



Faculty of Social Sciences

Political Science

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The Impact of Economic Nationalism in the European Union on the Economic Development of Member States: A Comparative Empirical Analysis

Bachelor's Thesis

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Background

Background of the Research

- Economic security has become more important to governments than military security after the WWII¹
- In recent years, the topic of economic nationalism has surged across the globe, including within the European Union²
- The policy of economic nationalism contradicts the EU's fundamental principles of the single market (free movement of goods, capital, services and people or the "four freedoms"), and it does not always correlate with political authoritarianism
- The UK's recent exit from the EU ("Brexit") is the most striking example of the consequences of the policy of economic nationalism³
- What are the real economic consequences of this policy within the EU?



¹Baughn, C. C., & Yaprak, A. (1996). Economic nationalism: Conceptual and empirical development. *Psychology*, 17, 759–778

²Born, B., Müller, G. J., Schularick, M., & Sedláček, P. (2019). The costs of economic nationalism: evidence from the Brexit experiment. *The Economic Journal*, 129(623), 2722.; Zettelmeyer, J. (2019). The return of economic nationalism in Germany. *Policy Briefs*, 19, 1–17.; Zettelmeyer, J. (2019b, March). The troubling rise of economic nationalism in the European Union.; Bolle, M. D., & Zettelmeyer, J. (2019). Measuring the rise of economic nationalism. *Peterson Institute for International Economics Working Paper*, 19, 1–57.

³Born, B., Müller, G. J., Schularick, M., & Sedláček, P. (2019). The costs of economic nationalism: evidence from the Brexit experiment. *The Economic Journal*, 129(623), 2722.

Hungarian Prime Minister V. Orbán and European Commission President U. von der Leyen at the European Commission headquarters in Brussels
Source: <https://www.aljazeera.com/news/2024/2/7/eu-launches-legal-action-against-hungarys-sovereignty-law>

Problem Statement



Research Problem

A research problem of the impact of economic nationalism policies in the European Union on the economic development of EU member states from 2003 to 2021

Research Question

General: how did economic nationalism policies in the European Union by member states affect their economic development in 2003–2021?

Clarification: what, if any, relationship was there between economic nationalism measures and economic development?

How did this effect behave over time?

How did the factor of economic integration influence the strength of this relationship?

Research Subject, Goal, and Objectives

Research Subject, Goal, and Objectives

Subject: the policy of economic nationalism on the part of the member states of the European Union in 2003–2021

Goal: identify the presence or absence of a relationship between the economic nationalism policy measures of EU member states and their economic development in 2003–2021, as well as to analyse its nature

Objectives:

1. At the theoretical level, identify the mechanisms of the relationship between the policy of economic nationalism and economic development indicators for the EU countries in order to link theoretical knowledge about the subject of the study to its specific empirical dimensions
2. Identify manifestations of economic nationalism policies in EU states in specific political and economic decisions and indicators during the period from 2003 to 2021 for further regression analysis
3. Assess the relationship between the identified measures of economic nationalism and economic development in EU member states to test the hypotheses
4. Analyse the temporal aspects of the relationship by distinguishing between short-term and long-term effects, and identify the role that economic integration has played in it
5. Make conclusions about the presence of a relationship and its nature, qualitatively correlate the results of quantitative analysis with theory, and answer the research question

Conceptualisation of Basic Concepts

"Economic Nationalism"

A **set of policies** that emphasize **domestic control** over the economy, labor, capital formation, even if it requires the imposition of restrictions

Important goals of economic nationalism policy are to **strengthen the wealth and power of the state**, closely identified with the nation as a collective community, and also to strengthen the sense of national glory and identity through economic development

Thus, the interest of the nation, national prosperity, is more important than the economic needs of the individual and especially humanity as a whole



Based on the ideas of
List, F.
Carey, H.
Buchanan, I.
Fichte, J.
Muller, A.
Nakano, T.⁴



⁴ List, F. (1904). The national system of political economy. Longmans, Green, Co.; Nugent, W. T. K. (1968). Money and American society, 1865–1880. Free Press.; Sharkey, R. P. (1959). Money, class, and party: An economic study of civil war and reconstruction. Johns Hopkins University Press.; Buchanan, I. (1879, October). Proposal of a national currency reform league for Canada. National Archives of Canada.; Helleiner, E. (2002). Economic nationalism as a challenge to economic liberalism? Lessons from the 19th century. International Studies Quarterly, 46, 307–329.; Nakano, T. (2004). Theorising economic nationalism. Nations and Nationalism, 10, 211–229.

Based on the ideas of
Sen, A.
Stiglitz, J. E.
Friedman, M.
Kuznets, S.⁵



⁵ Sen, A. (1999). *Development as freedom*. Oxford University Press; Stiglitz, J. E. (2012). *The price of inequality: How today's divided society endangers our future*. W.W. Norton & Co.; Friedman, M. (1992). *Money mischief: Episodes in monetary history*. Harcourt Brace Jovanovich.; Kuznets, S. (1966). *Modern economic growth: Rate, structure, and spread*. Yale University Press.

"Economic Development"

A process through which a nation enhances the **economic, political, and social well-being** of its people

This definition aligns with the **broader understanding** in economic theory where economic development is often seen not merely as an increase in national income or output but as an improvement in the quality of life and standard of living of the population

For the purposes of empirical analysis, economic development is measured more narrowly through specific, quantifiable economic indicators that reflect key aspects of a nation's economic health:

1. *GDP Growth Rate*
2. *Unemployment Rate*
3. *Inflation Rate*

Literature Review

Economic Nationalism Research

Theory

19th cent. Helleiner (2002): The main debate on economic nationalism took place in this century between its proponents and representatives of the liberal school of political economy. As a result, economic nationalism became closely connected with the concept of **nation**

20th cent. Nakano (2004): The idea of economic nationalism became an umbrella-like and collected all illiberal politics. This concept became analogous to realism in international relations, lost its focus on nations and faded into the background amid the debate between liberalism and Marxism

21th cent.: In the late 20th and early 21st centuries came the growth of research in the field of economic nationalism. Many researchers have advocated a theoretical rethinking of this theory and a return to its original connection to the nation (Szporluk, 1988; Mayall, 1990; Crane, 1998; Shulman, 2000; Abdelal, 2001, Helleiner, 2002; Nakano, 2004)

Empirical Evidence

EU's context

- S. I. Dinc and I. Erel (2013): Analysis of government interventions in corporate mergers within 15 EU countries (their focus stopped in 2004)
- M. A. Eger and S. Valdez (2015): Examined ideological shift and increasing popularity of radical right parties in Western Europe in 1970-2010
- I. Colantone and P. Stanig (2019): Showed an analysis of the rise of economic nationalist and radical-right parties across 15 Western Europe countries from the early 1990s to 2016

Region or country specific

- Born et al. (2019); Rubanov (2023): The Brexit case is considered by as a natural macroeconomic experiment and an example of economic nationalism policy's consequences. Due to actions in line with the policy of economic nationalism, the UK has lost \$197.2 billion, or 7.07% of GDP (PPP) in 2015 by 2023 since the official vote
- N. Bandelj (2008): Examined how economic phenomena are imbued with cultural meanings connected with economic nationalism in Slovenia
- C. C. Baughn and A. Yaprak (1996): Individual-level research based on surveys of the U.S. population determining what attitudes towards economic nationalism are associated with

