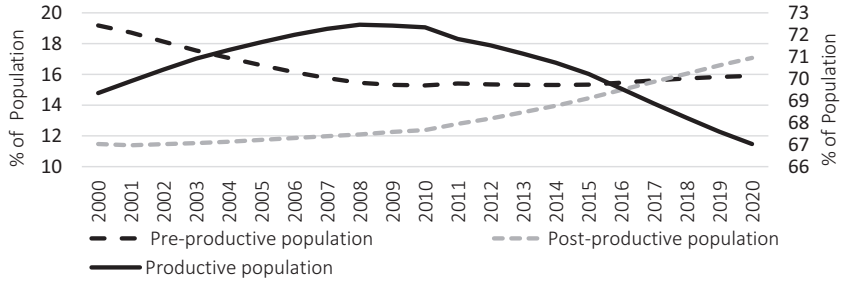

Fig. 5.3. Population Structure According to Age Groups. *Source:* Authors' own elaboration based on Database of the Statistical Office of the Slovak Republic (2023).

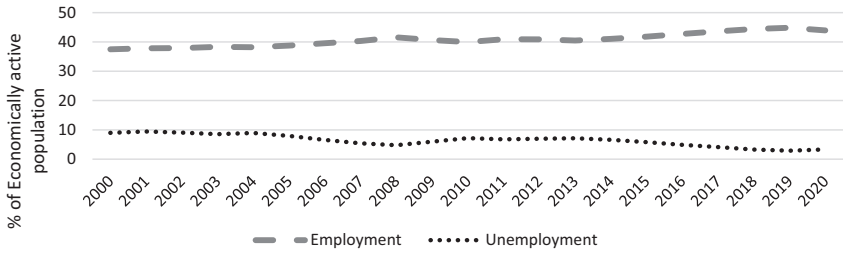

Fig. 5.4. Structure of Economically Active Population. *Source:* Authors' own elaboration based on Database of the Statistical Office of the Slovak Republic (2023).

deteriorating health status of the Slovak population. For example, the healthy life expectancy in Slovakia is significantly shorter than in developed Western countries.

The curve of the postproductive group confirms the aging of the Slovak population. Governmental bodies must pay more attention to social and health care programs for the elderly.

In line with our introductory formulation, we assume a positive impact of GDP on unemployment. This expectation complies with economic theory and was frequently discussed in economic literature. The following picture confronts the dynamics of GDP and the unemployment rate. The shape of both curves indicates an inverted relation, meaning that the increase in the output is reflected in the decreasing unemployment rate. Fig. 5.5 presents the dynamics of nominal GDP and unemployment. As an example, in the year 2001, at the volume of GDP (around 20 billion euros), the level of unemployment was close to 20% of the

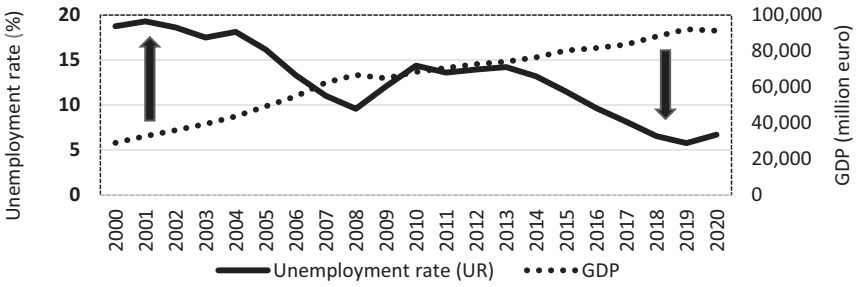

Fig. 5.5. GDP and Unemployment Rate. *Source:* Authors' own elaboration based on Database of the Statistical Office of the Slovak Republic (2023).

labor force compared to the situation in 2018 (GDP of around 80 billion euros with an unemployment rate of 6.5%).

The presented GDP in nominal terms and unemployment rate development can be broken down into three periods. The first period covers 2000–2008, the second covers 2009–2013, and the last one covers 2014–2020. While during the first period, the nominal GDP grew by 130%, the unemployment rate decreased rapidly from 18% to 10%; in the second period, the GDP increased by 14%, and the values of the unemployment rate moved between 12% and 14%. The output expanded by 19% in the last period, and the unemployment rate decreased from 13% to 6.7%.

4.2.3 Labor Productivity

Labor productivity is essential for monitoring the effectiveness of the labor market as to the output result per person in observed industries. In our case, the output is expressed by the nominal volume of GDP, while the unit of labor is represented by one working (WD) or calendar day (CD). According to the Eurostat (2024) data, development of labor productivity (amount of goods and services produced per day) seems to have a rising tendency apart from two periods of external shocks (global financial and debt crisis in 2009–2010 and COVID-19 in 2020–2022). In 2009, the labor productivity for calendar days decreased annually by almost 12 million euros and by 18 million euros for working days. In 2020, labor productivity for calendar days dropped by 3.4 million euros, and for working days, it dropped by 5.4 million euros. These declined values should be analyzed in relation to changes in the labor market, particularly with the unemployment rate between 2008–2009 and 2019–2020. The rate of unemployment in 2008 and 2009 achieved about 9.6% and 12.1%, respectively, while within 2019–2020, the rate was at 5.7% and 6.8%.

4.2.4 Trade Union Roles and Social Policies

Trade unions are one of the participants creating labor market rules. In the 2000s, trade unions played a key role in negotiating better working conditions in industries undergoing restructuring. As the Slovak working population is decreasing (see Fig. 5.3), unions' bargaining power is increasing and employers' flexibility in managing the labor market is decreasing. Similarly, trade union bodies have a rigid attitude to migration policy (hindering the competitiveness of the labor market). Employers fear the reduction in preproductive and productive population will require a new migration inflow, which could cause tension in the labor market.

5. Conclusion

The period 2000–2020 is a small part of independent Slovakia's history. However, significant sociopolitical and economic changes occurred in the country during this period. During the first years of the reported period, the country faced problems of high unemployment, which resulted from the economic collapse of many manufacturing enterprises due to a lack of competitiveness in foreign markets. However, the necessary changes in the legislative framework gradually created suitable conditions for foreign investors to enter Slovakia's business environment. As a result, job vacancies significantly increased, and unemployment decreased (from 20% in 2000 to 6.7% in 2020). The external effects of the global financial and debt crisis between 2008 and 2013 brought about some changes. A significant outcome was the structural shift in employment. Sectors with low competitiveness, unsuccessfully confronted with the business environment of developed EU countries, had reduced the labor market potential. The agricultural sector is a good example. About 4. 8% of the total labor force was employed in this sector in 2000, dropping to 2.6% in 2020. The period of years 2000–2020 is a short part of Slovak's history as an independent country.

The monitored periods of the labor market cover the most important development stages of the Slovak economy as an independent unit. The presented results indicate that despite several problematic political decision-making, the country managed to integrate into the economic space of the European Union and created prerequisites for the successful continuation of this development.

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Chapter 6

The Residential Real Estate Market in the Slovak Republic

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Abstract

The residential real estate market represents the entire complex of economic and social relations at the macroeconomic and microeconomic levels. This publication aims to evaluate developments in the field of financing and the development of the residential real estate market in Slovakia, with a special focus on the determinants affecting the demand, supply, and prices of residential real estate in Slovakia and Bratislava. Owner-occupied housing is the dominant type of housing and has a significant impact on the development of housing issues. Research into the issue of multiple ownership of real estate provides answers to questions about the growth of real estate prices in the conditions of Bratislava. The influence of financial indicators, especially interest rates, the availability of housing loans, and the regulation of the banking sector explain the essential connections in the area of the development of residential real estate prices and factors of their development. The analysis points to the need for the development of rental housing in Slovakia.

Keywords: Residential real estate market; housing policy; owner occupied and rental housing; real estate prices; cyclicality of housing prices

1. Introduction

The real estate market is part of a complex economic and financial system that connects the macroeconomic environment, the financial market, investments, banking, social conditions, and territorial development. The real estate market and the stability of the economic environment are in mutual interaction.

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According to Schwartz (2020), housing finance serves to understand how government policy affects financial markets, because mortgages are a central element of both banks and households balance sheets. Determinants affecting the prices of residential real estate are divided into supply and demand factors. As stated by Cár (2009), demand factors include credit availability, location, economic situation, demographic factors, political situation, housing policy, and savings rate. On the side of supply factors, the author mentions mainly the place of housing construction in the spatial plans of cities and municipalities, the availability of building plots as well as economic and technical factors such as the construction stage and the state of the housing stock. He considered the interest rate as a key factor in the real estate market.

Real estate market research focuses on various groups of approaches, such as regional, socioeconomic, investor, financial, banking, psychological, and others.

The regional approach looks for key factors of regional development and solutions to regional disparities, for example, Arundel and Hochstenbach (2020). Plešivčák and Buček (2017), using the example of the analyzed region, pointed out that the innovative capacity of the region and the support of the business environment are key development factors arising from the internal environment. From the external environment, the development of regions is mainly influenced by foreign direct investments and the social cohesion of the EU.

The authors Wu and Lux (2018) identified factors affecting real estate prices at the regional and national level, as well as potential price bubbles. They used Gordon's dividend discount model and treated house prices as the present value of future rental income. The analysis of regional trends showed that the growth of real estate prices in the regions was influenced by different factors in the short and long-term, so regional aspects are important.

The socioeconomic approach solves issues of housing policy, housing affordability, and thus has several aspects of research. For example, Lux and Sunega (2014) analyzed the conditions of eight European countries (Austria, Germany, Czech Republic, Hungary, Poland, Slovakia, Slovenia, and Italy) from the point of view of subsidies and housing options for seniors. They found that in countries with lower rates of home ownership and a higher share of rental housing, the range of housing subsidies for the elderly is wider and includes more innovative features. Szüdi and Kováčová (2016) applied a socioeconomic approach to housing issues for marginalized groups of Roma in Slovakia when they described the social housing project "Building hope" in the municipality of Rankovce in Eastern Slovakia.

2. Factors Influencing the Supply and Demand of Residential Real Estate

The analytical approach is related to the analysis of housing affordability. Housing affordability is an important social and economic indicator. It is evaluated from the financial aspect as housing affordability, and from the material point of view as housing accessibility. Questions of financial affordability of housing were addressed by Endel and Kuta (2018) and others. According to the authors Kuda and Lux (2010), the unaffordability of housing can be a cause of social exclusion. The concept of housing affordability has become the basis for assessing the housing situation.

Bohle (2018) analyzed the mortgage markets and found that factors such as the liberalization of financial flows and the privatization of the banking sectors directed predominantly international liquidity into mortgage financing.

Nemcová (2016) points to the importance of the concept of state housing policy in terms of strengthening purchasing power in the national economy. Kelly et al. (2018) evaluated that an increase in the availability of loans leads to an increase in the value of real estate. Their results indicate that market conditions such as LTV (Loan to Value) and PTI (Payment to Income) also had a significant impact on property prices.

Several economic, social, and demographic factors support owner-occupied housing. Kropáčková et al. (2022) state the advantages of owner-occupied housing through the advantages of mortgages compared to renting. Mikeszová et al. (2018) consider real estate ownership as an investment for old age. Property ownership can be motivated by own consumption, but it can also be an investment. Lennartz et al. (2019) stated that the motive for buying a second property is intergenerational support. Multiple property ownership affects housing affordability. Bieger et al. (2007) reported that retirees prefer secondary ownership due to living in nature. Lux (2009) stated that the taxation of financial income increases the price of rent. Therefore, people prefer to own property.

The influence of cultural and social factors was addressed by Acolin (2022), when he presents own housing as ontological certainties and the subjective feeling of creating one's own decisions. Hubert and Schmidt (2019) also found that cultural preferences influence homeownership decisions.

Palacin and Shelburne (2005), Winkler (2010), and Syrový (2009) found that homeowners move less compared to renters and therefore homeownership seems to be negatively correlated with labor mobility. Broulíková et al. (2018) analyzed the common assumption that home ownership promotes unemployment, because it is said that ownership limits the search for a job in the labor market. Empirical tests have produced mixed results, possibly due to the endogeneity of home ownership. The article documents that the privatization of apartments in Central and Eastern Europe after the fall of the Iron Curtain resulted in a quasiexperimental allocation of ownership of apartments to individual households. The authors found only weak evidence that homeowners are less willing to move and no evidence of a higher risk of unemployment compared to renters.

