 thousand flats in a rental housing regime with reduced rent so that, for example, the land is bought at a discounted rate, or at a capped price, and the rent is determined only at cost and with the commitment that it will be maintained for a period of twenty or thirty years (similar systems with lower rents run in Western Europe, e.g., in France).

The above suggestions for measures are certainly not final. Undoubtedly, it would be possible to significantly expand the list. We see their purpose primarily in turning attention to the real problems of the real economy and to the essence of the current problems that the Czech economy is experiencing.

4. Establishing Order and Justice in Public Finance Area

In proportion to the tasks mentioned under the previous points, it will be necessary to fundamentally restructure the public finances of the Czech Republic and its tax system. Below, we provide a brief description of this change:

On the revenue side: These measures can be summed up in the request to change the structure of the tax system and boost direct and property taxes and implement tax progression. However, there is currently no point in discussing how deep these absolutely necessary changes will run (e.g., the level of rates, etc.), at least until the “zero stage” of the tax reform is implemented.

This initial “zero stage”, which is concerned with nothing more than establishing order in the tax system and ensuring basic tax justice for all taxpayers, *should primarily include:*

- **Fundamental equalisation of all tax subjects** (e.g., solving the problem of taxation between self-employed persons and employees)
- **Proper assessment and eventual elimination of a large range of various exemptions**, discounts, and reliefs in individual tax ranges, about which no one even knows why they still exist and what social function they fulfil or should fulfil. It is necessary to assess whether they really express the interest of society as a whole, or whether they are just the interest of narrow lobby groups.
- **Solving problems associated with the abuse of intra-group (transfer) prices**, and the provision of services within the group for the purpose of tax optimisation.
- **Development and implementation of a comprehensive programme to combat the shadow economy**, illegal work, and related tax evasion. It is necessary to prepare and launch a continuous campaign against tax evasion and other negative economic phenomena, not only in the Czech Republic, but also in tax havens, to fundamentally strengthen the fight against undeclared work and other illegal activities (the so-called Švarc system), threatening the stability of public finances (mainly insurance funds).

On the expenditure side, it is necessary to carry out a detailed audit of all expenditure items of all parts of public finances and, on the basis of this audit and selected priorities, prudently reduce the expenditure side of budgets – not across the board, but by individual items.

Prior to any interventions, to thoroughly map what is actually covered from the individual budgets; to check whether we are not missing much-needed public resources for projects and expenses that should have been cancelled a long time ago due to various “unturned taps”. It will be very surprising to find out what kind of money is hidden behind the discrete allowances and who is connected to them in terms of fund drawing. Even on the expenditure side of public finances, nothing more is required than the establishment of elementary rules of efficiency – and in some parts even just the establishment of order. The taxpayer has the right to know for what purposes their money is being used.

5. Economic Policy Model Change in EU Context

The Czech Republic does not exist in a vacuum. The key question not only for the Czech Republic, but for all CEE states is how to fundamentally change their economic policy and thereby achieve significantly faster convergence of their economies. In our opinion, the **Czech Republic, as a medium-developed country with a long industrial tradition**, must take advantage of the maximum use of new directions and opportunities for the development of science, technology, digital technologies, and new management systems and skip the entire development stage, thus reaching the level of the most advanced countries much faster (as it was done in the past, for example, in Finland or Denmark). It is precisely the question of “rearmament” – changes in the structure of the economy, the role of the state in these processes.

Naturally, this change in economic policy will not be possible without close cooperation and

collaboration both with the EU authorities as a whole and with individual states. In our opinion, it is necessary to internally combine two, thus far relatively separate, processes. Even the most developed EU countries are not problem free. They are currently facing increasingly strong global competition from China, Japan, the United States, and other Southeast Asian countries in the field of cutting-edge technologies, artificial intelligence, digitization, new telecommunications technologies, biotechnology, autonomous driving, robotics, etc. and are looking for ways to counter this global trend.¹²³ In our opinion, it seems absolutely necessary to involve new countries more closely and comprehensively in these global challenges, to include them in a comprehensive solution, and not to leave them behind “to wrap something or to screw a handle onto something”. We are convinced that we will all benefit from this procedure.