Defence Statements



Statements of the Defence

1. The policy of economic nationalism contradicts the basic political and economic principles of the EU. Its implementation by individual member states should provoke a negative reaction
2. This policy has strong theoretical roots and is popular among contemporary politicians, but it has never been investigated in terms of the real economic consequences for the state and the nation, which makes the study unique
3. The policy of economic nationalism among the EU member states is empirically manifested by reducing duty-free import, increasing import tariffs, increasing trade balance, and decreasing the number of foreign workers, which goes against the core values of the EU
4. The implementation of economic nationalism policy in the EU context leads to short-term positive economic results (this year), taking advantage of the non-proliferation of such measures, as well as the unreadiness of other European actors to confront it instantly
5. In the long-term (from one year), the implementation of economic nationalism policy among the EU member states leads to negative economic consequences due to contradiction with the basic EU principles, as well as inclusion of European regulators and other actors designed to “pacify,” the country introducing measures under this policy
6. The level of economic integration is a moderator of the relationship between economic nationalism policies and their economic consequences and is therefore a factor in the “success,” of economic nationalism policy in the EU
7. In general, the policy of economic nationalism has negative economic consequences for most EU member states. The relationship found has both practical and academic applications. For example, it allows policy makers to identify optimal economic strategies adapted to the specific conditions of each EU country depending on its background. It can also serve as a basis for a discussion on possible reforms of the EU institutional design. It may be a good starting point for evidence in favour of the existence of economic elitism, hierarchy and inequality within the EU, which may allow some EU countries to pursue aggressive economic policies while others do not. It also opens up a discussion on the effectiveness of staying in the EU for countries that joined it at different times

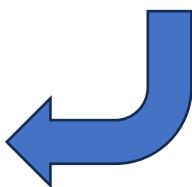
Theoretical Framework

Theoretical Framework

The study employs **Rational Choice Theory (RCT)** and **Neo-Institutionalism** according to D. North⁶ as its theoretical lenses

RCT: States (like individuals) make decisions based on their assessments of the best set of actions to achieve their goals, even if these decisions prioritise their national interests over collective benefits. They calculate that the benefits of such policies, perceived through the prism of their national interests, outweigh the costs imposed by EU institutions

Neo-Institutionalism: EU institutions influence the economic performance of member states by creating formal restrictive frameworks and informal “rules of the game”, limiting the manifestations of economic nationalist policies and promoting a culture of cooperation and integration



Thus, the study, integrating RCT and Neo-Institutionalism⁷, touches upon the complex interaction between the individual rationality of the state and the collective rationality embodied in the EU's institutions

⁶ Gadzhiev, K. A. (2015). Political institutions: Institutional and neo-institutional approaches. *Vlast*, 07, 134–140.

⁷ Hall, P. A., & Taylor, R. C. R. (1996). Political science and the three new institutionalisms. *Political studies*, 44, 936–957.

Methodological Foundations

Main data analysis method: **regression analysis** on Time Series Cross Section (TSCS) data

Models⁸ according to the recommendations for working with TSCS in political science⁹:

1. Autoregressive Distributed Lag (ADL)
2. Finite Distributed Lag (FDL)

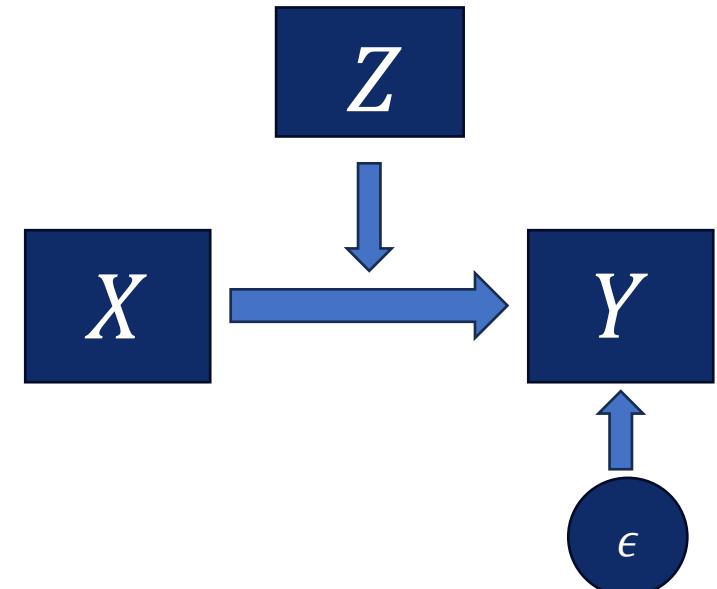
In order to analyse the role of economic integration as the factor determining the strength of the effect, interaction variables will be added in the specification of both models to assess the **moderation effect**:

Both models' advantages:

- Taking into account time lags: the ability to assess the initial effect that changes over time, i.e., to consider **short-term and long-term impact**
- The use of **multiple exogenous variables**, i.e., time series

Both models' limitation:

- It is assumed that the time series are stationary



⁸ The mathematical specifications of these models in general terms can be found in the appendix of this presentation

⁹ Boef, S. D., & Keele, L. (2008). Taking time seriously. *American Journal of Political Science*, 52, 184–200.; Beck, N., & Katz, J. N. (2011). Modeling dynamics in time-series-cross-section political economy data. *Annual Review of Political Science*, 14, 331–35

Formulation of Research Hypotheses



Research Hypotheses

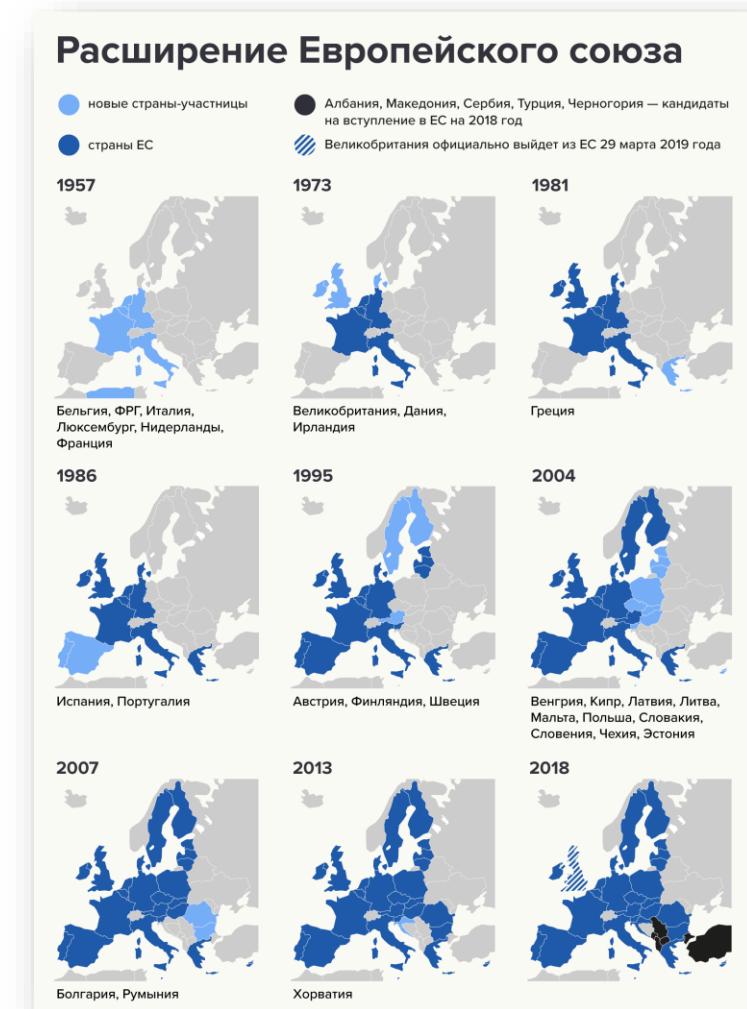
1. *Economic nationalism policy among EU member states in 2003–2021 led to a short-term improvement in economic indicators, reflecting the immediate benefits of protective measures*
2. *In the long term, EU member states that pursued economic nationalism policies in 2003–2021 had a negative impact on economic development due to contradictions with the EU's principles of integration*
3. *The “success” of economic nationalism policies among EU member states in 2003–2021 depended on the state's level of integration into the EU single market, with more integrated states experiencing more significant negative consequences of this policy*