The authors Mnasri (2015) and Syrový (2009) connected the advantages of rental housing with the flexibility of the workforce. The authors De Boer and Bitetti (2014) found that the deregulation of social housing does not automatically mean the emergence of a stable private rental sector.

3. History of Housing Development and Real Estate Market in Slovakia

3.1 History of Housing Development in Slovakia

Housing policy and the residential real estate market in Slovakia have undergone major changes, especially in the period of economic transformation after 1989. In Slovakia, owner-occupied housing is currently the dominant form. We believe that it is largely an economic question, as well as a psychological and cultural one. As stated by Lux (2009), until 1989, housing consisted mainly of state, cooperative, and state

enterprise apartments. To a lesser extent, there were privately owned houses. Until 1989, the area of housing was generally affected by central planning and administrative interventions. The construction of prefab houses before 1989 was typical for most socialist states and helped to overcome the housing need, according to Hegedüs et al. (2013). The development of the residential real estate market after 1989 was significantly contributed by the stabilization of the macroeconomic indicators of the Slovak economy, the reduction of interest rates, the growth of employment and economic performance, and last but not least, the adoption of the common euro currency in 2004. Policy changes in the area of housing after 1989 were dealt with by Szelény (2014), Špirková (2018), and Szolgayová et al. (2019).

According to Szolgayová et al. (2019), the first population census in 1991 showed that the rental sector made up 26.7% of the total housing stock and 22.1% were cooperative apartments. Szolgayová et al. (2019) found that the prevailing owner-occupied housing was caused by the privatization of apartments after 1989 in Slovakia. State apartments and apartments of state enterprises were transferred free of charge to the property of municipalities. The subsequent transformation of housing cooperatives after 1993 made it possible to privatize cooperative housing. The price of privatized apartments represented the unpaid part of investment loans, which was far below the market price. In this context, Špirková (2018) writes that as a result of privatization, up to 90% of apartments came into private ownership and there was a complete elimination of public and private rental apartments. Owned housing in Slovakia continues to grow continuously, when according to Eurostat (2024) in 2010, it represented 90%, in 2018, it was 91.3%, in 2020, it was 92.3%, and in 2022, up to 93% of the population had their own housing. This is broken down in Fig. 6.1 below:

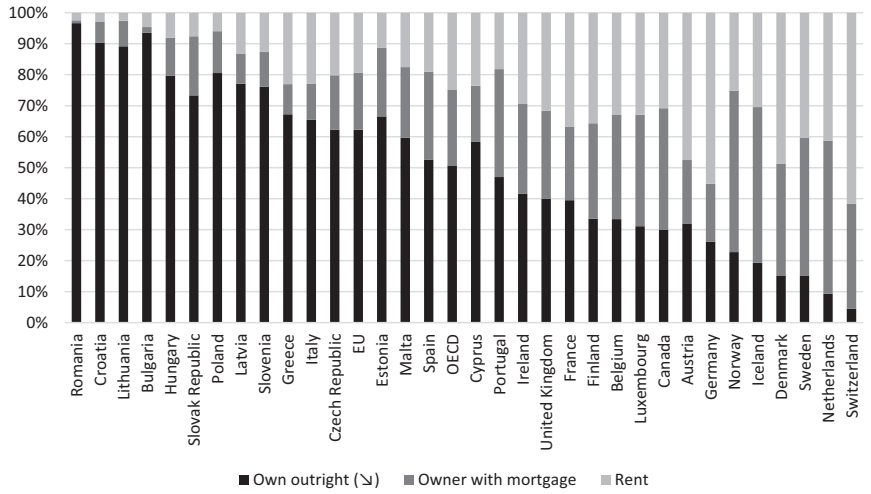

Fig. 6.1. Share of Owner-Occupied Housing in Selected Countries and Slovakia. *Source:* OECD (2022). *Note:* In each column, the first dark color indicates owner-occupied housing, followed by owner with mortgage, then rent private, rent subsidized and others.

3.2 The Situation on the Housing Market After Slovakia's Accession to the European Union

In 2004, the Slovak Republic joined the European Union. It was the beginning of a new phase of development for the Slovak residential real estate sector. As a result of positive macroeconomic developments, stable economic growth was recorded which was manifested in increasing foreign direct investments, increasing liquidity, decreasing inflation, and lowering interest rates. After joining the EU, Slovakia was perceived as a fast-growing economy, which joined the Eurozone in 2009. In the period after the global financial crisis after 2008, the Slovak banking sector maintained the growth of real estate loans. This phenomenon persisted until 2023. Real estate financing was the dominant element of lending, as loans were directed not only to the purchase of real estate but also to the financing of developers' development projects. Since 2015, Slovak households have been among the fastest-indebted households in the EU. The ratio of loans to GDP increased from 25% in 2015 to 36.7% in 2020.

The housing market includes owner-occupied, rental, and state-owned sectors. Mansfeldová and Tuček (2002) and Hegedüs et al. (2013) stated that the rental sector contains the state (often seen as social) and the private sector.

Rental housing in Slovakia lags behind after 1989. In practice, there exist basic forms of rental housing, namely market, regulated, and social rental housing. Social and regulated rental housing have a weak offer in Slovakia, where market rental housing prevails. Market rental housing is concentrated in the Bratislava region and in large regional cities such as Košice and Banská Bystrica. There are differences in the definition of social rental housing in EU countries. The authors De Boer and Bitetti (2014) and Cár (2009) pointed to the need to approach it according to specific national conditions. Hegedüs et al. (2017) addressed the issues of the private rental sector, and they predict its dynamic development in the future.

According to Eurostat (2024) data, the share of people living in rental housing in Slovakia is continuously maintained at a low level. In 2017, 9.9% of the population used rental housing, in 2018, it was 8.7%, and in 2022, it was only 7.8%. Statistical data also point to the threat of poverty from the point of view of rental housing. In Slovakia, in connection with the growth of rental prices, the threat of poverty in the area of rental housing has increased compared to owner-occupied housing. The risk of poverty increased during the period between 2005 and 2023 from 18% to 40% in rental housing, while the risk of poverty remained at 12% in owner-occupied housing.

In 2023, rental prices have increased significantly. The growth of interest rates, the decrease in the financial availability of housing, and the related reorientation of a part of the population to rental housing contributed to the growth of the rent.

The Average Monthly Rental Prices of Two-Room Apartments (EUR) are shown in below Table 6.1.

Developments in the housing market after 2015 were influenced by low interest rates and available housing loans. Several studies shown below in Fig. 6.2 that the increase in the availability of credit causes an increase in real estate prices. The

Table 6.1. Average Monthly Rental Prices of Two-Room Apartments (EUR).

	1Q 2010	4Q 2018	4Q 2020	4Q 2021	4Q 2022	3Q 2023*
Bratislava I	670	790	646	676	739	1,163
Bratislava II	530	570	561	537	665	838
Bratislava III	540	570	558	542	619	889
Bratislava IV	500	540	550	558	622	843
Bratislava V	531	600	561	509	605	794
Košice I	530	590	545	561	670	n.a
Košice II	380	560	532	548	656	n.a
Košice III	370	430	510	495	570	n.a
Košice IV	510	490	526	516	659	n.a
Banská Bystrica	410	440	514	531	604	n.a
Nitra	390	580	528	534	585	n.a
Prešov	370	410	456	482	560	n.a
Trenčín	360	400	520	549	596	n.a
Trnava	410	560	551	553	618	n.a
Žilina	380	550	539	505	623	n.a

Source: Author's own processing using data reality.sk, nehnuteľnosti.sk and bencont.sk.
Note: *Bruchánik (2023).

increase in the availability of loans was mainly caused by the drop in interest rates. Research in Slovakia confirmed that these factors, combined with the growth in demand, also influenced the growth in real estate prices. There was continuous growth in real estate prices until 2023. In 2023, real estate prices fell. The fall in real estate prices was caused by the rise in interest rates, the reduction in the availability of loans, and the limitation of loans by the regulator through LTV, DSTI (Debt Service to Income), and DTI (Debt to Income).

The stability of the real estate market is also influenced by the development of apartment construction. The number of completed apartments in this area is growing, but the demand for apartments in cities exceeds their supply. The following Fig. 6.3 shows the development of construction in the conditions of the Slovak Republic in parts of Western, Central, and Eastern Slovakia, as well as in individual regions of the Slovak Republic.

4. Real Estate Market Developments

4.1 Determinants of the Development of Real Estate Prices

The development of the real estate market is influenced by several determinants. According to the authors Schiller and Weiss (1999), real estate prices are essentially predictable. A drop in prices on the real estate market may not be news

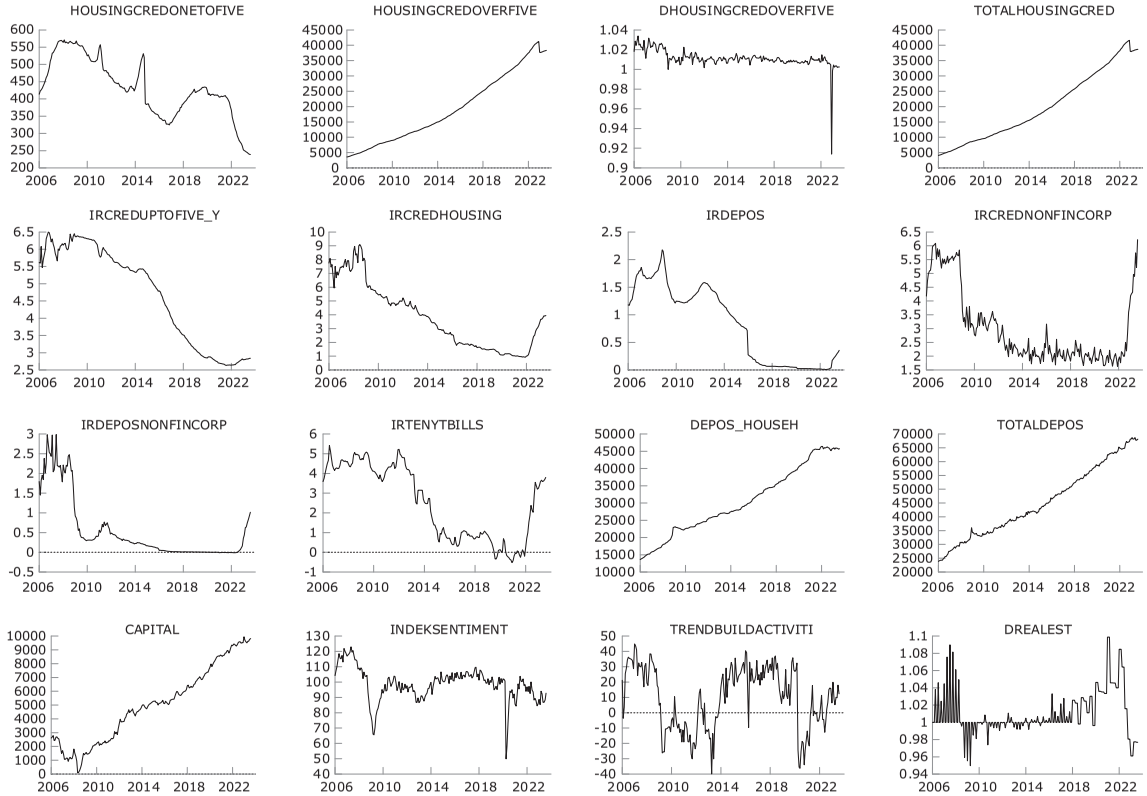

Fig. 6.2. Selected Indicators Influencing the Property Market. *Source:* Author's own processing using NBS (2024) data. *Note:* HOUSINGCREDONETOFIVE = housing loans with maturity 1–5 years; DHOUSINGCREDOVERFIVE = changes in housing loans with maturity over 5 years; TOTALHOUSINGCRED = total housing loans; IRCREDUPTOFIVE_Y = interest rate for loans up to 5 years; IRCREDHOUSING = interest rate on housing loans; IRDEPOS = interest rates on deposits; IRCREDNONFINCORP = interest rate on loans for non-financial corporations; INDEKSENTIMENT = economic sentiment index; DWAGES = wage changes; INFL = inflation; IRDEPOS = interest rate on deposits; DEPOS_HOUSEH = household deposits; TOTALDEPOS = total deposits; CAPITAL = capital of banks; DREALEST = changes in real estate prices in Slovakia.