In these processes, the European Union and the European Commission must have an irreplaceable initiating role of a coordinator and driver. In our opinion, it faces a number of tasks that are already relevant today. Without aiming to provide an exhaustive overview of such tasks, at this stage, we consider the most important ones:

- To process an independent, comprehensive, and impartial analysis of the strengths and weaknesses of all economies in the European Union. (We need to know where we stand to handle the future together.)
- To initiate a detailed discussion on the position and role of the EU common budget in this area.
- In order to strengthen innovative technologies and protect strategic areas, it is important to fundamentally redefine the question of the position of the state and its role in the economy and the rules of economic competition (e.g., the possibility of state involvement in the economy, state interventions or the transfer of ownership of key companies to the state in the event of a hostile takeover by competitors, temporary state support in the field of innovation, relaxation of rules in the field of company mergers in areas where size is a condition for business success, etc.).
- More effective measures against dumping and abuse of a dominant position.¹²⁴

However, the entire consideration of economic policy must be outlined by the need for raising the standard of living. Even if manufacturing with high added value develops rapidly, it does not guarantee higher wages and better working conditions for employees. Therefore, it will still be important to promote social dialogue and collective bargaining. Therefore, it will be necessary to strengthen the role of employees in the very running of companies and thereby strengthen economic democracy.

123 The New ‘German Industry Strategy’, Nationale Industriestrategie 2030, Bundesministerium für Wirtschaft und Energie (BMWi), Berlin, February 2019, is very inspiring in this regard. (https://www.bmwi.de/Redaktion/DE/Downloads/M-O/nationale-industriestrategie.pdf?__blob=publicationFile&v=12).

124 The final part is based on the official ČMKOS document: ČMKOS Input on Determination Czech Republic Priorities for the Sibiu Summit, which was drafted by ČMKOS based on a request by the Office of the Government of the Czech Republic and subsequently presented at the round table of the EU National Convention on 29 March 2019. Unfortunately, the National Convention’s recommendation of 17 April 2019 contains none of the points discussed in the paper (www.narodnikonvent.cz).



2020-2021 Covid-19 Crisis and Its Effect on CZ Wage Convergence

The onset of the Coronavirus crisis at the beginning of 2020 stopped the rather promisingly developing economy of the Czech Republic and fundamentally changed, today we can say it fundamentally redefined, the economic policy of the state, despite the fact that the actual economic effects of the crisis were significantly – by numerical orders – lesser than initially estimated.

The decline in GDP in 2020 “surprisingly” reached only 5.6%. It turned out that the Czech economy is much more resilient than expected. **The actual data on the development of GDP showed that the Coronavirus crisis did not even remotely affect the entire economy of the state, but only a small part of it. Key companies – “main GDP producers” – operated with just partial restrictions. Only some selected industries and service sectors were affected, which, actually, do not have a large weight in relation to GDP creation (about 10% of output) – definitely not as large as attributed by the media. However, this made it possible, and in fact still makes it possible, for essentially small pressure groups – mostly professionally and regionally restricted with the help of the media, to create the impression that the economy, if not today, is sure to collapse entirely tomorrow.**

Unfortunately, some economists and politicians were very happy to draw on to those individual signals from the microsphere and, without any correction, have converted them into pessimistic estimates of the development of the economy. According to them, the decrease should have ranged from minus 10 to minus 15 percent; according to former President Klaus, even between minus 15 and minus 20% of GDP. Unfortunately, the effects of this policy are fatal for the further development of the Czech economy:

A. Negative Development of State Budget and Public Finances This Year and Following Years

Last year, the government and subsequently the Parliament were pushed by various lobby groups into hasty tax measures of a very large scale. Under the heading of “help the economy against the Coronavirus effects”, tax changes of a permanent nature were adopted, under an artificially created time pressure and without proper consideration of all the effects, resulting in changes that under “normal circumstances” would be very difficult – if not impossible – to implement.