Empirical Base

Chronological Framework and Research Boundaries

Period: 2003–2021

Geographical scope: 24 current EU member states
(excluding Bulgaria, Roumania and Croatia for data completeness)



EU enlargement

Source: <https://tass.ru/infographics/8500>



Data — dependent variables (annual)

Economic development indicators¹⁰:

- *GDP (PPP): growth rates*
- *Unemployment rate*
- *Inflation rate*

Source: Eurostat¹¹

¹⁰ The distribution of the dependent variables can be found in the appendix of this presentation

¹¹ The statistical office of the European Union. Eurostat. <https://ec.europa.eu/eurostat/>

Data — independent variables (annual)

Indicators reflecting various aspects of economic nationalism policy, taken from the theory¹²:

- *Effectively Applied Weighted Average (%) Tariff*: The average of tariffs weighted by their corresponding trade value (should increase to comply with the policy of economical nationalism)
- *Duty Free Imports (US\$)*: Effectively applied 0% tariff imports (must be lower for the policies implemented to fall under the ideology of economical nationalism)
- *Number of Foreign Workers in the Local Labour Market*: Reflects the extent to which a country is willing to give foreigners access to the local labour market (according to the policy of economic nationalism, needs to be lower)
- *Hirschman-Herfindahl (HH) Market Concentration Index*: A measure of the dispersion of trade value across an exporter's partners
- *Index of Export Market Penetration*: Is calculated as the number of countries to which the reporter exports a particular product divided by the number of countries that report importing the product that year (is the moderator variable)
- *Trade Balance (% of GDP)*: exports of goods and services (% of GDP) minus imports of goods and services (% of GDP), this indicator should be higher under a policy of economical nationalism (but it is important to note that one cannot judge a country's policy adherence solely on this indicator)

Sources: Eurostat¹³, The World Bank (The World Integrated Trade Solution project)¹⁴

¹² Descriptive statistics for the main and control variables can be found in the appendix of this presentation

¹³ The statistical office of the European Union. Eurostat. <https://ec.europa.eu/eurostat/>.

¹⁴ World Integrated Trade Solution (WITS). The World Bank. <https://wits.worldbank.org/>.

Results



GDP Growth Rate — 1

- **FDL** model was selected
- The positive effect of the increase of **Duty-Free Imports** in the current year will be decreased by the negative effect in the next year, but in total its one percent increase still gives a positive effect in the form of an increase in GDP Growth Rate by ≈ 0.005
- **Trade Balance** shows a minor positive association with GDP growth
- The effect of the **Average Tariff** for the current year ($\beta = 2.955, p < 0.01$) show significant initial positive impact on the GDP Growth Rate

Table 1: GDP Growth Rate Model (FDL)

GDP Growth Rate	
Duty Free Import (\log) $_{t-0}$	4.104*** (1.412)
Duty Free Import (\log) $_{t-1}$	-3.628** (1.426)
Trade Balance (% of GDP)	0.095** (0.044)
Average Tariff $_{t-0}$	2.955*** (0.918)
Average Tariff $_{t-1}$	-3.987*** (1.403)
Foreign Workers Number (\log) $_{t-1}$	-1.296*** (0.449)
Export Market Penetration Index (\log)	-9.832*** (2.312)
Average Tariff $_{t-1}$	0.904*
× Export Market Penetration Index (\log)	(0.487)
Foreign Workers Number (\log) $_{t-1}$	0.353** (0.152)
× Export Market Penetration Index (\log)	
Controls	Yes
N	418
R-squared	0.466
Adj. R-squared	0.445
Residual Std. Error	3.042 (df = 401)
F Statistic	21.890*** (df = 16; 401)

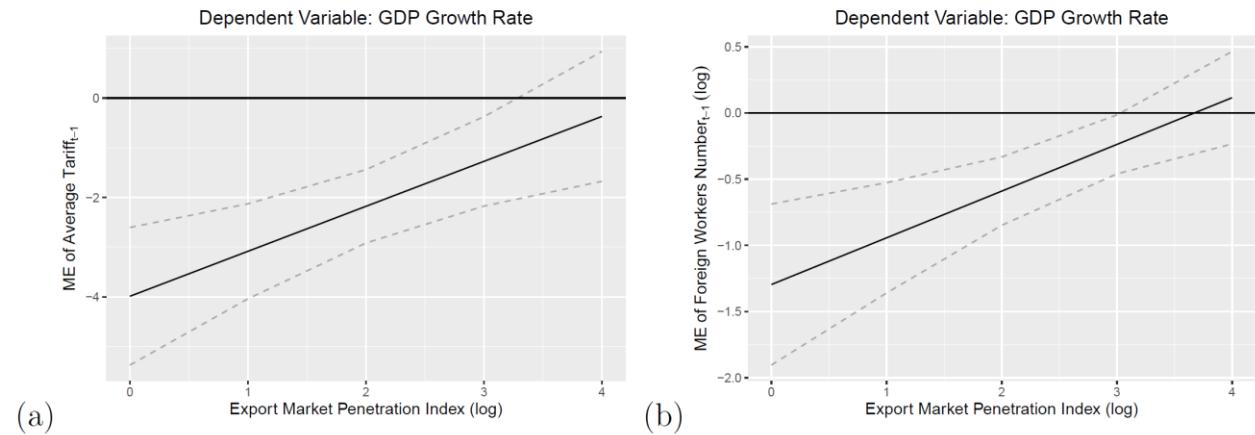
***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.

GDP Growth Rate — 2

- At zero value of the moderator variable (i.e. at weak economic integration) the lagged value of the **Average Tariff** shows significant negative effect ($\beta = -3.987, p < 0.01$) with one-unit increase and holding all other variables constant (recall that the effect of this variable for the current year was equal to 2.955)
- However, the effect of tariffs on GDP growth becomes **less negative** as market penetration increases, and becomes insignificant once the moderator variable reaches a value greater than 3
- The conditional marginal effect of the **Foreign Workers Number (log)** on GDP growth rate shows conceptually similar pattern: at weak economic integration it has strong negative effect, but it mitigates with increasing economic integration

Figure 1: Conditional marginal effect of (a) Average Tariff Rate $_{t-1}$ and (b) Foreign Workers Number $_{t-1}$ (log) on GDP Growth Rate



Note: the scale of values of the moderator variable (Export Market Penetration Index (log)) to visualise includes all the values that this variable takes in the available data.