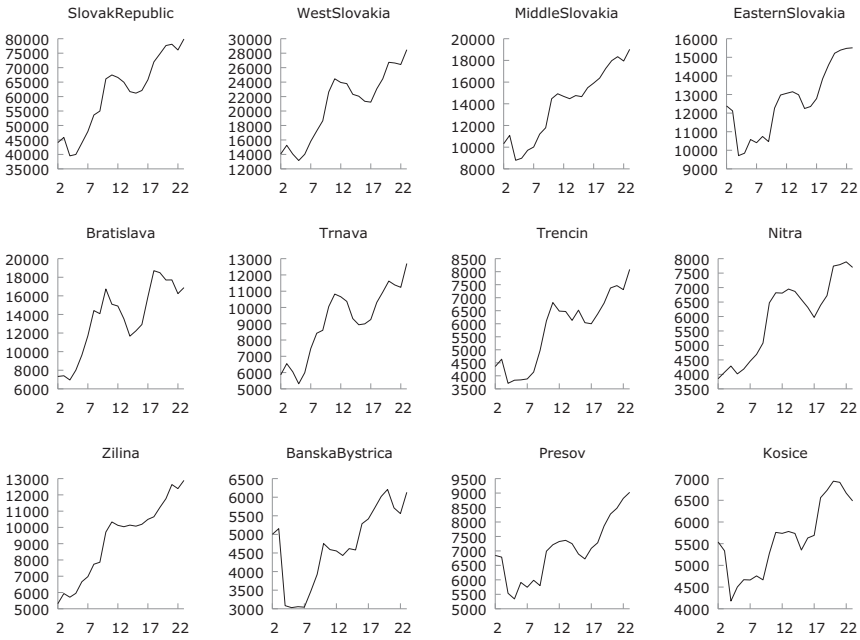

Fig. 6.3. Flats Under Construction Within Slovakia in the Period 2002–2022. *Source:* Author's own processing using Statistical Office of the SR (2024) data.

because price changes are partly known in advance. To illustrate the importance of real estate market inefficiencies for risk management, the authors estimate a simple model of real estate price forecasts using an indicator called the "Case-Shiller quarterly Home Price Index." Shiller (2016) has warned against both tech bubbles and real estate bubbles, arguing that psychologically driven volatility is an inherent feature of all asset markets.

The authors Tkacova et al. (2024) identified the influence of economic and sociological variables on the price of real estate at the national and regional level in Slovakia and pointed out the differences at the regional level. They confirmed the assumption about the different influence of determinants on the price of real estate at the regional level. The National Bank of Slovakia consistently monitors the development of the real estate market and the quarterly development of real estate prices in Slovakia.

The authors Cesnak et al. (2024) provide a market evaluation methodology through indices used for real estate market analysis, such as the housing affordability index or macroeconomic models estimating real estate price fundamentals.

The authors Vogel and Werner (2015) analyzed bubbles in real estate markets and found that extreme market events were basically caused by excessive expansion of bank credit and leveraged transactions.

Cronin and McQuinn (2016) found that the reduction in LTV ratios that may occur as a result of regulatory caps will lead to greater demand for rental housing, which will lead to higher rents at a given housing price level.

This result is suitable for explaining the housing market in Slovakia after 2022. Greenwald (2018) found that the PTI indicator is a more effective tool for dampening the growth of real estate prices compared to the LTV indicator.

Brauner and Plottová (2017) found that the rental price depends on the purchase price of the property, interest rates, developments on the financial market, and the rate of inflation. They confirmed that there is interdependence between property prices and rental prices. Dröes and Francke (2018) found a strong correlation between property prices and market turnover. GDP and interest rates could also explain the correlation between price and turnover indicators.

As Schwartz (2020) points out, large-scale mortgage markets only work where the government influences the banking system to eliminate maturity risks and limit excessive credit creation.

Using quarterly data covering house prices in different countries over four decades, Aizenman et al. (2019) find that house price appreciation is positively associated with economic growth, while the relationship between house price depreciation and economic growth is highly nonlinear depending on country-specific characteristics. Ehrenbergerová and Bajzík (2020) found that an increase in the interest rate by one percentage point causes a decrease in real estate prices by 0.7% after 1 year and by 0.9% after 2 years.

The authors Pittini et al. (2019) identified these problems when it comes to the Slovak real estate market: a high share of owner-occupied housing in Slovakia, high prices of private rental housing, and large price differences between Bratislava and other regions.

The article from Lennartz et al. (2019) addresses three key topics: how to produce more affordable housing units, how to better allocate scarce housing resources among residents and between regions; and how to reduce the speculative element in the current housing market.

Cunha and Lobão (2021) consider factors such as gross domestic product (GDP), interest rates, housing starts, and tourism to be the main cause of real estate price growth but not in all the geographical levels of analysis.

The development of interest rates on loans and the drop in interest rates on deposits stimulated households to buy residential real estate or to buy secondary and investment real estate. Limited investment returns on the capital market during the period of low interest rates stimulated to invest in real estate. The growing demand for loans and the increasing availability of loans in combination with a limited supply caused the growth of real estate prices on the Slovak market. These are displayed below in Fig. 6.4:

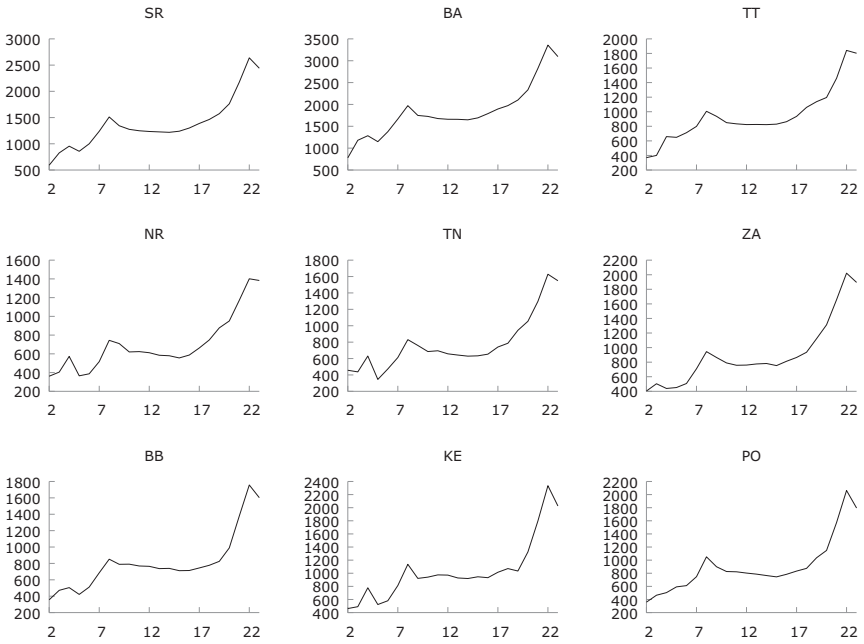

Fig. 6.4. Development of Real Estate Prices in Slovakia (EUR/m^2).
Source: Author's own processing using NBS (2024) data.

The author Cár (2009) states that the growth of interest in private rental housing is limited by the economic disadvantages of renting an apartment compared to purchasing it, while in addition the apartment becomes the property of the buyer.

4.2 Analysis of Housing Prices in Slovakia and Bratislava

The following models shown in Fig. 6.5 are compiled in such a way that it is possible to identify the main factors of the development of the real estate market in Slovakia.

The growing demand for loans and the increasing availability of loans have caused an increase in real estate prices on the Slovak market. The models show the strong influence on real estate prices in Slovakia when it comes to such factors as changes in housing loans over 5 years, interest rates on loans over 5 years, interest rates on housing loans, economic sentiment index, construction activity trends, and total housing loans. The development of real estate prices in Bratislava was influenced by the development of wages and savings, which we explain by the fact that investors prefer investing in real estate over alternative forms of

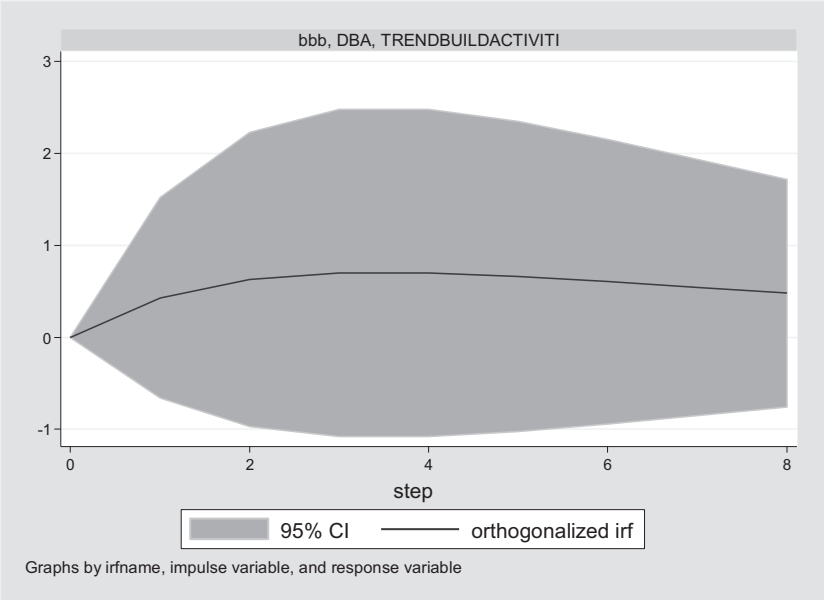

Fig. 6.5. Impulse-Response Function: Impulse – Real Estate Prices in Bratislava Changes; Response – Build Activity. *Source:* Author's own processing using NBS (2024) data.

investment and also by multiple ownership of real estate as investment real estate or for rental purposes.

The residential real estate market is influenced by macroeconomic factors and the development of the banking and financial market. When it comes to macroeconomic influences, it was mainly inflation that had a significant impact on the growth of real estate prices in both, Slovakia and Bratislava. The positive development of employment was reflected in the growth of real estate prices in Bratislava.

We analyzed the impact of individual variables on the prices in Bratislava and on the average prices of residential properties in Slovakia. The conclusions about the impact of the growth of deposits on the growth of real estate prices in Bratislava were confirmed. The conclusions about the impact of growth in construction activity on price changes in Bratislava were based on the theoretical assumptions that rising prices cause growth in construction activity. The growth of residential real estate prices in Bratislava was driven by demand from investors, as well as a reaction from construction contractors.

Models of Real Estate Price Factor Estimations in Slovakia and Bratislava are shown in the below Table 6.2.

Table 6.2. Models of Real Estate Price Factor Estimations in Slovakia and Bratislava.

	Model 1 WLS Dependent Variable: BA	Model 2 OLS Dependent Variable: DBA	Model 3 OLS Dependent Variable: Realestate-Prices	Model 4 OLS Dependent Variable: Drealest	Model 5 ANOVA Dependent Variable BA	Model 6 ANOVA Dependent Variable Realestate-Prices
Const	−3800.66	0.53***	−2909.67***	0.51***	−	−1311.58***
	***	(0.18	(866.87	(0.20	1504.45***	(212.47
	(1063.98	2.84)	−3.35)	2.49)	(260.89	−6.17)
	−3.57)				−5.77)	
DHOUSINGCREDOVERFIVE	1380.54	0.17**	793.46	0.50***	0.06**	0.05**
	(962.96	(2.56	(785.12	(0.18	(0. 02	(0.01
	1.43)	0.01)	1.01)	2.67)	2.74)	3.02)
IRCREDUPTOFIVE_Y	263.23***	−0.01*	226.04***	−0.01**	243.44***	206.57***
	(31.88	(0.005	(26.48	(0.005	(28.32	(23.07
	8.25)	−1.96)	8.53)	−2.34)	8.59)	8.95)
IRCREDHOUSING	163.05***	−0.002	141.31***	−0.002	178.52***	151.14***
	(14.60	(0.002	(12.33	(0.002	(15.59	(12.70
	11.16)	−1.09)	11.46)	−0.96)	11.45)	11.90)
IRCREDNONFINCORP					−4.95	−1.83
					(14.17	(11.54
					−0.35)	−0.16)
INDEKSENTIMENT	3.74***	0.0009***	2.28**	0.0008***	3.77***	1.93*
	(1.05	(0.0002	(0.936	(0.000225	(1.028	(0.83
	3.53)	4.49)	2.44)	3.39)	3.67)	2.31)