We can apply this conclusion to practically all tax packages adopted last year. Of the specific measures, especially the loss carryback, real estate transfer tax cancellation, meal plan flat rate implementation, and the completely irresponsible way of cancelling the super-gross wage rate (which will have “repercussions” next year in the additional, already approved, increase in the tax credit per

taxpayer)¹²⁵. We must not omit such inconspicuous, but effective, measures as the allegedly temporary “shutdown” of the already functioning Electronic Records of Sales system, without triggering its final stage (EET will remain officially switched off until the end of 2022 – for now).¹²⁶ These measures thus completed the destruction process of the tax system started by the ODS party and its equal tax project (see ‘Blue Chance’) in the decade before last, having onset the process of decapitalisation and subsequent privatisation of public insurance systems – especially health and pension systems (see below).

These problems are already manifested in the development of the state budget this year. In five months, according to cash flow, the state budget deficit reached CZK 255 billion, i.e., the trend indicates that, at the minimum, the huge state budget deficit planned for this year (minus 500 billion CZK) will be reached.¹²⁷ In practice, it can realistically be expected that there will be a significant increase in the state budget deficit compared to last year, when the real SB deficit reached the value of -367.4 billion CZK (and GDP fell by -5.6%). All this in conditions where, according to the latest forecast, the MoF CR expects a growth of +3.2% this year. So, in a relatively deep downturn in the economy, we achieved a significantly lower deficit than when the economy is growing. This statement alone speaks louder than all deep analyses. **The fact that the state budget deficit does not decrease when the economy grows, but on the contrary increases, is a confirmation of what we claimed all last year, namely that the excessive acceptance of permanent tax reductions of a fundamental nature and volume will permanently damage the public finances of the Czech Republic, especially the state budget.**

Unfortunately, we also have to state the absolutely obvious – that the MoF CR has effectively resigned from the real management of the public finances of the Czech Republic, which is evidenced not only by the completely passive draft of the state budget for this year, **but also by the fact that there is still no publicly known consolidation plan of public finances.**

B. Slow-down or Halt Wage and Salary Growth This and Next Year

The absolutely fatal problem of the state budget this year, but also in the coming years, is, and will be even more, the significant slowdown in the growth of wages and salaries as one of the main sources of budget revenues (according to our estimate, about 87% of public finance revenues are directly or indirectly linked to wage growth and salaries).

However, this fundamental problem seems to be poorly understood. Unfortunately, the government views wages and salaries with “enterprise” optics, as a cost and not as a key source of income for public finances. If it were otherwise, government officials would not be able to advocate the stop in wage and salary growth, since workers are said to have already received a boost from tax cuts (we will come back to the relevance of this claim later). The growth of wages and salaries already slowed down significantly last year. **This year, unfortunately, the situation will be repeated due to the super-gross wage move, very varied wage growth, and calls from government representatives to stop wage growth, Coronavirus crisis effects, competition by cheap imported labour (and also, for example,**

125 The impact of this measure on the year-on-year growth of the net nominal wage can be estimated at around 0.7% at the level of the average wage.

126 It is very interesting that, for example, in the submitted material, as well as in the Convergence Programme, there is evaluation of this measure (after all, there is no mention of turning the EET off per se). The actual impact comprises two factors – the impact of actually suspending an already functioning EET system and that of not triggering its final phase (ČMKOS can estimate the total annual impact at around CZK 10 billion).

127 However, it cannot be ruled out that the Ministry of Finance may adjust the negative development of the budget through various steps, at least before the elections. (The point is that during the year, the performance of the state budget is evaluated according to the development of the accounts – i.e., the cash performance – which directly responds to administrative measures – primarily on the expenditure side.

extreme growth in mortgages). In our view, it will be a great success if real wages and salaries as a whole hover around zero this year.¹²⁸

C. Long-Term Effects of Tax Changes

The above-described current issues are really only the “tip of the iceberg”. The tax changes implemented in 2020 have long-term systemic effects. These separately presented and assessed tax changes have actually “merged” to create a new qualitative feature. Incidentally, last year, **a fundamental tax reform was implemented in the Czech Republic**. “step by step”. At the same time, it triggered fundamental and essentially irreversible processes in the Czech economy and society.¹²⁹ primarily:

- a) **Recurring very high public finance deficits:** the Czech Republic entered a period of very high public finance deficits. After last year’s deficit of approx. CZK 370 billion (according to cash flow), this year’s planned deficit of at least CZK 500 billion is more than certain to occur. From a general point of view, such deficit level (which is still growing) is practically irremediable without the adoption of fundamental measures on the income and expenditure side of public budgets. On the other hand, it is more than obvious that the tax measures implemented last year eradicated at least half of these general possibilities of consolidation. *The implemented “tax reform” effectively shifted the role of public finance consolidation to the expenditure side only, which of course entails a tangible risk of endangering economic growth and thus the consolidation itself (see the situation ten years ago).*¹³⁰ Naturally, this is aimed primarily at middle and low-income groups of the population, especially employees and pensioners. Moreover, with these high deficits, it is not at all clear whether they will help to boost the economy, and, primarily, whether they will help its restructuring and long-term high economic growth. It is almost certain that most of these “tax impulses” will only mean an increase in the profits of companies, and that, as in previous years, those will largely “flow” abroad.¹³¹
- b) The implemented tax changes **further deepen the unfairness of the Czech tax system in a fundamental way**. The fundamental problem of the tax system in the Czech Republic is that most taxes are directly linked to wages and their development. This is due to the fact that the largest tax source of public finances comprises employee insurance premiums, indirect taxes, and income tax from dependent activities, with the latter already being significantly higher than the corporate income tax. (In addition, the development of wages directly affects the development of pensions and thus also the amount of indirect taxes paid by the second largest group of consumers after

128 Among other things, this development indicates the growth of wages and salaries in the 1st quarter. Indeed, if we break down the slightly optimistic overall growth of 3.2% into individual sectors, it becomes quite clear that this growth is mainly driven by salary growth in the health sector (11.3%) and education (4%), while growth in other sectors is very low, barely at the level of inflation (industry and trade 2.2%, agriculture 1.5%, transport and construction 1%, public administration 0.5%).

129 According to our estimate, the total annual impact of the 2021 tax cuts on the entire public finances will be around a quarter of a trillion crowns. This undeclared tax reform thereby surpasses the previous record in the reduction of tax revenues associated with the introduction of the so-called flat tax in 2008 (at that time, the total impact of the tax reforms was around CZK -180 billion per year, but the measures were introduced gradually, and the impact was thus spread over more years).

130 As a result, the health insurance system, which will have to be continuously supplemented from public budgets, will run into chronic problems. Efforts to transfer some substantial expenses to the income account from the EU are very limited. Revenues from the EU are fundamentally insufficient to offset potential tax shortfalls.

131 This statement seems to counter the proposal of the state budget for next year, which expects a decrease in the deficit in fact only as a result of measures on the income side. Unfortunately, the expected decrease in the state budget deficit resulting from the relaxation of measures to fight the Coronavirus, after which the budget will still remain in a deep deficit estimated at CZK 390 billion, cannot be called budget consolidation – not even remotely.

employees).

All the measures of both tax packages adopted last year are intended primarily for companies and the self-employed, including the abolition of super gross wages. This means that the fundamental inequality in taxation between individual taxpayers is deepening. The structure of taxation focused on the taxation of labour and consumption with very low taxation of capital and property (in the Czech Republic, practically all property taxes have been abolished) is strikingly similar to the taxation of less developed emerging economies.

- c) The enforced method of abolition of super-gross wage ***upsets the social cohesion of Czech society***. The cancellation of the super-gross wage increases the pressure to stop the already mentioned growth of wages and salaries, which is supposed to be “replaced” by the state tax reduction. In fact, for most employees, this step brings very little “extra” compared to what they would be able to negotiate in the framework of collective bargaining. In addition, this reduction will not affect the growth of wages and salaries for only one year (as it seems to be the case today), but it is necessary to expect a slowdown or a halt in growth for a number of years.¹³²