Unemployment Rate — 1

- **ADL** model was selected
- The dependent variable has been **logarithmised**
- **Average Tariff's** current ($\beta = -0.047, p < 0.05$) and lagged ($\beta = 0.052, p < 0.01$) values have opposite effects on the unemployment rate. Summing up, a one-unit increase in the Average Tariff value leads to a rise in the Unemployment Rate by 0.5 percent, holding all other variables constant and no matter the economic integration of the country is
- **HH Market Concentration Index (log)** shows significant negative coefficient, and **Trade Balance** variable shows a non-significant relationship

Table 2: Unemployment Rate Model (ADL)

	Unemployment Rate (log)
Unemployment Rate (log) $_{t-1}$	1.547*** (0.053)
Unemployment Rate (log) $_{t-2}$	-0.666*** (0.053)
Average Tariff $_{t-0}$	-0.047** (0.020)
Average Tariff $_{t-1}$	0.052*** (0.017)
Trade Balance (% of GDP)	-0.001 (0.001)
HH Market Concentration Index (log)	-0.055*** (0.020)
Foreign Workers Number (log) $_{t-1}$	0.038*** (0.013)
Export Market Penetration Index (log)	0.047 (0.057)
Foreign Workers Number (log) $_{t-1}$ × Export Market Penetration Index (log)	-0.010** (0.004)
Controls	Yes
N	401
R-squared	0.940
Adj. R-squared	0.938
Residual Std. Error	0.112 (df = 388)
F Statistic	506.724*** (df = 12; 388)

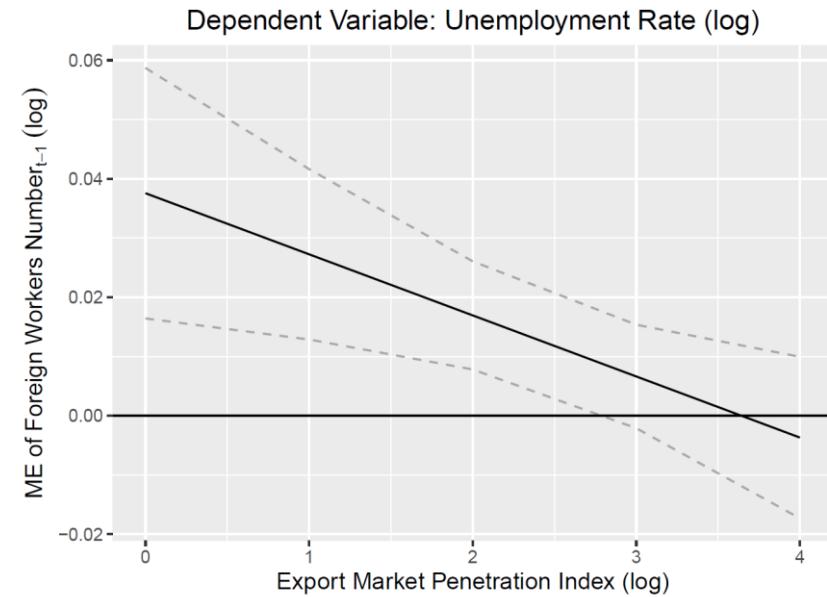
***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.

Unemployment Rate — 2

- At weak economic integration of the country the lagged value of the **Foreign Workers Number (log)** show significant positive effect ($\beta = 0.038, p < 0.01$) at the dependent variable indicating a 0.038 percent increase in unemployment with foreign workers number one percent growth and holding all other variables constant
- However, while **the marginal effect** of foreign workers on unemployment is initially positive, it **decreases** as the level of economic integration of the country increases. This positive relationship becomes insignificant when the moderator variable takes values approximately greater than 3, as in the case of the previous model for GDP Growth Rate

Figure 2: Conditional marginal effect of Foreign Workers Number_{t-1} (log) on Unemployment Rate (log)





Inflation Rate — 1

- **ADL** model was selected
- A choice of three specifications was made
- The coefficient for the current year value of the **Duty-Free Imports (log)** is positive and significant, however, the lagged value is negative (almost the same strength) and also significant, indicating that the impact of increased duty-free imports reverses after one year
- The **Average Tariff's** current year's coefficient ($\beta = -0.446, p < 0.1$) it is negative and significant. The lagged value of this indicator is positive but not significant. It means that increased tariffs slightly reduce inflation already this year, holding all other variables constant, and the effect of their increase is unlikely to be spread over time
- **Trade Balance's** coefficient also shows negative and significant ($\beta = -0.026, p < 0.05$) effect on the inflation

Table 3: Inflation Rate Models (ADL)

		Model 1	Model 2	Inflation Rate Model 3
Inflation Rate _{t-1}		0.550*** (0.055)	0.500*** (0.047)	0.537*** (0.053)
Inflation Rate _{t-2}		-0.114 (0.078)	-0.114 (0.078)	-0.073 (0.068)
Inflation Rate _{t-3}		0.097** (0.049)	0.054 (0.051)	
Duty Free Import (log) _{t-0}		0.875 (0.618)	1.039* (0.629)	1.063* (0.568)
Duty Free Import (log) _{t-1}		-0.843 (0.613)	-0.999 (0.621)	-1.005* (0.563)
Average Tariff _{t-0}		-0.522* (0.284)	-0.630** (0.279)	-0.446* (0.243)
Average Tariff _{t-1}		0.353 (0.255)	0.480* (0.258)	0.246 (0.214)
Trade Balance (% of GDP)		-0.025** (0.010)	-0.025** (0.010)	-0.026** (0.010)
Foreign Workers Number (log) _{t-0}		5.665** (2.480)	5.789** (2.573)	5.681** (2.469)
Foreign Workers Number (log) _{t-1}		-7.611*** (2.493)	-7.556*** (2.583)	-7.801*** (2.417)
Foreign Workers Number (log) _{t-2}		1.762* (1.051)	1.597 (1.157)	1.966** (0.936)
Export Market Penetration Index (log)		-0.811 (0.742)	-0.722 (0.757)	-0.818 (0.694)
Foreign Workers Number (log) _{t-0} × Export Market Penetration Index (log)		-2.427** (1.011)	-2.500** (1.041)	-2.356** (0.993)
Foreign Workers Number (log) _{t-1} × Export Market Penetration Index (log)		3.141*** (1.091)	3.136*** (1.112)	3.198*** (1.035)
Foreign Workers Number (log) _{t-2} × Export Market Penetration Index (log)		-0.668 (0.518)	-0.595 (0.546)	-0.798* (0.462)
Controls		Yes	Yes	Yes
N		376	376	395
R-squared		0.706	0.700	0.693
Adj. R-squared		0.687	0.682	0.675
Residual Std. Error		1.045	1.054	1.047
F Statistic		(df = 353) 38.474***	(df = 354) 39.297***	(df = 373) 40.039***
		(df = 22; 353)	(df = 21; 354)	(df = 21; 373)