DWAGES	343.410	−0.00378	215.58**	−0.01	261.28*	163.12*
	***	(0.0219	(98.57	(0.02	(107.80	(87.79
	(2.901	−0.17)	2.18)	−0.50)	2.42)	1.83)
	2.901)					
INFL	82.62***	0.005*	68.49***	0.006*	68.23***	58.90***
	(16.71	(0.003	(13.84	(0.003	(13.84	(12.22
	4.94)	1.70)	4.96)	1.82)	1.70)	4.82)
IRDEPOS	61.68	0.02**	48.82	0.02**	80.94*	75.64*
	(49.19	(0.008	(41.77	(0.009	(44.58	(36.30
	1.25)	2.53)	1.16)	2.31)	1.82)	2.08)
DEPOS_HOUSEH	0.020**	0.04	0.01*	−0.0002	0.09***	0.07***
	(0.009	(0.0006	(0.008	(0.00007	(0.01	(0.01
	2.122)	0.06)	1.71)	−0.38)	7.34)	7.42)
TOTALDEPOS					−0.07***	−0.06***
					(0.008	(0.007
					−8.41)	−8.79)
IRTENYTBILLS	−9.78	−0.016***		−0.009	−12.94	−3.73
	(10.62	(0.001		(0.002	(9.36	(7.26
	−0.92)	−5.25)		−4.52)	−1.38)	−0.49)
UNEMPL	−22.71***	−0.0007		−0.0008	−25.08***	−20.76***
	(5.80	(0.001		(0.001	(5.50	(4.48
	−3.91)	−0.71)		−0.68)	−4.56)	−4.63)
TRENDBUILDACTIVITI	−2.83***	−0.0006	−2.42***	−0.0006	−1.63**	−1.27**
	(0.55	(0.001	(0.46	*** (0.001	(0.52	(0.42
	−5.12)	−6.14)	−5.19)	−5.25)	−3.12)	−2.99)
DGDP		−0.001	−2.13	−0.001	−1.91	−0.57
		(0.007	(3.22	(0.0008	(3.41	(2.77
		−1.61)	−0.66)	−1.42)	−0.56)	−0.21)

(Continued)

Table 6.2. *(Continued)*

	Model 1 WLS Dependent Variable: BA	**Model 2 OLS Dependent Variable: DBA**	**Model 3 OLS Dependent Variable: Realestate-Prices**	**Model 4 OLS Dependent Variable: Drealest**	**Model 5 ANOVA Dependent Variable BA**	**Model 6 ANOVA Dependent Variable Realestate-Prices**
TOTALHOUSINGCRED	0.08*** (0.008 9.92)		0.07*** (0.007 10.49)		0.04* (0.02 1.85)	0.03* (0.01 1.82)
	R-squared 0.967 S.E. of regression 97.72	*R*-squared 0.47 S.E. of regression 0.01	*R*-squared 0.96 S.E. of regression 80.17	*R*-squared 0.95 S.E. of regression 87.17614	*R*-squared = 0.97 Prob > *F* = 0.000	*R*-squared 0.97 Prob > *F* = 0.000

Source: Author's own processing using NBS (2024) data.

Note: Values in parentheses are std. error and *t*-value; *** denotes statistical significance at the 1% level, ** at the 5% level and * at the 10% level. Variables: DHOUSINGCREDOVERFIVE = changes in housing loans with maturity over 5 years; IRCREDUPTOFIVE_Y = interest rate for loans up to 5 years; IRCREDHOUSING = interest rate on housing loans; IRCREDNONFINCORP = interest rate on loans for non-financial corporations; INDEKSENTIMENT = economic sentiment index; DWAGES = wage changes; INFL = inflation rate; IRDEPOS = interest rate on deposits; DEPOS_HOUSEH = household deposits; TOTALDEPOS = total deposits; IRTENYTBILLS = interest rate on 10-year government bonds; UNEMPL = unemployment rate; TRENDBUILDACTIVITI = the trend of construction activity; DGDP = change in GDP growth; TOTALHOUSINGCRED = total housing loans.

The current development after the increase in interest rates confirms the validity of general results and connections between loan prices, their availability, real estate prices, and interest rates. Last but not least, in the real estate market, there is inertia and downward price inflexibility. How can this be explained? It is also necessary to start from the position of individual subjects on the market and their preferences. If we think about whose interest is the reduction of real estate prices, we come to the following conclusions: Banks and developers perceive a possible fall in real estate prices as a risk. Banks because they not only finance real estate but also, they have real estate as collateral for housing loans. A reduction in the value of collateral requires additional security of receivables or reporting them as more risky, which requires the holding of higher capital. Developers are interested in selling real estate at a profit, which also threatens the rise in input prices at the time of real estate construction. Real estate agents are also interested in maintaining high real estate prices, as their commissions depend on the value of transactions. In essence, it can be concluded that from a microeconomic point of view, there are only a few entities that are interested in reducing real estate prices. These include entities on the demand side, that is, households and also the state, which is interested in increasing the availability of housing.

Based on all the known contexts, the growing trend in the real estate market has broken and currently a drop in prices is already noticeable throughout the Slovak Republic. This can be explained mainly by the growth of interest rates and inflation. Despite the reduction in real estate prices, the affordability of residential real estate has decreased in Slovakia. In order to reduce risks, the National Bank of Slovakia limited the LTV, DSTI, and DTI indicators to housing loans.

As a result of rising interest rates, access to own housing became more difficult and therefore residents had to solve their needs through rental housing. The growth of rental housing in 2023 was largely caused by the inaccessibility of own housing, which the inhabitants of Slovakia prefer not only for economic but also for psychological reasons. The growth of rental housing in the last year is not the result of household preferences, but is a solution from the point of view of economic constraints.

The Hodrick–Prescott filter was used to estimate the cyclicality of the development of housing prices in Slovakia. As the graph in Fig. 6.6 shows, during the period 2022–2023, significantly increasing cyclical component appears which indicates an overvaluation of residential real estate prices.

This figure points to two significant periods of cyclical growth in real estate prices. The first period with significant cyclical component can be recognized during the global financial crisis in 2008 and the second period with significant growth in real estate prices was during the period 2021–2022. Cesnak and Klacso (2021) did not find the presence of a price bubble on the real estate market in the Slovak Republic, although they admitted the overvaluation of real estate in some regions of the Slovak Republic. Similar results are also reported by Tkacova et al. (2024).

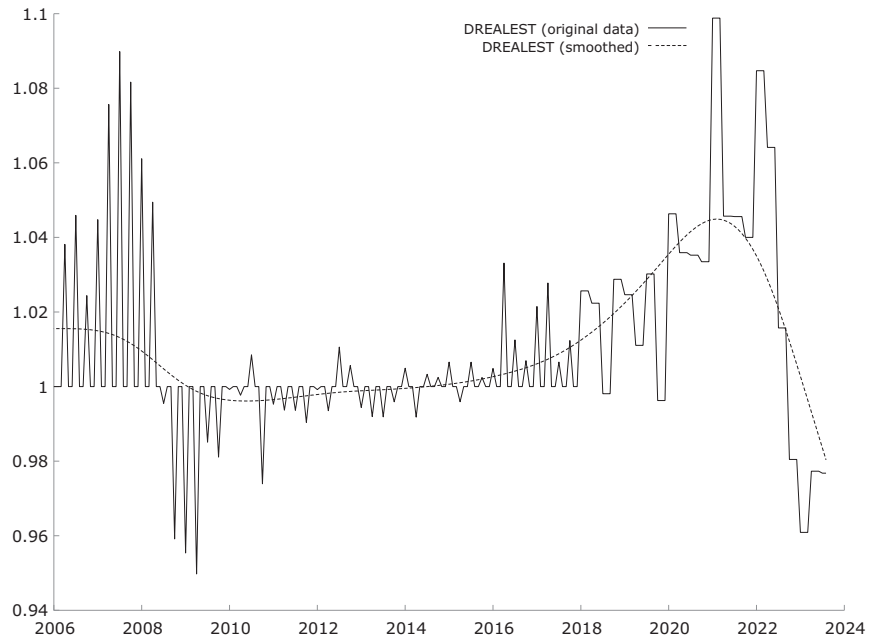

Fig. 6.6. Hodrick–Prescott Filter of the Time Series of Changes in the Prices of Residential Real Estate in Slovakia. *Source:* Author's own processing using NBS (2024) data.

5. Conclusion

The development of the residential real estate market in Slovakia shows certain general features that can be theoretically predicted, but it also has its own specifics, which are connected to historical, cultural, and other elements specific to Slovakia. The general factors that significantly influenced the development of the residential real estate market include mainly the effects of the macroeconomic environment. In Slovakia, it has been confirmed that the financing and development of the real estate market requires a stable economic environment. The stabilization of the macroeconomic indicators of the Slovak economy contributed significantly to the development of the real estate market and its financing, especially the reduction of interest rates, the growth of employment, the performance of the economy, and last but not least, the adoption of the common currency, the euro.

The reduction of interest rates caused an increase in the availability of housing loans, which on the other hand, along with the growth in demand, caused an increase in the prices of residential properties. In the period after 2015, Slovak households were evaluated as the fastest indebted households within the EU,

which caused the need to limit the availability of loans. The decrease in the availability of loans was also caused by the increase in interest rates and the limits and restrictions on housing loans by the National Bank of Slovakia. Although rental housing began to increase after 2023, it was forced due to the unavailability of housing loans. Preference for owner-occupied housing still persists, due to the economic disadvantage of rental housing compared to housing loan repayments.

The analysis points out that individual factors affect real estate prices in Bratislava and Slovakia to a different extent. Real estate prices in Bratislava reacted more strongly to changes in interest rates and credit availability. In Bratislava, the influence of multiple ownership of properties held for rent, was also evident. We explain the connection with savings by the fact that the saved funds are invested in the secondary ownership of real estate, which is subsequently sold at a profit or used for renting. This is manifested to a greater extent in Bratislava. Of the macroeconomic influences, inflation had a significant impact on the growth of real estate prices in both groups, Slovakia and Bratislava. The positive development of employment was reflected in the growth of real estate prices in Bratislava.

The situation on the residential real estate market is undergoing major changes resulting from rising interest rates and inflation. At all levels of residential real estate market research, the need to develop affordable or rental housing, comes to the fore.

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Chapter 7

External Economic Relations of the Slovak Republic: Trade, Investment, and Related Policies

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Abstract

Given the fact that Slovakia is a small, open, export-oriented economy strongly dependent on foreign trade and foreign direct investment (FDI) inflows, this chapter seeks to analyze the country's performance in international trade and investment flows as well as its foreign economic policy in the field of export and investment promotion. This chapter points out that Slovakia's foreign trade and inward FDI flows are highly interconnected due, inter alia, to the lion's share of foreign companies in Slovak exports. In addition, Slovakia's largest comparative advantages in exports are "acquired" through FDI inflows and include products of the automotive and electronics industries. However, the way in which Slovakia is involved in international trade and investment flows reflects its reliance on lower value-added economic activities, such as, in particular, the assembly of motor vehicles from imported intermediate products. In order to increase international competitiveness of the Slovak economy and ensure its future economic growth, it is important to improve the effectiveness of Slovakia's foreign economic policy and economic diplomacy, diversify the territorial and commodity structure of Slovak exports, support the expansion of Slovak companies abroad, as well as attract FDI with higher added value and to less developed regions.

Keywords: External economic relations; foreign economic policy; European Union; foreign trade; international specialization; foreign direct investment

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1. Introduction

The Slovak Republic represents a small, open, export-oriented economy that is heavily dependent on foreign trade and foreign direct investment (FDI) inflows. With trade openness, measured as the ratio of total trade (exports plus imports) in goods and services to gross domestic product (GDP), higher than 204% in 2022, Slovakia belongs to the 10 most open economies in the world (World Bank, 2024a). From a historical perspective, Slovakia's trade openness shows an increasing trend, indicating the growing importance of trade flows in the economy. Slovakia's foreign trade is closely related to FDI. Multinational corporations operating in Slovakia make a significant contribution to the Slovak Republic's GDP, employment, and export volumes. Given the fact that Slovakia has a small domestic market, the inflows of FDI are predominantly export-oriented, which has a major impact on the export structure of the Slovak economy (Ministry of Economy, 2024a).