In reality, this is a false increase in wages. However, the state implements this “extra pay for employees” (of course, as well as the reduction of other taxes) against incurred debt. The reduction of taxes will increase the deficit of the state budget. In the first phase, the state simply borrows the funds, primarily from the state budget, to cover the tax shortfall. The resulting debt will then be repaid by employees (and pensioners) in various forms. In addition to slowing down or halting the growth of wages and salaries for the next few years with a parallel rise in inflation, this will also very likely result in an increase in indirect taxes (VAT and consumption taxes), a decrease in employment in public services, and eventually an increase in co-payments for the financing of public services (education, healthcare, social care), and quite likely also in the privatisation of some of their lucrative parts and, last but not least, slowing down the valorisation of pensions (and transferring part of the public social insurance to a private one). After all, this was also one of the main reasons these seemingly incomprehensible measures were implemented. However, it is also impossible to overlook the measures at the level of regions and municipalities, by which the municipal and regional budgets, in addition to the indisputable pressure on the central budget for compensation (partially already carried out during the final approval of the budget), will deal with the loss of income from shared taxes (approx. -80 billion CZK annually). Here, too, pressure can be expected to reduce a whole range of expenses, such as expenses for culture, sports, and transport, and also in terms of the number of employees of local governments and their salaries. However, the question of their own income will not remain unnoticed either – public transport prices, real estate tax, rent in municipal apartments, an increase in all local fees (temporary accommodation, waste collection, etc.)

The real effects of the chosen path of cancelling the super-gross wage “on credit” will, in fact, be primarily enjoyed by large export-oriented multinational firms (i.e., firms that depend very little on domestic purchasing power). Above all, their profitability will increase when wage growth slows down or stops. The Ministry of Finance also expects a significant increase in the share of profit (and a reciprocal decrease in the share of wages in added value) for this year and for the following years.

This year, the Ministry of Finance of the Czech Republic expects that the volume of wages and salaries will grow 6 times slower than national economic labour productivity (0.7% to 4.2%). In practice, this means that after six years of growth, the share of wages (employee compensation) in GDP will decrease for the first time, by two percentage points, from 45.9% achieved in 2020 to 43.8% this year. However, the Ministry of Finance of the Czech Republic expects a decrease for the next three years as well. Thus, in 2024 this share should be only 41.4%. ***This would bring us back to roughly the level of 2015-2016 and the***

132 At least as the tax measures will catch up next year, when the tax discount per taxpayer will increase again by CZK 3,000 per year, reaching a total value of CZK 30,840 (this year it is CZK 27,840; last year it was CZK 24,840). However, other factors will hold back wage growth (see below).

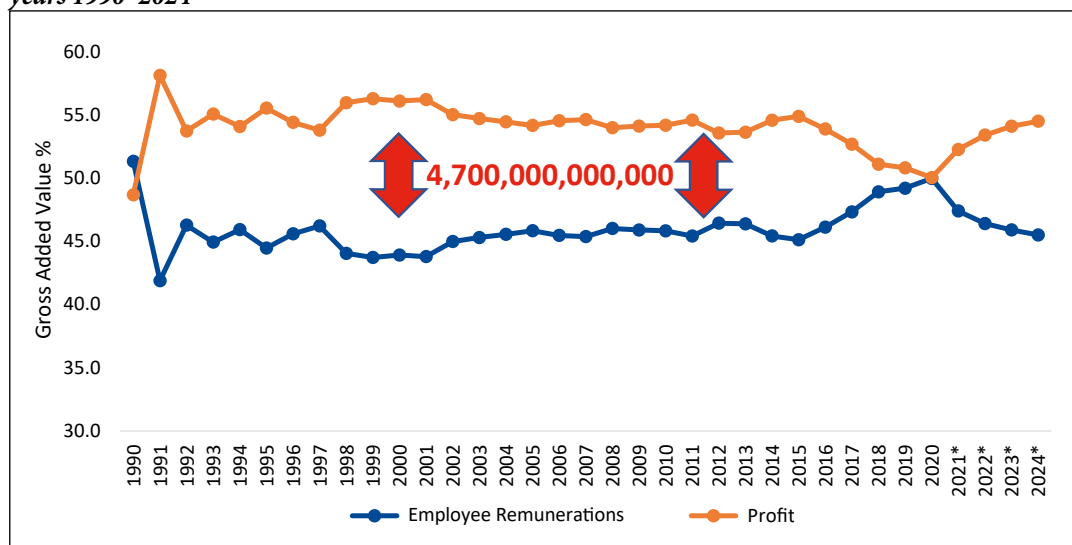
entire successful phase of wage growth in the second half of the last decade would be erased. (!)

d) Tax changes, especially the enforced way of the super-gross wage abolition, also means a **fundamental disruption of wage convergence**. Thirty years after the start of the economic transformation, the Czech Republic reached roughly 38% of the wage level of its advanced neighbours – Germany and Austria. Continuation of the trend of convergence started five years ago, however, it would take us around 35 years to catch up. The process associated with the abolition of the super-gross wage, as a result of which the share of wages in the newly created value will decrease again, will break this trend and lead to a fundamental delay in wage levels convergence between the Czech Republic and its developed neighbours.