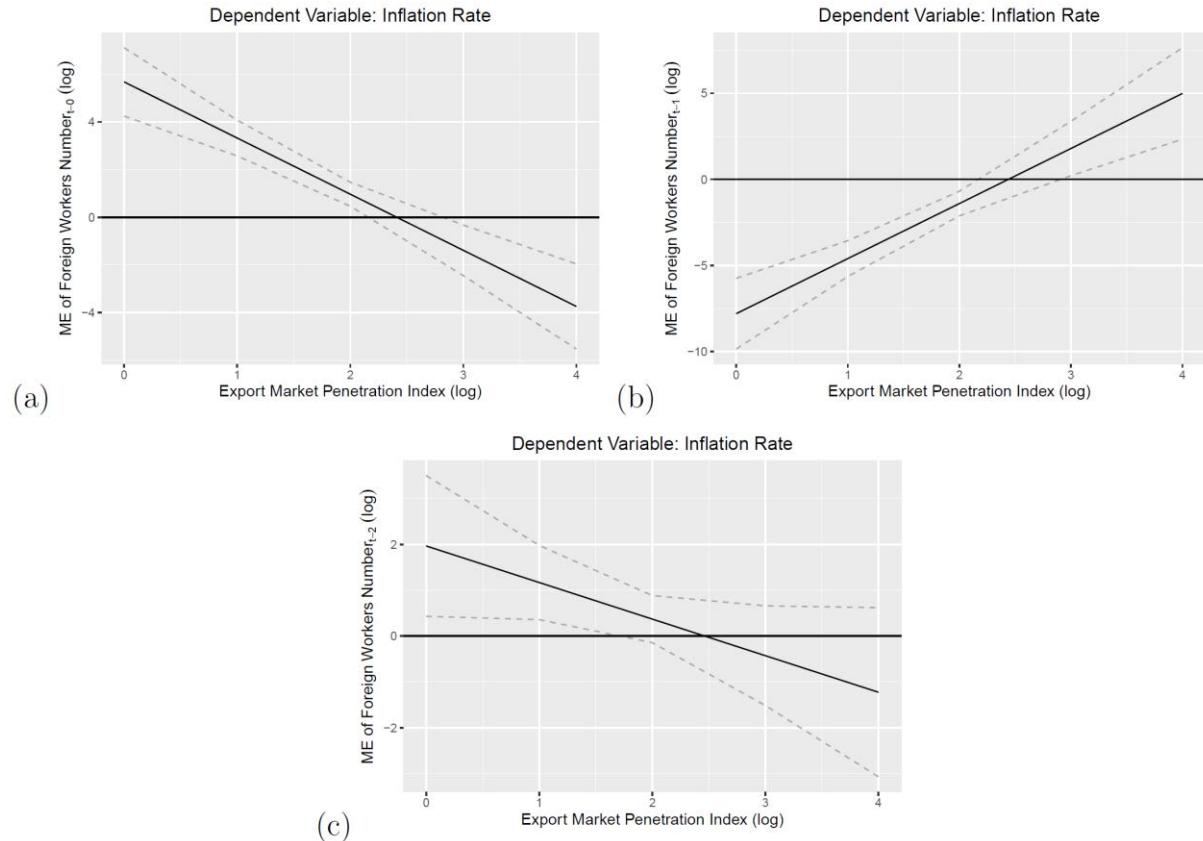
***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.

Inflation Rate — 2

- Conditional marginal effect of the **Foreign Workers Number (log)** on the Inflation Rate varies over time and highlights the complex trade-offs between the short-term and the long-term benefits associated with economic nationalism policy
- Nevertheless, if we look at the magnitude of this effect, **over all values** of the level of economic integration, the **total effect** of attracting people on the inflation remains **negative**, which is not in favour of the economic nationalism

Figure 3: Conditional marginal effect of (a) Foreign Workers Number_{t-0} (log), (b) Foreign Workers Number_{t-1} (log) and (c) Foreign Workers Number_{t-2} (log) on Inflation Rate



Conclusion



H1: a Short-Term Effect

- **Hypothesis is confirmed**, as indicated by the high significance of all the dependent variables reflecting this policy in each model
- Economic nationalism policies among EU member states lead to **short-term improvements** in economic indicators, reflecting the **immediate benefits** of the protective measures

	GDP Growth Rate Model 1 (FDL)	Unemployment Rate (log) Model 2 (ADL)	Inflation Rate Model 3 (ADL)
Unemployment Rate (log) _{t-1}		1.547***	
Unemployment Rate (log) _{t-2}		-0.666***	
Inflation Rate _{t-1}			0.537***
Inflation Rate _{t-2}			-0.073
Duty Free Import (log) _{t-0}	4.104***		1.063*
Duty Free Import (log) _{t-1}	-3.628**		-1.005*
Average Tariff _{t-0}	2.955***	-0.047**	-0.446*
Average Tariff _{t-1}	-3.987***	0.052***	0.246
Trade Balance (% of GDP)	0.095**	-0.001	-0.026**
HH Market Concentration Index (log)		-0.055***	
Foreign Workers Number (log) _{t-0}			5.681**
Foreign Workers Number (log) _{t-1}	-1.296***	0.038***	-7.801***
Foreign Workers Number (log) _{t-2}			1.966**
Export Market Penetration Index (log)	-9.832***	0.047	-0.818
Average Tariff _{t-1}	0.904*		
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-0}			-2.356**
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-1}	0.353**	-0.010**	3.198***
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-2}			-0.798*
× Export Market Penetration Index (log)			
Controls	Yes	Yes	Yes
N	418	401	395
R-squared	0.466	0.940	0.693
Adj. R-squared	0.445	0.938	0.675
Residual Std. Error	3.042 (df = 401)	0.112 (df = 388)	1.047 (df = 373)
F Statistic	21.890*** (df = 16; 401)	506.724*** (df = 12; 388)	40.039*** (df = 21; 373)

***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.



H2: a Long-Term Effect

- **Hypothesis is confirmed**, in the long-term, EU member states that pursued economic nationalism policies experience negative economic outcomes due to the conflicts with EU integration principles
- The results show **that the initial positive effects** of economic nationalism are often **reversed** by stronger negative impacts within one to two years

	GDP Growth Rate Model 1 (FDL)	Unemployment Rate (log) Model 2 (ADL)	Inflation Rate Model 3 (ADL)
Unemployment Rate (log) _{t-1}		1.547***	
Unemployment Rate (log) _{t-2}		-0.666***	
Inflation Rate _{t-1}			0.537***
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Duty Free Import (log) _{t-1}	-3.628**		-1.005*
Average Tariff _{t-0}	2.955***	-0.047**	-0.446*
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Trade Balance (% of GDP)	0.095**	-0.001	-0.026**
HH Market Concentration Index (log)		-0.055***	
Foreign Workers Number (log) _{t-0}			5.681**
Foreign Workers Number (log) _{t-1}	-1.296***	0.038***	-7.801***
Foreign Workers Number (log) _{t-2}			1.966**
Export Market Penetration Index (log)	-9.832***	0.047	-0.818
Average Tariff _{t-1}	0.904*		
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-0}			-2.356**
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-1}	0.353**	-0.010**	3.198***
× Export Market Penetration Index (log)			
Foreign Workers Number (log) _{t-2}			-0.798*
× Export Market Penetration Index (log)			
Controls	Yes	Yes	Yes
N	418	401	395
R-squared	0.466	0.940	0.693
Adj. R-squared	0.445	0.938	0.675
Residual Std. Error	3.042 (df = 401)	0.112 (df = 388)	1.047 (df = 373)
F Statistic	21.890*** (df = 16; 401)	506.724*** (df = 12; 388)	40.039*** (df = 21; 373)