In this context, this chapter examines various aspects of Slovakia's external economic relations, specifically its performance in foreign trade and FDI flows, as well as the country's foreign economic policy in the field of export and investment promotion. The external economic relations of the national economy are defined as all its relations with other global economy's actors, which involve the movement of goods, services, capital, and people across borders, while these activities are affected by foreign economic policy (Ministry of Economy, 2024b). As an integral part of the overall economic policy, foreign economic policy can be seen as the government's deliberate action that influences the country's external economic relations through the determination of foreign economic rules, principles and objectives, as well as methods and tools necessary for their achievement. Given that Slovakia is part of the European Union's (EU's) common commercial policy, which falls within the exclusive responsibility of the EU, this chapter deals with export and investment promotion policies that continue to be managed by the Member States.

This chapter is structured as follows. The first section provides an overview of Slovakia's foreign economic policy in the field of foreign trade and investment, with a special focus on strategic documents and the institutional framework in this area. The second section identifies the main characteristics of the territorial and commodity structure of Slovakia's foreign trade in goods and analyzes international specialization of the Slovak economy. The third section describes Slovakia's position in foreign investment flows, especially the structure of inward and outward FDI as well as the importance of FDI for the Slovak economy. The final section of this chapter is devoted to concluding remarks along with some policy implications.

2. An Overview of Slovakia's Foreign Economic Policy in the Field of Trade and Investment

Foreign economic policy of the Slovak Republic is significantly influenced by its membership in the European Union and the Eurozone. With the accession to the EU in 2004, Slovakia adopted rules of the EU's common commercial policy and lost its autonomy in the field of external trade policy. The common commercial policy falls under the exclusive competence of the European Union, which means that the EU manages trade and investment relations with non-EU countries through its trade and investment policy. The EU's responsibilities in this area include trade in goods and services, the commercial aspects of intellectual property, public procurement, and FDI (European Commission, 2024). The EU makes laws on trade and investment matters, as well as negotiates and concludes international trade and investment agreements. In addition, Slovakia joined the euro area in 2009 implying that monetary policy, which can also be used to influence external economic relations, is conducted by the European Central Bank. It should also be noted that Slovakia is part of the EU single market with free movement of goods, services, capital, and persons, which limits the possibilities of determining its foreign economic policy.

The current strategic document that covers Slovakia's foreign economic policy in the field of foreign trade and investment is the *Concept of External Economic Relations and Economic Diplomacy of the Slovak Republic for the Period 2022–2030* (hereafter "Concept") developed by the Ministry of Economy of the Slovak Republic and the Ministry of Foreign and European Affairs of the Slovak Republic (MFEA). The Concept has replaced the previous two strategic documents such as the *Strategy of External Economic Relations of the Slovak Republic for the Period 2014–2020* (hereafter "Strategy") and the *Focus of Economic Diplomacy in the Field of Bilateral and Multilateral Relations until 2020*.

According to the Concept, Slovakia's foreign economic policy is primarily aimed at "supporting inclusive and sustainable economic growth, creating jobs with higher added value and increasing the competitiveness of the Slovak economy on an international scale" (Ministry of Economy, 2024a). To achieve the main goal in the field of external economic relations, the following partial objectives are set out: (i) diversification of the territorial structure of Slovak foreign trade, (ii) attracting FDI with higher added value, (iii) creating a favorable international environment to promote the economic interests of the Slovak Republic, (iv) improving the use of pro-export policy instruments, and (v) increasing the efficiency of economic diplomacy. The objectives of the Concept are broad, unspecified, and therefore difficult to measure. The Concept states that based on the above-mentioned partial objectives, the so-called action plans with specific tasks and measurable indicators will be developed for the effective implementation of the Concept (Ministry of Economy, 2024a). However, such an action plan has not yet been published.

The Strategy, as the previous strategic document in the field of Slovakia's external economic relations, contains significantly more objectives which are divided into four groups, such as commercial policy objectives, investment

objectives, objectives in the field of research and innovation cooperation with other countries, and objectives in the field of unified presentation of the Slovak Republic (Ministry of Economy, 2024b). Commercial policy objectives consist of general and specific objectives. The general objectives are to increase export volumes, increase the number of exporters, and ensure stable supplies of strategic goods. The specific objectives are to (i) diversify the territorial structure of exports – increase the share of exports to non-EU markets, (ii) diversify the commodity structure of exports – increase the share of exports in commodity groups other than HS85 (electrical machinery and equipment) and HS87 (motor vehicles), (iii) increase the share of exports of small and medium-sized enterprises (SMEs), and (iv) increase the share of services exports, including tourism. Investment objectives of the Strategy include increasing FDI inflows particularly to higher added-value sectors and less developed regions, increasing export performance through investment, increasing investment in industrial R&D, and supporting established investors in expanding their activities in the Slovak economy. To sum up, the objectives of Slovakia's external economic relations defined in the strategic documents are primarily focused on export and investment promotion, emphasizing the need to diversify territorial and commodity structure of foreign trade and attract FDI with higher added value.

In light of the above-mentioned strategic documents and the fact that Slovakia is part of the EU's common commercial policy, the Slovak Republic's foreign economic policy focuses primarily on export and investment promotion, that is, pro-export policy and policy supporting FDI inflows. Pro-export policy is defined as all activities, objectives, and corresponding tools of the state aimed at enhancing the country's export performance (Ministry of Economy, 2024b). Pro-export policy instruments can be divided into financial, fiscal, and functional instruments (Ministry of Economy, 2024b). Financial instruments include banking and insurance products. Fiscal instruments consist of the so-called structural instruments, that is, instruments financed from EU sources, and instruments falling under development cooperation programs that may potentially enhance export performance. Functional instruments include a wide range of services provided to exporters by various stakeholders.

Economic diplomacy, as an integral part of Slovakia's foreign policy, represents the coordination of activities carried out by state and nonstate actors, which are aimed at supporting commercial and business activities of Slovak entrepreneurs when they enter foreign markets, as well as supporting flows of FDI into the Slovak economy (Government Office of the SR, 2016). Slovak economic diplomacy is primarily focused on promoting exports, FDI inflows, and interests of the Slovak Republic in international organizations (Ministry of Economy, 2024b). Economic diplomacy promotes exports and investments through the provision of assistance, advisory, consultancy, and information services. Economic diplomats identify investment and export opportunities for Slovak companies abroad and investment opportunities for foreign companies in the Slovak economy, look for opportunities to present Slovakia and organize such presentations, establish contacts with local entrepreneurs, monitor tenders and selection procedures, and perform many other functions.

Investment policy instruments can be divided into acquisition and marketing activities, consultancy and assistance activities, investment aid (investment incentives), and postinvestment assistance (Ministry of Economy, 2024a). Acquisition investment activity is carried out by various actors in Slovakia and abroad through the active promotion of Slovakia as an attractive investment destination. Marketing activity consists in the creation of promotional materials about the Slovak investment environment. Before starting a business in Slovakia, potential investors are usually provided with consultancy and assistance services in a variety of domains, such as, for instance, assistance with the selection of location and real estate, organization of meetings with local stakeholders, and consultancy on labor market situation, tax system, and investment incentives. Postinvestment assistance is intended to help established companies with expanding their production and operations, solving potential problems with the public administration bodies, and identifying local suppliers and service providers.

The main fiscal instrument for supporting FDI flows into the Slovak economy is investment aid regulated by European and Slovak legislation, which is divided into extraordinary investment aid and regional investment aid. Extraordinary investment aid can be granted to support investment projects related to industrial production in sectors strategic for the transition to a net-zero economy (Ministry of Economy, 2024d). These strategic sectors include, for instance, the production of batteries, solar panels, and wind turbines, as well as the production of critical raw materials necessary for their manufacture. The Ministry of Economy (2024d) defines regional investment aid as state aid "designed to foster competitiveness and reduce regional disparities." Regional investment aid may be granted for investment projects of new or established companies in the field of industrial production, technology centers, and shared services centers. In Slovakia, investment incentives are provided in the form of grants for tangible and intangible fixed assets, corporate income tax relief, contribution for newly created jobs, and rental or sale of publicly owned real estate at a discounted price (SARIO, 2024a).

The provision and amount of regional investment aid are influenced by various factors, such as the size of a company, minimum investment amount, number of newly created jobs, share of new technologies in a given investment, unemployment rate, and economic development of a district where the investment is made. Maximum aid intensity, which means the maximum amount of investment incentives calculated as a portion from the eligible costs, varies depending on particular regions and districts of Slovakia, while the Bratislava region's districts are completely excluded from the investment aid scheme. From August 2002 to February 2024, the Slovak government granted 267 investment incentives with a total value of almost 2.5 billion euros for investment projects that planned to create approximately 72 thousand new jobs (Ministry of Economy, 2024e). In that period, the most widely used forms of investment aid were grants for tangible and intangible fixed assets (46% of the total aid granted) and income tax relief (44% of the total aid granted). The main beneficiaries of regional investment aid were car manufacturers such as Volvo Car Slovakia, Kia Slovakia, PSA Slovakia, and Jaguar Land Rover Slovakia. From a territorial point of view, the highest number

of investment incentives were granted to the companies from Germany, Slovakia, Austria, the Republic of Korea, the Netherlands, and the United States.

2.1 Institutional Framework of Slovakia's External Economic Relations

The institutional framework of Slovakia's external economic relations and economic diplomacy consists of the following actors:

- The Ministry of Economy of the Slovak Republic, including Slovak Investment and Trade Development Agency (SARIO), Slovak Innovation and Energy Agency (SIEA), and Slovak Business Agency (SBA);
- The Ministry of Foreign and European Affairs of the Slovak Republic (MFEA), including the Slovak Republic's diplomatic missions and Slovak Agency for International Development Cooperation (SAIDC);
- The Ministry of Finance of the Slovak Republic, including Export-Import Bank of the Slovak Republic (EXIMBANKA SR) and Slovak Guarantee and Development Bank (SZRB);
- Other ministries and specialized agencies such as the Ministry of Tourism and Sport of the Slovak Republic, including Slovakia Travel, the Ministry of Investments, Regional Development and Informatization of the Slovak Republic, and the Ministry of Agriculture and Rural Development of the Slovak Republic;
- Nonstate actors such as Slovak Chamber of Commerce and Industry (SOPK), Council of Slovak Exporters, Klub 500, National Union of Employers, Entrepreneurs Association of Slovakia, and many others.

The Competitiveness and Productivity Council of the Government of the Slovak Republic (hereafter "Council") is an advisory, coordinating and initiative body of the Slovak Government aimed at increasing the productivity and competitiveness of the Slovak economy and the better regulation policy (Ministry of Economy, 2022). In 2021, the Council replaced the more narrowly focused Export and Investment Promotion Council of the Government of the Slovak Republic, which was created in 2012 with the purpose of strengthening the support for international business and economic cooperation and presentation of the Slovak Republic abroad, while the priority objective was to promote exports and FDI inflows (Government Office of the SR, 2024). The Council's mission is to (i) support internal competitiveness and productivity, improve the business environment, promote investment and innovation in the economy, as well as (ii) improve international competitiveness, including the promotion of export, foreign investment, and international cooperation in the field of innovation. Its main function is to monitor, analyze, and evaluate the productivity and competitiveness of the Slovak economy. The Council brings together state and nonstate actors in the area of the Slovak Republic's external economic relations. It consists of 23 members, among whom are representatives of the state

administration bodies, business and employer organizations, and self-governing associations (Ministry of Economy, 2022).

"Team Slovakia" is an informal interministerial platform seeking to enhance cooperation and mutual awareness of central state authorities in the field of export and investment promotion, supply chain development, science, research and innovation development, tourism promotion, and other areas (MFEA, 2022). It is made up of representatives at the level of directors-general of the Ministry of Economy, Ministry of Transport, Ministry of Agriculture and Rural Development, MFEA, Government Office, SBA, SARIO, and Slovakia Travel. The coordination group focuses on sharing information on projects, sectoral policies, and ongoing activities with foreign partners. It creates synergistic effects for selected activities and projects by involving human and financial capacities of the relevant members. In summary, the Council and "Team Slovakia" play an important role in coordinating the activities of various stakeholders in the area of external economic relations and economic diplomacy of the Slovak Republic.