To summarise, the tax and budget policy launched last year exploited the Coronavirus crisis to push for fundamental and irreversible changes in Czech society; changes that were already openly formulated fifteen years ago in the Blue Chance project. It changes the distribution setup in society in a fundamental way. It leads to privatisation of and charging for public services. It stops the convergence of Czech wages to the developed countries of the EU. It renews and strengthens the tendency of the Czech Republic to use very cheap labour as a basic competitive advantage and thus delays the necessary restructuring. In this way, it significantly contributes to the permanent closure of the Czech Republic in its subordinate economic position. The presented preliminary outline of the state budget does not change this trend. On the contrary, it fully confirms it.

Graph No. 24

Development of the share of wages and profit in the gross added value of the Czech Republic in the years 1990–2024



Source: own calculations using Czech Statistical Office data (Historical Yearbook of National Accounts 1990 to 2010, Statistics of National Accounts, 29/06/2021); years 2021 – 2024 – calculated from the Macroeconomic Prediction of the Czech Republic, MoF, April 2021.

Table No. 8
2021 Estimated Year-on-year Tax Revenue Loss of Public Budgets Based on Approved Amendments to Tax Laws Implemented in 2020

Cancellation of Super-Gross Wage Rate of 15 and 23%	- 94 bn. CZK (minimum)*
Increase in Tax Credit per Taxpayer	- 20 bn. CZK
Breaking the Tax Bonus on Children Limit	- 10 bn. CZK (minimum)
Loss Carryback	- 30 bn. CZK (minimum)
Acceleration of Depreciation & Increase in Entry Asset Price Limit	- 17 bn. CZK
Exemption of Government Bonds	- 2 bn. CZK
Real Estate Transfer Tax Cancellation	- 20 bn. CZK
Flat Rate Tax for Self-employed Persons	- 10 bn. CZK
Meal Plan Flat Rate	- 20 bn. CZK**
VAT Reduction for Accommodation Services, Culture, Sports	- 4 bn. CZK
Road Tax Reduction	- 1 bn. CZK
Diesel Excise Duty Reduction	- 6 bn. CZK
Public Finances Sum Total:	- 234 bn. CZK (254 bn. CZK)***
State Budget	- 174 bn. CZK (187 bn. CZK)
Budgets of Regions****	- 18 bn. CZK (19 bn. CZK)
Municipal Budgets	- 42 bn. CZK (48 bn. CZK)

* Static calculation based on the volume of wages in 2020, without the effect of the super-gross wage cancellation on the assumed slow-down or halt in the growth of wages and salaries in 2021 (impact on public finances approx. CZK 20 billion); this is a final estimate based on approved parameters. Compared to previous estimates, there have been changes mainly in the taxpayer credit, where during the approval process, there were opposite movements.

** Impact when this system is fully factored in, without the effect of overtime on the increase in the meal allowance, and without the effect of working for multiple employers.

*** The impact taking into account the impact resulting from the cessation of wage and salary growth between 2020-20214 is provided in parentheses.

**** According to the behaviour of regions and municipalities this year, it is obvious they will apply enormous pressure to ensure their budgets have these relatively strong impacts compensated from the state budget.

Glossary

convergence – the process or state of bringing together, or converging, two quantities; in economics, this word is used to approximate the economic indicators of two (or more) countries; the opposite is the concept of **divergence**

transformation – the transition from a centrally controlled economy to a free market economy, which took place mainly in the 1990s

real wages (or the real expression of indicators) – wage level adjusted for price growth; thanks to the adjustment, we can compare wages over time and monitor their purchasing power; the opposite is **nominal wages**

extensive economic model – the functioning of the economy based on a high volume (of machines, employees, and therefore also the entire production), i.e., quantity; as a result, it leads to a policy of low costs and cheap labour, as it limits investments in technology and innovation; the opposite is the **intensive model**, which is based on quality