***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.



H3: Total Effect

- Hypothesis is partially confirmed**, indicating that while economic integration **moderated** the effects of economic nationalism, **highly integrated** states could **mitigate** or even reverse negative consequences due to their economic and political influence

	GDP Growth Rate Model 1 (FDL)	Unemployment Rate (log) Model 2 (ADL)	Inflation Rate Model 3 (ADL)
Unemployment Rate (log) _{t-1}		1.547***	
Unemployment Rate (log) _{t-2}		-0.666***	
Inflation Rate _{t-1}			0.537***
Inflation Rate _{t-2}			-0.073
Duty Free Import (log) _{t-0}	4.104***		1.063*
Duty Free Import (log) _{t-1}	-3.628**		-1.005*
Average Tariff _{t-0}	2.955***	-0.047**	-0.446*
Average Tariff _{t-1}	-3.987***	0.052***	0.246
Trade Balance (% of GDP)	0.095**	-0.001	-0.026**
HH Market Concentration Index (log)		-0.055***	
Foreign Workers Number (log) _{t-0}			5.681**
Foreign Workers Number (log) _{t-1}	-1.296***	0.038***	-7.801***
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***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.

Discussion

Implications and Future Research

- The results allow each EU member state develop an **optimal set of economic measures** based on its integration and influence level
- Another interesting outcome is the potential **economic elitism within the EU**. Table 5 shows that countries that benefit most from economic nationalism policy tend to be the most economically integrated and influential, often the longest-standing EU members

Table 5: Countries that benefit and disadvantage from economic nationalism policy

Benefit	Disadvantage
Germany, Italy, France, Spain, Netherlands, Belgium, Austria, Sweden, Denmark, Poland, Czech Republic	Portugal, Finland, Hungary, Slovenia, Ireland, Greece, Slovak Republic, Lithuania, Estonia, Luxembourg, Latvia, Cyprus, Malta

- This suggests a potential **economic hierarchy** within the organisation, and raises questions about economic inequality within the EU
- This finding has implications for the EU's internal cohesion and raises questions about whether the organisation's institutional structures adequately address such disparities or if **reforms are needed** to ensure a more equitable union

Robustness and Endogeneity Concerns

- Extensive **robustness checks** were conducted to ensure that the findings are not only statistically significant but also robust against various forms of econometric biases
- All models were estimated with **robust standard errors** using the *HC3* formula, and also **re-estimated after the exclusion of outliers**, which were defined using Cook's Distance measure
- Huge diagnostics were conducted to **test** the detected **interaction effect** in line with leading methodological recommendations field of regression analysis in political science (Hainmueller et al., 2019)
- To evaluate concern about **multicollinearity**, generalised variance inflation factors (GVIFs) were calculated for all variables in each model, and all the instances of GVIFs were well below the commonly used threshold of 10–11 values, which satisfies the most conservative thresholds (O'Brien, 2007), indicating that multicollinearity **is not a significant concern** in my models



Delimitations

- Accuracy, completeness, and consistency of collected data (however, the sources used in this study all employ consistent methodology)
- Concentration on EU member states from 2003 to 2021 may not encapsulate the full historical breadth of economic nationalism in the EU or its effects in other global contexts
- Methodological assumptions of employment of the ADL and the FDL models, while robust, may not fully account for all dynamics and complexities of economic behaviour

A link to the repository on GitHub where the data used in the study can be freely accessed, as well as the R code replicating the results of this study:

<https://github.com/VladRub1/thesis-economic-nationalism-in-eu>

This ensures transparency and provides an opportunity for scholarly verification and critique of the methodologies employed and conclusions drawn

Thank you!

Appendix

Appendix 1. Autoregressive Distributed Lag (ADL) Model

Model's general specification for the case with one main predictor:

$$y_{i,t} = \alpha + \sum_{j=0}^p \beta_j^{ADL} \cdot x_{i,t-j} + \sum_{k=1}^q \theta_k^{ADL} \cdot y_{i,t-k} + \langle \vec{\gamma}, \overrightarrow{Controls} \rangle + \epsilon_{i,t}$$

- α — is a constant term
- $y_{i,t}$ — true value of the dependent variable value for the current period (t) and the current country (i)
- $x_{i,t}$ — predictor value for the current period (t) and the current country (i)
- p, q — numbers of considered time lags for the predictor and the dependent variable
- $\beta_j^{ADL}, \theta_k^{ADL}$ — parameters at predictor and dependent variable for different time periods (lags)
- $\vec{\gamma}, \overrightarrow{Controls}$ — vector of parameters at control variables and vector of values of control variables
 - the expression $\langle \vec{\gamma}, \overrightarrow{Controls} \rangle$ means a dot product of the two vectors
- $\epsilon_{i,t}$ — random error for the current period (t) and the current country (i)



Appendix 2. Finite Distributed Lag (FDL) Model

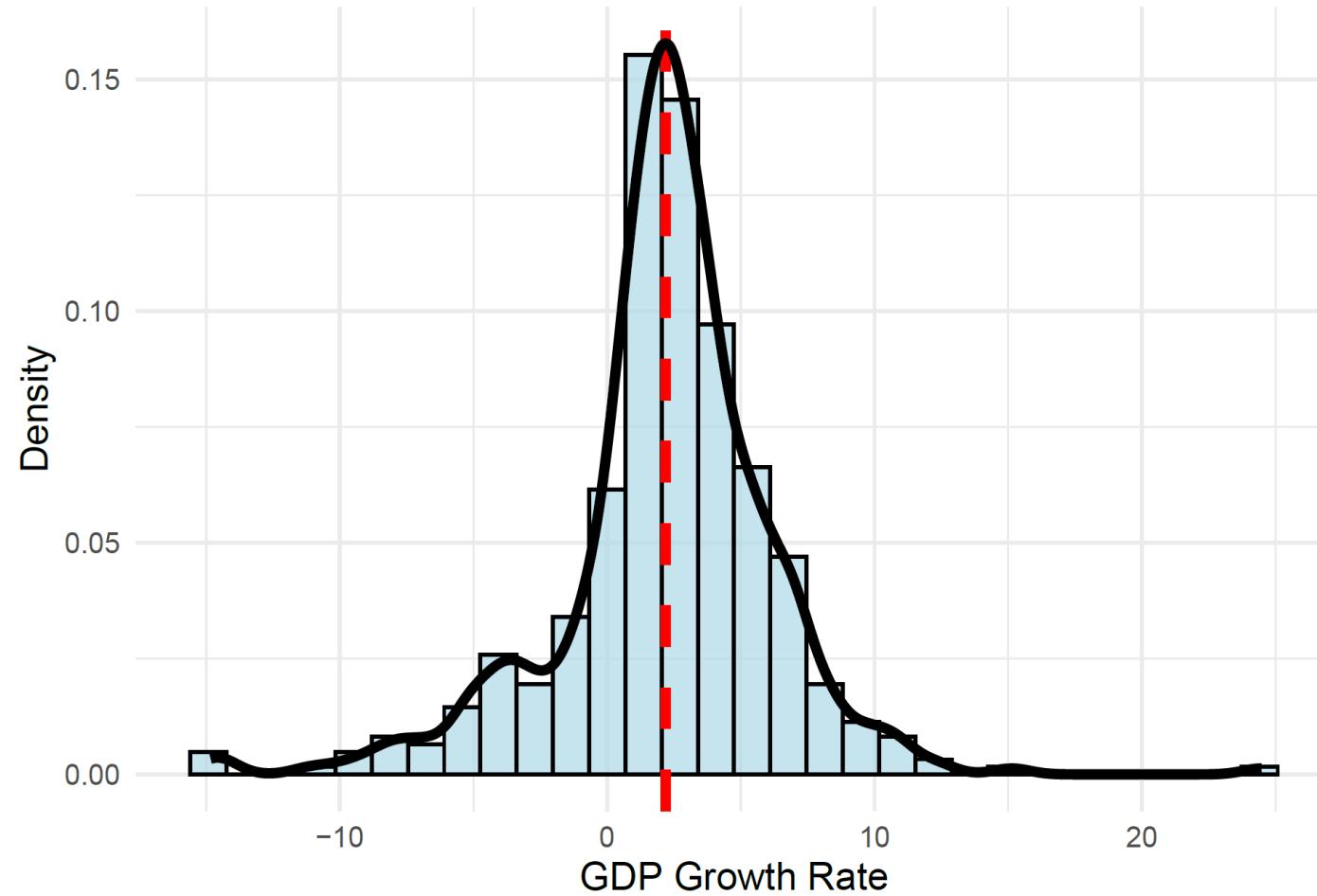
Model's general specification for the case with one main predictor:

$$y_{i,t} = \alpha + \sum_{j=0}^p \beta_j^{ADL} \cdot x_{i,t-j} + \langle \vec{\gamma}, \overrightarrow{Controls} \rangle + \epsilon_{i,t}$$

- all variables retain their definitions as in the ADL model, but *without the lagged terms of the dependent variable*

Appendix 3. Distribution of Dependent Variables

Distribution of GDP Growth Rate:



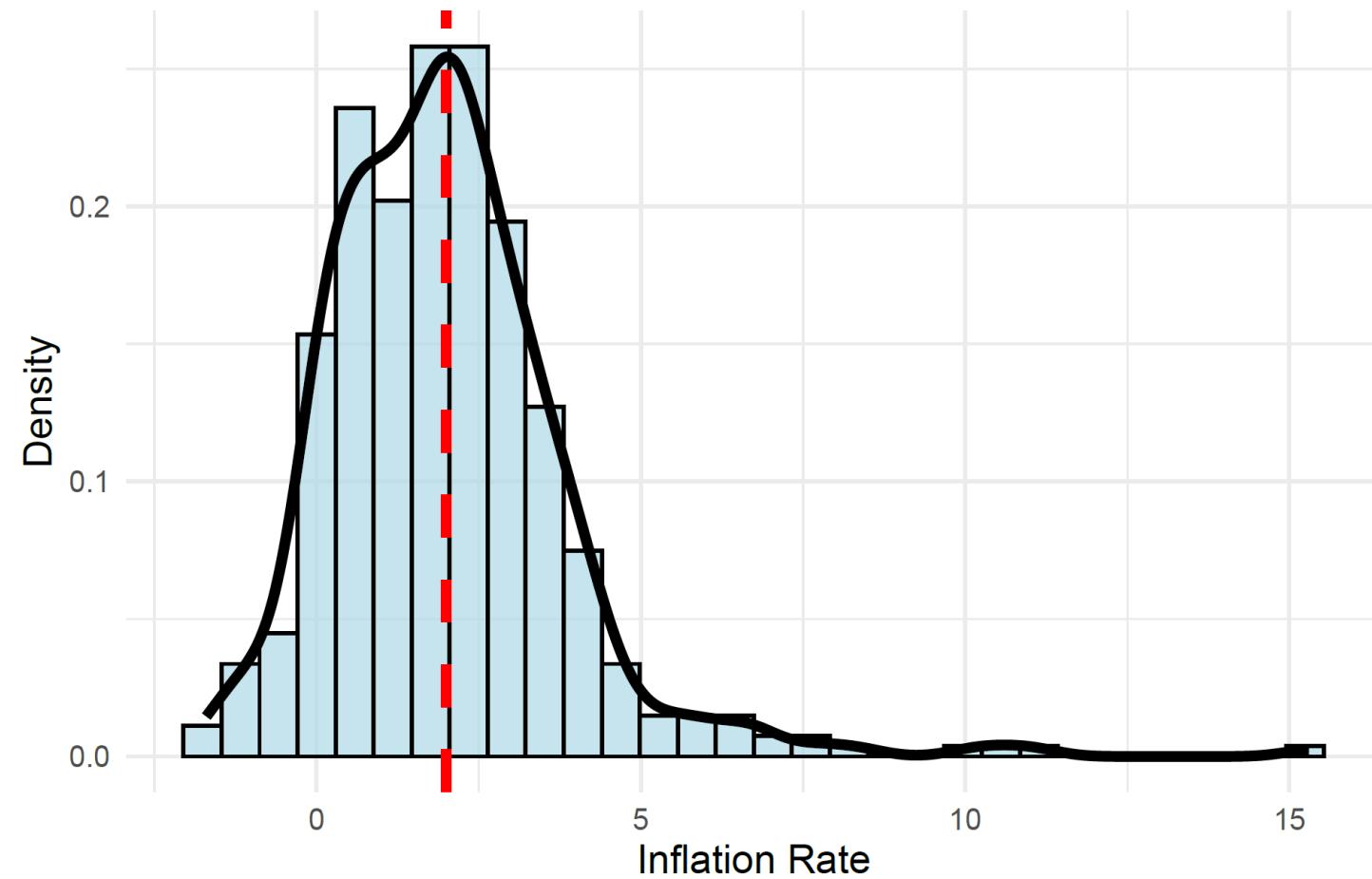
Appendix 4. Distribution of Dependent Variables

Distribution of Unemployment Rate (log):



Appendix 5. Distribution of Dependent Variables

Distribution of Inflation Rate:





Appendix 6. Descriptive Statistics

Descriptive statistics for main and control variables:

Statistic	N	Mean	St. Dev.	Min	Max
GDP Growth Rate	456	2.185	4.053	-14.840	24.480
Inflation Rate	456	1.998	1.846	-1.700	15.300
Unemployment Rate	456	8.560	4.296	2.017	27.825
Unemployment Rate (log)	456	2.044	0.443	0.701	3.326
Average Tariff	450	1.938	0.680	0.660	6.140
Duty Free Import (US\$ log)	450	23.651	1.563	19.721	26.859
Foreign Workers Number (log)	449	11.762	1.786	7.824	15.449
HH Market Concentration Index	456	0.072	0.028	0.030	0.300
HH Market Concentration Index (log)	456	-2.697	0.370	-3.507	-1.204
Export Market Penetration Index	456	16.154	11.653	2.580	45.700
Export Market Penetration Index (log)	456	2.507	0.773	0.948	3.822
Trade Balance (% of GDP)	456	3.221	8.514	-20.643	40.074
Population Number (log)	456	15.769	1.439	12.892	18.236
FDI Net Inflows (% of GDP)	456	13.654	45.105	-117.375	449.083
FDI Net Outflows (% of GDP)	456	10.786	41.059	-137.317	301.264
World Trade Growth (%)	456	3.436	6.331	-12.190	12.590
Country Trade Growth (%)	456	3.494	7.509	-21.810	45.700