The Ministry of Economy of the Slovak Republic and the Ministry of Foreign and European Affairs of the Slovak Republic are the main actors in Slovakia's external economic relations. In 2011, the MFEA took over the responsibility for economic diplomacy from the Ministry of Economy, but foreign trade remained under the competence of the Ministry of Economy. According to Csabay and Cséfalvayová (2022), the division of competencies in the field of external economic relations has naturally led to a rather forced, but necessary cooperation, as well as frictions between these two ministries. Parízek, a chairman of the Council of Slovak Exporters, argues that this division of competences causes unsystematic and ineffective foreign trade promotion (Oláhová, 2023). The Ministry of Economy is the central state administration body responsible, inter alia, for foreign trade and investment aid, including the formulation and implementation of foreign trade policy and investment policy (Ministry of Economy, 2024c). In close cooperation with the MFEA and other actors in the field of Slovak external economic relations, the Ministry of Economy proposes policies to promote exports, FDI, and innovation. The specialized agencies SARIO, SIEA, and SBA fall under the remit of the Ministry of Economy of the Slovak Republic.

SARIO was founded in 2001 as an implementation and facilitation state agency for export and investment promotion. Its main mission is "to accelerate the investment, export and innovation potential of the Slovak Republic with the intention of turning the country into a technology center attractive to foreign investors, experts and potential business partners" (SARIO, 2024b). It aims to attract FDI flows into the Slovak economy and support export performance of Slovak companies. In terms of investment promotion, SARIO focuses on consultancy, technical and assistance activities. It provides a wide range of services for potential and established investors related to the Slovak business environment, investment location, labor market, cooperation opportunities, investment incentives, local suppliers, and other areas. SARIO supports investors in three main phases such as location assessment phase, market entry phase, and postinvestment phase (i.e., continuous support). Furthermore, SARIO acts as an intermediary that facilitates communication between the companies and relevant state or public

administration bodies. Regarding foreign trade support, SARIO provides information, assistance, consultancy, and educational services for Slovak companies with the aim of supporting their exports, as well as services for foreign companies interested in Slovak production and production cooperation (SARIO, 2024c). The agency supports Slovak companies and their international sales by organizing business missions and cooperation events, supporting the participation of Slovak companies in international fairs, searching for business partners abroad, training exporters, and other activities.

Between 2002 and 2022, SARIO concluded more than 630 investment projects amounting to a total of almost 15 billion euros. These investments created more than 140 thousand direct jobs (SARIO, 2024d). From a sectoral point of view, the majority of investment projects were related to automotive industry (30% of concluded investment projects between 2002 and 2022), electrical engineering industry (13%), and machinery industry (12%). Regarding territorial breakdown, SARIO supported the most investment projects of companies from Germany, the Republic of Korea, the United States, and Austria. During the same period, SARIO supported thousands of Slovak companies through more than 1,889 business missions, cooperation events, and participation in international fairs (SARIO, 2024e). Based on data from 2022, SARIO employs 88 people (SARIO, 2024e). Its budget for 2024 amounts to 4.7 million euros, representing an increase of 29% compared to the previous year (Ministry of Economy, 2024f). SARIO currently has three regional (domestic) offices in Bratislava, Banska Bystrica, and Kosice. It does not have any foreign offices, although the Strategy states that a network of SARIO foreign offices will be created to support exports. In the near future, SARIO plans to have its representation in the United States, Germany, and the Republic of Korea through seconded experts whose main task will be to present the Slovak business environment, as well as identify investment and trade opportunities directly in the selected territories (SARIO, 2024f).

However, Slovakia still lags behind some other countries in certain aspects of government support for trade and investment. Compared to the Czech Republic's trade and investment promotion agencies (there are two separate agencies, namely CzechInvest and CzechTrade), SARIO has almost three times fewer employees (CzechTrade and CzechInvest employed a total of 250 people in 2022) and approximately six times lower annual budget according to data from 2022. In addition, CzechTrade and CzechInvest together have 18 regional offices in the Czech Republic and more than 50 foreign offices (CzechInvest, 2024a; CzechTrade, 2024). Between 2002 and 2022, CzechInvest mediated 1,938 investment projects (CzechInvest, 2024b), which is three times more than SARIO mediated during the same period. According to the OECD (2018) report, which evaluates investment promotion agencies of its member countries, SARIO has a smaller number of staff and a higher number of mandates compared to the median of OECD countries, while its activity mix is focused on image building and targeting. In addition, Slovakia's investment promotion agency belongs to the group of agencies with a lower average budget and fewer domestic and foreign offices.

The SBA, founded in 1993, is a public–private institution that specializes in supporting SMEs during all phases of the business cycle, including strengthening their competitiveness within the EU single market and third country markets (SBA, 2024). It provides financial services (i.e., microcredits), as well as nonfinancial services (i.e., education, training, and consultancy) to SMEs. The SIEA, founded in 1999, is an implementation agency that promotes Slovak exports indirectly through comprehensive support for the development of innovative activities with the aim of increasing the efficiency of the domestic economy and its competitiveness (Ministry of Economy, 2024a).

The MFEA is responsible for the coordination and implementation of Slovakia's economic diplomacy. As part of the Slovak foreign policy, economic diplomacy focuses on promoting exports and FDI inflows, increasing the involvement of entrepreneurs in development cooperation, developing foreign cooperation in the field of science, research and innovation, and promoting Slovakia's economic interests in international organizations (MFEA, 2024a). The MFEA promotes foreign trade, investment, and international cooperation through the Business Center Department and the network of diplomatic missions. Economic diplomacy activities carried out by the MFEA include business missions, fairs and exhibitions, presentation events, Innovation Days, Company Days, "From Regions to the World," Export Forum, and other activities. With 91 diplomatic missions abroad, the Slovak Republic is represented in 64 countries (MFEA, 2024b). According to the latest available information, Slovakia has 70 economic diplomats in 62 countries (MFEA, 2024c). In recent years, the number of economic diplomats has increased significantly. However, it is important to note that economic diplomacy activities are carried out by all representative offices, regardless of the presence or absence of an economic diplomat. The heads of diplomatic missions (representative offices and consulates general) are responsible for the performance of economic diplomacy. Among the weaknesses of the Slovak Republic's economic diplomacy are insufficient human and financial resources allocated to economic diplomacy, performance of multiple functions at the same time by some economic diplomats, weak evaluation of the results achieved by economic diplomacy, low effectiveness of supporting SMEs in non-EU markets, and other aspects (e.g., MFEA, 2018; Oláhová, 2023; Ružeková et al., 2021).

The Slovak Republic started to provide bilateral development assistance in 2003. The SAIDC, founded in 2007, represents an implementation agency of Slovakia's official development assistance. An important role of SAIDC is, inter alia, to support the creation of new business partnerships of Slovak companies involved in development cooperation activities and to facilitate their penetration into the markets of developing countries (Ministry of Economy, 2024a). In this regard, the Private Sector Engagement Program was designed to support synergies between the Slovak Republic's development cooperation objectives and the business goals of Slovak companies, especially SMEs, in developing countries (SlovakAid, 2024). It engages the private sector in Slovakia's development cooperation activities and helps Slovak businesses to establish themselves or

expand their activities in developing countries through cofinancing projects in the form of grants from the national budget.

In the field of external economic relations, the Ministry of Finance of the Slovak Republic is responsible for bilateral investment treaties (BITs) and double taxation conventions (Ministry of Economy, 2024a). The Export-Import Bank of the Slovak Republic and the Slovak Guarantee and Development Bank fall within the sphere of authority of the Ministry of Finance of the Slovak Republic. The SZRB is a specialized banking institution that may support Slovak exports indirectly through the financing of SMEs.

EXIMBANKA SR, founded in 1997, is a state export credit agency and the only direct instrument of the state for export financing (EXIMBANKA SR, 2024). Its main mission is to support Slovak exporters, regardless of their size, business sector, or destination country, through financial operations and expertise in the field of export, thereby increasing their competitiveness on foreign markets. Besides export promotion, EXIMBANKA SR also supports FDI of Slovak enterprises. EXIMBANKA SR plays a complementary role for commercial financial institutions, enabling Slovak companies to enter riskier projects, sectors, and territories. It provides a wide range of banking and insurance products, as well as other forms of export promotion, such as, for instance, consultancy on financial, commercial, and territorial export-related issues and the organization of various specialized events and workshops. Unlike other EU countries, the position of EXIMBANKA SR is specific, in that it provides comprehensive institutional support for exports, that is, banking and insurance activities, under one roof (Pavelka et al., 2021, p. 120). Banking products include financing, namely preexport credits, investment loans, foreign investment loans and buyer credits, as well as bank guarantees when exporting to foreign markets. Insurance products are intended for businesses or banks, allowing them to eliminate commercial, political, or combined risks. In addition, EXIMBANKA SR also supports Slovak companies that want to implement development projects and thus establish themselves in developing countries by providing preferential export credits, that is, concessional financing to a foreign buyer from the public sector in selected developing countries (SlovakAid, 2024). Under the so-called PSLO mandate, EXIMBANKA SR provides companies with information on the opportunities for participation in tenders of international financial institutions in developing countries, for which they may obtain financing from these institutions.

The Ministry of Tourism and Sport of the Slovak Republic is responsible for tourism promotion. Since its establishment in February 2024, the Ministry of Tourism and Sport has taken over competences in the field of tourism from the Ministry of Transport of the Slovak Republic (Ministry of Transport, 2024). Slovakia Travel, which falls under the remit of the Ministry of Tourism and Sport, represents a national marketing and promotion agency in the field of Slovak tourism. The Ministry of Investments, Regional Development, and Informatization of the Slovak Republic coordinates the agenda of Slovak innovation diplomacy. The Ministry of Agriculture and Rural Development of the Slovak Republic is responsible for export promotion of agricultural and food products.

3. Foreign Trade of the Slovak Republic

Slovakia as a small open economy is highly dependent on foreign trade, while applying an export-driven growth model (European Commission, 2023b). With the share of total trade in GDP exceeding 204% in 2022, Slovakia is the most open Visegrad Group country, the fourth most open EU Member State and one of the 10 most open economies in the world (World Bank, 2024a). Slovakia's trade openness reveals an increasing trend (the total trade accounted for 112% of GDP in 1993), which indicates the growing importance of foreign trade for the Slovak economy over time. Regarding the performance in goods exports, Slovakia ranked first among EU countries, as the share of exports of goods accounted for 88.6% of the Slovak GDP in 2022 (Eurostat, 2024b). However, a high degree of trade openness is closely linked to a high vulnerability to external economic shocks, which is also the case in Slovakia.

The territorial structure of Slovak foreign trade has changed considerably over the last few decades. Until 1989, the vast majority of Czechoslovakia's foreign trade was carried out with the Soviet Union and other Central and Eastern European countries, that is, members of the former economic organization Comecon. In the 1990s, during the period of transition to a market economy, the country's geographic pattern of foreign trade changed fundamentally, as the share of Slovakia's merchandise exports to Western Europe increased from 19% in 1989 to 71% in 1994 (WTO, 1995). In a subsequent period, the most important factor that affected Slovakia's trade patterns was the country's accession to the EU in 2004. The Czech Republic was Slovakia's largest trading partner from the dissolution of Czechoslovakia in 1993 until 1997, and since then Czechia has been the second most important trading partner due to geographical proximity as well as historical, linguistic, and cultural ties. Since 1998, Germany has been the largest trading partner of the Slovak Republic (UNCTADstat, 2024a).

Slovakia naturally has the closest commercial and economic ties with other EU Member States. Intra-EU (intraregional) trade accounted for 80.1% and 76.8% of Slovakia's exports and imports of goods, respectively, in 2022 (Eurostat, 2024c). Slovakia's most important export partners are Germany (21% of total merchandise exports in 2022), Czechia (12%), Hungary (9%), Poland (8%), and France (6%) (UNCTADstat, 2024a). On the other hand, when it comes to intra-EU trade, the majority of Slovakia's imports come from Germany (14% of total merchandise imports in 2022), Czechia (9%), Poland (5%), Hungary (5%), and France (3%) (UNCTADstat, 2024a). Extra-EU trade, that is, trade with non-EU countries, accounted for 19.9% and 23.2% of Slovakia's exports and imports of goods, respectively, in 2022 (Eurostat, 2024c). Outside the EU, important export partners are the United Kingdom (4% of total merchandise exports in 2022), the United States (3%), and China (3%). The largest non-EU import partners include China (8% of total merchandise imports in 2022), Russia (7%), and the Republic of Korea (6%) (UNCTADstat, 2024a). In summary, the territorial structure of Slovakia's foreign trade is relatively concentrated, as most of its trade is carried out with a few trading partners, mainly from the EU. However, some non-EU countries are important partners due to imports of oil,

natural gas, and components for the Slovak manufacturing sector. It can also be observed that Slovakia does not have developed trade relations with developing countries.