capital – a broad concept which in economics traditionally expresses the means of production of entrepreneurs, but also money, and wealth; in a broader sense, basically anything that can be evaluated

comparative advantage – generally describes a situation where one of the subjects of an economic relationship (e.g., one country) is more productive in some activity than anyone else

natural productivity – productivity expressed in specific work outputs for a certain period of time; it is not converted into classical macroeconomic figures – such as standard productivity (which is most often expressed as gross domestic product per employees or hours worked) – which entail certain limitations in terms of their reporting capacity

purchasing power parity – a special economic unit that recalculates the value of a currency in a way that makes it comparable with the currencies of other countries; in international comparisons, it is therefore more popular to express indicators (e.g., wages) by purchasing power parity than, for example, by simple conversion to euros, which does not take into account the purchasing power of the local currency in the local economy

devaluation – depreciation of currency

ERDI (Exchange Rate Deviation Index) – an indicator of the currency market value ratio and its expression in purchasing power parity

economic (im)balance – (im)balance of the total demand and supply in the economy

valorisation – appreciation, i.e., increase, in value or price; often used, e.g., for pensions (valuation of pensions = increasing pensions)

social transfers – simply put, all social benefits and social services provided by the state

inflation – rise in consumer prices

cold progression – occurs when the rates of individual tax bands remain stagnant for a long time; this means that as employee salaries rise, so does the tax burden as employees gradually move into a higher tax band due to higher salaries

employee compensations – a term from national accounting, which basically expresses the volume of wages (including social contributions);

finalising economy – produces final products; this has a major impact on higher added value in production, which is reflected in higher product prices and, therefore, higher wages for employees; hierarchically subordinate economies are (sub)supplier countries that produce key components for the final product, but at far lower prices, i.e., lower added value and lower wages; Germany is a typical example of a finalising economy, while the Czech Republic and Hungary are examples of supplier economies

tax optimisation – finding all possible loopholes in tax laws and tax credits; the company is looking for the maximum possible tax reductions, even though this is often considered unethical, or in extreme cases even illegal

tax shield – tools to reduce the company's tax base

decision-making sphere – group of people with the decision-making power; the text mainly refers to political representation and influential employers

middle-income trap – a situation where the country in question has become richer to a certain extent, but has exhausted its previous competitive advantages (usually in the form of cheap labour) and is unable to find another growth model

nominal convergence – convergence of indicators important for the adoption of the euro; these are levels of government debt, consumer price growth, and public budget balances; opposite concept is **real convergence**, which tracks indicators of the standard of living and is therefore more interesting from the point of view of employees

the European pillar of social rights – the relatively recent social “constitution” of the European Union, which defines the socio-economic principles and goals of European integration

geographical peripheries – countries that are not close to the centres of development; in the European context, these are mainly the countries of Eastern and Southern Europe

current account balance – captures the difference between the import and export of goods and services

labour costs – everything that is counted as a cost per employee (mostly expressed per 1 hour of work); it includes the wages and salaries and non-wage costs (wage compensation, social benefits, statutory security, personnel expenses, taxes and subsidies, and others)

exchange rate commitment – a tool of the National Bank that stimulates values by linking them to a specific target value of the exchange rate; In 2013, the CNB set this commitment at 27 CZK/€, in 2017 its validity expired

tertiary education – i.e., college / university; preceding levels are secondary (high school) and primary (elementary)

the Washington Consensus – a set of ten economic policy prescriptions drafted 1989 by economist John Williamson in 1989 to help developing countries; a reform package of rules recognised by Washington institutions such as the International Monetary Fund, the World Bank, and the US Department of Treasury; it includes requirements on the sustainability of state budgets, privatisation of public services, deregulation, opening of economies to trade and investment, and strengthening of market forces within the national economy – it can be viewed as a kind of neoliberal policy guidelines

balance of payments – this is a monetary expression of economic transactions between a certain country and its foreign partners over a certain period of time

knowledge base – a set of knowledge and skills that are historically held in a given region and developed therein

diffusion of innovation – i.e., how, when, why, and at what rate new ideas and technologies spread

cluster – a targeted local concentration of interconnected companies and institutions in a specific field

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Team of Authors

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