Response to Review



Daria Salnikova, Supervisor

“Понятие «долгосрочные эффекты» в контексте данного исследования несколько неоправданно, так как речь идет об отложенном эффекте не более чем на два года”

- ✓ I agree that it would be more correct to use the term “medium-term effects” instead of the “long-term” ones. Initially, the choice in favour of the terminology of long-term effects was made to contrast more with short-term effects, but in the paper, to avoid confusion, it was clearly defined what is meant by these or those effects

“Автор обсуждает проблему эндогенности в своей работе, однако касается только «вершинки айсберга». На перспективу можно было рассмотреть также оценивание моделей посредством метода GMM”

- ✓ Agreed, but unfortunately not familiar with the GMM method at the moment. In my next research I will definitely study methodological literature on this topic



Daria Salnikova, Supervisor

“Кроме того, также стоит представить панельно-корректированные стандартные ошибки в оцененных моделях”

- ✓ **I agree. I corrected myself:
I re-estimated all final
models using Panel-
Corrected Standard Errors.
Result: for most predictors
the significance remained
the same or became better.
Estimates with a change in
significance are highlighted
in bold**

**With all the advantages/
benefits I agree!**

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***p < .01; **p < .05; *p < .1

Note: a) Robust standard errors are reported in the parentheses. b) I did not report the coefficient estimates of the constant as well as the parameters at control variables.



Ilya Lokshin, Reviewer

I agree with many of the comments, especially the theoretical ones (and grateful for the detailed and coherent discussion), but would like to discuss the following points:

“Одно из положений, вынесенных на защиту, звучит следующим образом: «*This policy [экономического национализма] has strong theoretical roots and is popular among contemporary politicians, but it has never been investigated in terms of the real economic consequences for the state and the nation (both in the context of a single country and a group of countries), which makes the study unique.*» Значит ли это, что последствия экономического национализма никогда не исследовались? В это просто не очень верится”

- ✓ **There is certainly a large number of works (economic) in the field of economic nationalism, but primarily I had in mind empirical studies covering all EU countries and assessing the impact on real economic development over a period of time. Studies similar to my research boundaries were really not found, and most of the existing ones are rather theoretical works**

“Первая гипотеза признает, что политика экономического национализма может приносить положительные плоды в краткосрочном периоде, но не в долгосрочном. Совершенно непонятно, почему уже в гипотезе делается это допущение о нецелесообразности этой политики в долгосрочном периоде”

- ✓ **The logic of this hypothesis is justified by the fact that in the long-term period the influence of European institutions, which impose restrictive measures against countries pursuing a policy of economic nationalism, based on the political goals of the organisation and the contradiction of this policy to the key values of the EU, will become visible**

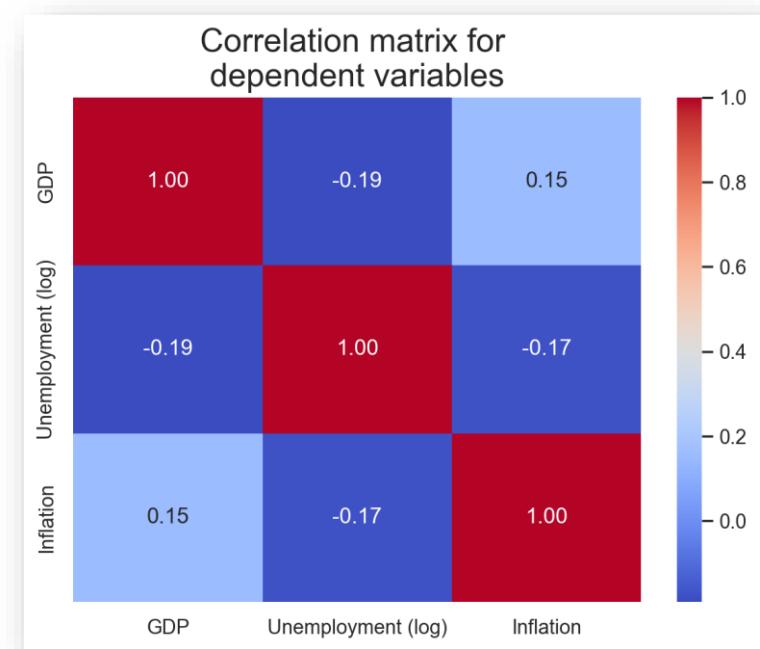
Ilya Lokshin, Reviewer

“Операционализация экономического развития (или благополучия) одновременно через уровень безработицы и через уровень инфляции может вызвать сомнения, поскольку хорошо известно, что безработица способна оказывать инфляционное давление (кривая Филлипса), так что более высокая безработица часто сопровождается более низкой инфляцией. При таком положении вещей... эти два прокси могут входить в противоречие друг с другом, а значит, возникает вопрос о целесообразности измерения через них одной и той же латентной сущности”

- ✓ **A good point, but the empirical data shows that the correlation between these two indicators is negative as expected, but weak (-0.17). This was verified at the step of exploratory data analysis and suggested that the three indicators reflect different facets of economic development**

“С учетом того, что «долгосрочный» период охватывает не более чем несколько лет (стр. 23), кажется разумным назвать его «среднесрочным»”

- ✓ **Totally agree, indeed it would be more correct to talk about the “medium-term effects” effect as stated earlier**





Ilya Lokshin, Reviewer

“Коэффициенты при предикторах велики и, более того, очень сильно «скакут» от года к году... Если оставить в модели переменную только за один год, то коэффициент при ней, вероятно, был бы сопоставим по размеру с суммой коэффициентов при всех лагированных переменных... Иными словами, возникает предположение о мультиколлинеарности для лагированных переменных”

- ✓ **Indeed, lagged variables are a priori related to each other, and this is deliberately built into the model according to the hypotheses. If we leave a variable for one year only, the coefficient on it will of course be close to the sum of all lagged variables, but it will capture the entire available effect, and the point in decomposing it into several years is precisely to see how the effect varies across years and to analyse the more complex structural nature of this relationship. Roughly speaking, it is like giving the "overall temperature of the hospital" or separately in wards with sick and healthy patients to understand what it's made up of**

“Автор – и здесь нужно отдать ему должное – в Приложении приводит тесты на мультиколлинеарность, и там мы наблюдаем следующее: для первой пары переменных (из вышеупомянутых) GVIF равна около 9, для второй она выше 11, для третьей группы переменных GVIF колеблется от 8.6 до 11.2, а такие показатели – весьма весомые свидетельства в пользу того, что мультиколлинеарность действительно имеет место”

- ✓ **As mentioned in the paper, GVIF values between 8 and 11 correspond to the most stringent and conservative thresholds accepted in the methodological literature (about 10). Some eminent sources in the field of regression analysis (O'Brien, 2007) argue that even values of 20, 30 and 40 do not necessarily indicate the presence of multicollinearity. Furthermore, one statistical evidence for the presence of multicollinearity is: low (or absent) statistical significance of individual predictors when R^2 is high, which is not the case in my work. I insist that all predictors contribute individually to the outcome due to the chosen specification, and the threat of multicollinearity is absent or not influential in the research**

With all the advantages/benefits I agree!

Thanks again for your attention!