Regarding the commodity structure of foreign trade, Slovak export is dominated by motor vehicles for the transport of persons (24.4% of total merchandise exports in 2022), parts and accessories of vehicles (5.1%), television receivers (4.4%), telecommunication equipment (3.8%), and refined petroleum products (2.5%) (UNCTADstat, 2024a). From a long-term perspective, the road vehicles, electric machinery and appliances, and machinery make up more than half of Slovakia's total exports in goods, indicating a low level of diversification of the Slovak export basket. This is confirmed by the UNCTAD's export product concentration index (i.e., Herfindahl-Hirschman index), according to which Slovakia has a moderately concentrated export structure, but with a growing concentration tendency (UNCTADstat, 2024c). Compared to the other Visegrad countries, Slovakia has the most concentrated commodity structure of exports. On the other side, Slovakia's most important import items include parts and accessories of vehicles (11% of total merchandise imports in 2022), telecommunication equipment (6.1%), natural gas (5.6%), electrical machinery (3.6%), and electric current (3%) (UNCTADstat, 2024a). Except for energy imports, the commodity structures of Slovakia's exports and imports are similar, suggesting the importance of intraindustry trade.

In Slovakia, the terms of trade, measured as the ratio between the index of export prices and the index of import prices, deteriorate over time (OECD, 2024a), which indicates an unfavorable position of the economy in international trade flows. This is caused by various factors, such as the increasing prices of imported inputs, including fossil fuels and other commodities, as well as the way of Slovakia's integration into global value chains, that is, assembling of imported intermediate products (European Commission, 2023a), resulting in a low domestic added value in Slovak exports (Fidrmuc et al., 2020). According to OECD (2024b) data, Slovakia has the fourth highest share of foreign value added in gross exports (47.7% in 2020) among OECD countries. In addition, Slovakia records the lowest share of high-technology exports, that is, products with high R&D and innovation intensity, in the total manufactured exports (8.4% in 2022) among the Visegrad countries and the fifth lowest within the EU (World Bank, 2024b). Other weaknesses of Slovakia's exports include a high concentration of exporters, weak involvement of SMEs in total exports, and insufficient export performance of Slovak companies. The 10 largest exporting companies, predominantly foreign owned, accounted for 33% of total Slovak exports in 2020 (Hrabina, 2021). Slovak exports are generated mostly by foreign companies, whereas domestic companies accounted only for 12% of total exports in 2021 (Steinhauser & Boros, 2022). SMEs, that is, companies with less than 250 employees, accounted for 29.5% of total Slovak exports in 2022 (SBA, 2023).

Table 7.1 reports five commodity groups with the highest degree of international specialization of the Slovak Republic in four selected years (1995, 2007, 2015, and 2022). It was calculated by using the Lafay index of international specialization. In 1995, Slovakia's greatest comparative advantages were in the

Table 7.1. The Highest Values of the Lafay Index of International Specialization of the Slovak Republic.

No.	1995	2007	2015	2022
1	Iron and steel products, not clad (4.94)	Passenger motor vehicles (7.17)	Passenger motor vehicles (7.79)	Passenger motor vehicles (10.71)
2	Petroleum products, refined (1.57)	Television receivers (4.62)	Television receivers (3.06)	Television receivers (1.55)
3	Textile yarn (1.32)	Petroleum products, refined (1.37)	Rubber tires (0.81)	Rubber tires (0.57)
4	Iron and steel products, clad (1.12)	Iron and steel products, not clad (1.09)	Petroleum products, refined (0.72)	Iron and steel products, not clad (0.46)
5	Wood, simply worked (0.87)	Sanitary, plumbing and heating fixtures (0.41)	Iron and steel products, not clad (0.42)	Petroleum products, refined (0.32)

Source: Author's own calculations, using UN Comtrade (2024) data.

Note: The values of the Lafay index of international specialization (LFI) are given in brackets. The LFI is calculated using the following formula: $LFI_j^i = 100\left(\frac{x_j^i - m_j^i}{x_j^i + m_j^i} - \frac{\sum_{j=1}^{N}(x_j^i - m_j^i)}{\sum_{j=1}^{N}(x_j^i + m_j^i)}\right)\frac{x_j^i + m_j^i}{\sum_{j=1}^{N}(x_j^i + m_j^i)}$, where x_j^i and m_j^i are export and import of a commodity group j at the 3-digit level of SITC classification of a country i to and from the rest of the world, respectively, and N is the total number of commodity groups. A positive value of the LFI indicates the existence of comparative advantage in a given commodity group, whereas a negative value indicates comparative disadvantage. The higher the LFI value, the greater the comparative advantage. For more information, see Zaghini (2003).

export of lesser sophisticated and low-skill products, such as iron and steel products, textile yarn, and wood (Table 7.1). In 2022, Slovakia achieved the strongest comparative advantage in the export of passenger motor vehicles. The degree of Slovakia's international specialization in motor vehicles shows a growing trend from the mid-2000s when PSA Peugeot Citroën (currently Stellantis) and Kia started their operations in the Slovak economy. Slovakia also shows relatively high degree of specialization in exporting television receivers, rubber tires, iron and steel products, and refined petroleum products. As can be seen in Table 7.1, the patterns of Slovakia's international specialization are relatively constant in the 21st century. Broadly speaking, Slovakia shows "acquired" comparative advantages, in particular through FDI inflows, rather than "natural" comparative advantages that are based on factor endowments.

4. Foreign Direct Investment

The inflow of FDI plays a vital role in the Slovak economy. Foreign companies operating in Slovakia hold an important share of Slovak exports, employment, industrial production, as well as overall GDP. At the beginning of the 21st century, FDI inflows contributed to the modernization and restructuring of the Slovak economy. Foreign investments significantly contributed to labor productivity growth, primarily due to the import of efficient technologies, and thus also to Slovakia's economic convergence toward the EU average (Ministry of Economy, 2018). However, FDI flows into the Slovak economy were not adequately accompanied by investments into R&D, innovation, and high-tech industries, which resulted in the current stagnation of higher added-value sectors and international competitiveness of the Slovak economy (Ružeková et al., 2021). Although multinational corporations are more productive than Slovak companies, they mostly transfer lower added-value economic activities to the Slovak economy, rather than research activities that usually remain in their home countries. This led to the result that Slovakia represents a "top assembly plant" and not a leader in research and innovation (Habrman et al., 2022).

Fig. 7.1 depicts FDI inflows as a percentage of GDP to the Slovak Republic and other Visegrad Group countries from 1993 to 2022. Inward FDI flows to the Slovak economy can be divided into three periods. The first period, dated from Slovakia's independence in 1993 until 1998, is characterized by relatively low FDI inflows to the Slovak economy compared to other Visegrad countries, mostly due

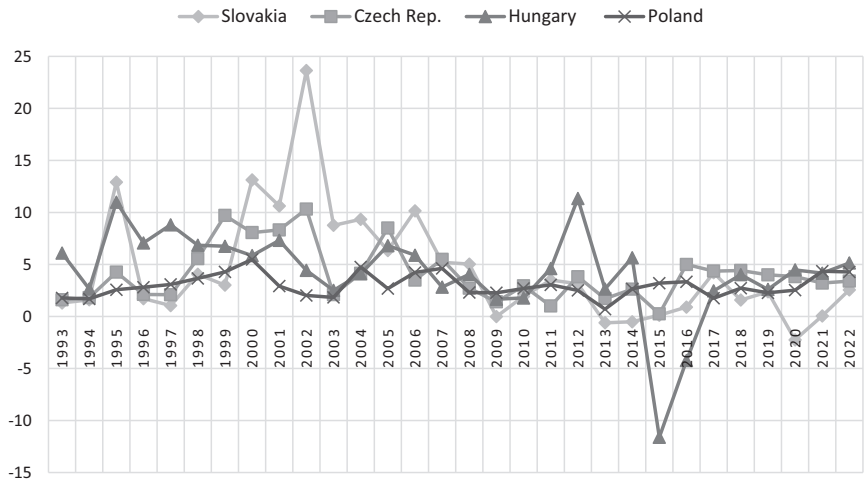

Fig. 7.1. FDI Inflows to the Visegrad Countries in the Period 1993–2022 (% of GDP). *Source:* Author's own elaboration based on UNCTADstat (2024b) data.

to political instability and unfavorable investment environment during the era of "Mečiarism" (1993–1998). In this period, FDI inflows to the Visegrad countries were mainly driven by the privatization process. The government of Vladimír Mečiar publicly prioritized domestic investments over foreign ones (Wemer, 2013), which also contributed to relatively low FDI flows into Slovakia. Between 1993 and 1998, FDI inflow to GDP ratio in Slovakia averaged 3.8% per year (UNCTADstat, 2024b). In the second period, dated from 1999 to 2008, the Slovak economy experienced a boom in FDI inflows, primarily thanks to economic reforms (tax, pension, labor market, and other reforms) implemented by the two governments of Mikuláš Dzurinda (1998–2006), investment aid that started to be provided by the Slovak government, Slovakia's accession to the EU in 2004, as well as continuation of the privatization process. Between 1999 and 2008, the share of FDI inflow in Slovakia's GDP was on average 9.5% per year (UNCTADstat, 2024b), while the highest inward FDI flows were recorded between 2000 and 2006, when Slovakia became a leader in FDI inflow to GDP ratio among the Visegrad countries (Fig. 7.1). The change was triggered by the Global Financial Crisis, as a result of which Slovakia experienced a negative FDI inflow in 2009. In the postcrisis period, FDI inward flows did not reach the level of the first decade of the 21st century. The third period, dated from 2009 onwards, is characterized by a relative slowdown in FDI inflows expressed in relation to GDP compared to the previous period as well as other Visegrad countries (Fig. 7.1). Between 2009 and 2022, FDI inflow to GDP ratio in Slovakia averaged 1.2% per year (UNCTADstat, 2024b). This slowdown may be caused, inter alia, by the loss of Slovakia's competitive advantage based on a relatively cheap, available, and skilled labor force.

Slovakia's position in foreign investment flows is highly inward-oriented, given that inward FDI stock was equivalent to 50.6% of Slovakia's GDP in 2022, while outward FDI stock represented only 4.8% of its GDP in a given year (UNCTADstat, 2024b). The share of inward FDI stock in Slovakia's GDP has increased more than tenfold since 1993, when the stock represented 4.7%. However, over the recent years, inward FDI stock to GDP ratio has shown a downward trend (e.g., inward FDI stock accounted for more than 62% in 2017) (UNCTADstat, 2024b). Compared to the Czech Republic and Hungary, as well as EU27 average, inward FDI stock to GDP ratio in Slovakia is significantly lower. The large imbalance between FDI inflows and outflows reflects the need of the Slovak economy to import foreign capital and not to export it abroad. The share of outward FDI stock in Slovakia's GDP has more than quadrupled between 1993 and 2022. However, Slovakia records the second and fourth lowest outward FDI stock to GDP ratio among OECD and EU countries, respectively (UNCTADstat, 2024b). This may indicate the low ability of Slovak companies to expand abroad due to a lack of capital and low competitiveness in foreign markets caused by insufficient innovation capacity (IHA, 2023), as well as an inadequate state support for FDI outflows.

Inward FDI stock in Slovakia accounted for 53.8 billion euros in 2022 (NBS, 2024). As shown in Fig. 7.2, the largest foreign investors in Slovakia are the

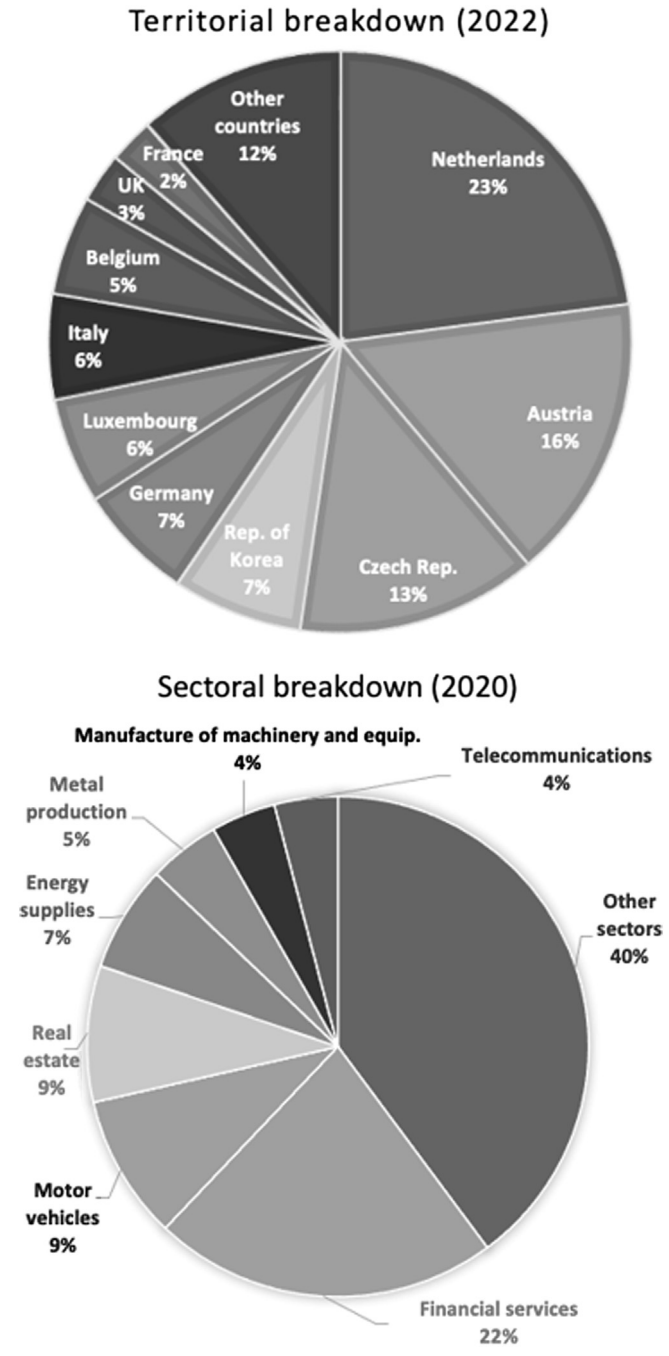

Fig. 7.2. Structure of Inward FDI Stock. *Source:* Author's own elaboration based on NBS (2024) data.

Netherlands (due to the fact that many non-Dutch multinational corporations are registered there because of tax advantages), Austria, and the Czech Republic. Despite the fact that Germany accounts for only 7% of inward FDI stock in Slovakia (Fig. 7.2), German companies belong to the most important foreign investors in the Slovak economy. Most FDI in Slovakia is carried out by EU-based multinational corporations. In 2022, EU countries accounted for 86.4% of inward FDI stock in the Slovak Republic, while the share of OECD countries represented 96.8% (NBS, 2024). Among non-EU countries, the largest investors include the Republic of Korea and the United Kingdom, followed by the United States and Norway.

In the Slovak economy, inward FDI stock is very unevenly distributed. From a territorial point of view, 81% of inward FDI stock is concentrated in Western Slovakia, including the Bratislava Region, 12% in Central Slovakia, and only 7% in Eastern Slovakia (NBS, 2024). Roughly two thirds of inward FDI stock is concentrated in the Bratislava region, with 63.6% located in Bratislava. Although state investment aid is aimed at reducing regional disparities, the regions of Presov and Banska Bystrica account for only 1.6% and 2.4% of Slovakia's inward FDI stock, respectively (NBS, 2024). Regarding the sectoral breakdown, 59.4% of inward FDI stock in the Slovak economy is concentrated in the service sector, particularly financial, real estate, and telecommunication services, and 31.6% in manufacturing sector, especially automotive, metallurgical, and mechanical engineering industries (Fig. 7.2). The automotive industry is the most important manufacturing sector for FDI inflows and, at the same time, the driving force of the Slovak economy. Slovakia's automotive industry produces more than one million vehicles per year, accounts for half of the total industrial production, directly employs (four established car manufacturers and their direct suppliers) about 176 thousand people, and contributes by 11% to Slovakia's GDP (SARIO, 2024f). The fifth global car manufacturer in Slovakia, Volvo, is expected to start its production in 2026 with a planned annual capacity of 250 thousand vehicles (SARIO, 2024f). It is important to note that inward FDI stock is largely concentrated in low value-added manufacturing, such as assembly activities in the car industry (IHA, 2023).

Determinants that positively influence FDI flows into the Slovak economy include favorable geographic location in the center of Europe, high degree of trade openness, membership in the EU and euro area, relatively skilled and educated labor force, positive attitude of the Slovak government toward inward FDI flows (e.g., investment incentives, SARIO activities, industrial parks), heavily industrialized economy (especially a highly developed automotive industry and a dense network of automotive suppliers), and other factors. Regarding the types of FDIs according to the main motivation of multinational corporations when investing abroad, efficiency-seeking FDI or, in other words, export-oriented FDI dominate from the Slovak economy's perspective (e.g.,

Habrman et al., 2022; Ministry of Economy, 2024a). In the early 21st century, FDI inflows were mostly driven by relatively cheap and qualified workforce, which is no longer the case due to increasing labor costs as well as a shortage of skilled labor (e.g., European Commission, 2023a). This suggests that Slovakia should build a new competitive advantage and improve its nonprice competitiveness in order to attract the necessary amount of FDI, especially to higher added-value sectors.

On the other hand, the factors that can adversely affect multinational corporations' decision to invest in Slovakia include small domestic market with 5.4 million inhabitants, mineral resources scarcity, inland location of the country, significant regional disparities, high vulnerability to external economic shocks due to Slovakia's dependence on industry, exports and high integration in global value chains, suboptimal quality and availability of transport infrastructure, relatively low R&D and innovation spending, poor availability of labor force and unfavorable demographic situation (e.g., shrinking working-age population and population aging), low labor productivity (measured as GDP per person employed and hour worked) compared to the EU average (Eurostat, 2024a), low efficiency of public administration, inefficient judiciary system, and uncertain macroeconomic environment (e.g., European Commission, 2023a, 2023b; U.S. Department of State, 2024).

Slovak companies have not made significant outward FDI, as the total cumulative value of direct investments from Slovakia abroad amounted to 5.1 billion euros in 2022 (NBS, 2024). As shown in Fig. 7.3, Slovakia records a high territorial concentration of outward FDI stock. Approximately 54% of Slovakia's outward FDI stock is concentrated in the Czech Republic (Fig. 7.2). It can also be observed that Slovak companies tend to expand to geographically close European countries, such as the Czech Republic, Poland, Austria, and Hungary, which together accounted for 72% of Slovakia's outward FDI stock in 2022 (Fig. 7.3). Most of these host countries have similar economic structures with comparable level of economic development, which, to a certain extent, limits the potential economic benefits that outward FDI can bring, such as the transfer of new technology and know-how from abroad (Fidrmuc et al., 2020). Therefore, state support for FDI outflow to Western European countries and non-EU countries might be beneficial for the Slovak economy. Among non-EU countries, the United Kingdom, Ukraine, and China have the largest share in outward FDI stock of the Slovak Republic (NBS, 2024). As illustrated in Fig. 7.3, Slovakia's outward FDI stock is predominantly concentrated in the service sector, namely wholesale, real estate, and management consultancy services.

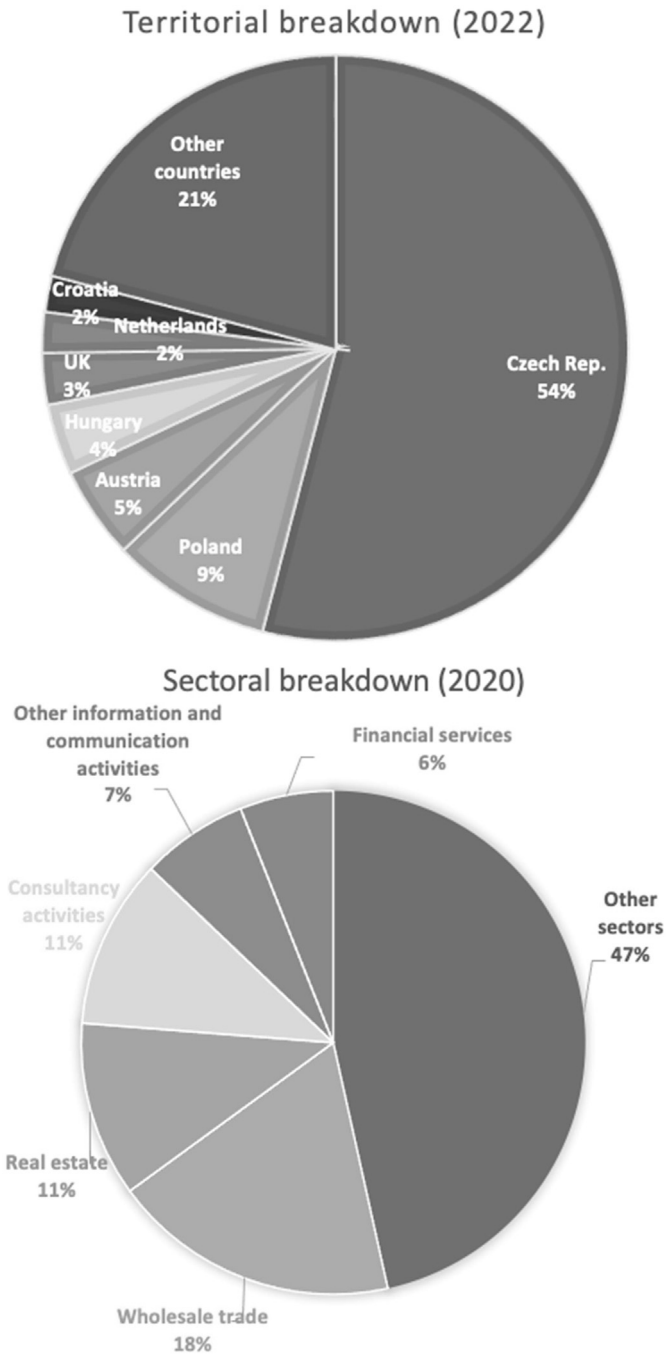

Fig. 7.3. Structure of Outward FDI Stock. *Source:* Author's own elaboration based on NBS (2024) data.

5. Conclusion

As emphasized in this chapter, foreign trade and FDI are key drivers of the Slovak economy's performance. Therefore, an appropriate foreign economic policy together with clearly defined strategies, objectives, and instruments of external economic relations, as well as an effective institutional framework in the field of trade and investment promotion are more than necessary. However, there is considerable scope for further improvements in various areas, such as, for instance, strengthening the efficiency of Slovak economic diplomacy, enhancing cooperation among different stakeholders, allocating more human and financial resources to the national system of export and investment promotion. It is also important to note that Slovakia's membership in the European Union, especially with regard to the EU's common commercial policy and investment policy measures, as well as being part of the Eurozone define the framework for the formulation and implementation of national policy in the field of external economic relations.

Slovakia is one of the most open economies in the world with a growing tendency toward trade openness. The largest comparative advantages in Slovak exports are "acquired" through FDI inflows and consist of the products of automotive and electronics industries, namely passenger motor vehicles and television receivers. The territorial structure of Slovakia's foreign trade is relatively concentrated, as most of its trade is carried out with a few EU countries, whereas the share of non-EU countries in Slovak exports remains very low. Slovakia records a relatively concentrated commodity structure of exports, which is dominated by road vehicles and electric machinery and equipment. The country is strongly integrated in global value chains, but its role primarily consists in assembly of imported intermediate products, resulting in a low domestic value added in Slovak exports. The analysis of Slovakia's exports also indicates a high concentration of exporters, weak involvement of SMEs in total exports, and insufficient export performance of Slovak companies. Therefore, diversification of the territorial and commodity structure of Slovak exports seems to be crucial for increasing competitiveness and ensuring future economic development of the Slovak economy.

Slovakia's foreign trade is closely linked to foreign investment due to the fact that FDI inflows are primarily export-oriented and foreign companies contribute significantly to Slovakia's total exports. Inward FDI flows increased industrial production, employment, and labor productivity, as well as contributed to the modernization and restructuring of the Slovak economy. Slovakia is a net importer of FDI, that is, inward FDI considerably exceeds outward FDI, indicating a high need for foreign capital in the Slovak economy and a low ability of Slovak companies to expand abroad. Inward FDI stock in the Slovak economy is characterized by an uneven territorial distribution and a high concentration in a few sectors. In recent years, FDI inflows to the Slovak economy have slowed down, which may be caused, inter alia, by the loss of Slovakia's competitive advantage based on a relatively cheap, available, and skilled labor force. Slovakia faces the challenge of ensuring FDI inflows of the necessary amount, attracting FDI with higher added value and to less developed regions, as well as supporting investments by Slovak companies abroad.

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