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Does theory influence policy? A quantitative analysis of interrelationship between academic discourse and economic policy in international trade

Abstract. This paper addresses the mutual influence between economic theory and policy in international trade employing interdisciplinary methodology, integrating Natural Language Processing (NLP) and econometric analysis. We test whether the relationship between economic theory and economic policy can be characterised by either “economics as art” approach (where theory serves the role of an auxiliary tool to the policy) or by “scientific” approach (where economic policy is interpreted as the practical application of theory). We firstly characterise the academic discourse in terms of adherence to either protectionism or economic liberalism with NLP algorithms. Our analysis reveals the formation of a dominant liberal consensus in academia regardless of journal quality adjustments. Secondly, we estimate Vector Autoregression (VAR) and Vector Error Correction (VEC) models to analyse the dynamic relationship between academic discourse, trade policies, and economic activity (measured by trade volume). At the global level, we identify a complex, bidirectional relationship: academic discourse helps predict policy and trade in the short-run, while in the long-run, policy and economic activity help predict the discourse. This refutes the “scientific” interpretation of direct theoretical influence in favour of “economics as art” approach. Similar analysis of Russian data provides deeper understanding of the relationship between theory and policy at the country level. On the one hand, Russian academic discourse aligns with global liberal trends and tends to study the economic environment rather than have a direct influence on it. On the other hand, Russian policy-makers are driven by distinct political objectives, pursuing protectionist policies despite a more liberal global academic discourse. These results indicate the absence of the “scientific” approach in Russia.

Keywords: *international trade; economic policy; academic discourse, protectionism, liberalism.*

JEL Classification: B27, F13, F14.

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1. Introduction

Schematically, the relationship between economic theory and economic policy can be characterised by two distinct approaches. On the one hand, economic policy is traditionally considered as an “art” with theory as its auxiliary tool. J.S. Mill (Mill, 1967) was the first to formalise this point of view which is supported by predominantly

qualitative research (Colander, Su, 2018) or real case studies (Melnik, Miryakov, 2019; Trincado, Lazzarini, Melnik, 2019) in modern literature. On the other hand, the “scientific” approach, as defined by F.A. von Hayek (Hayek, 1989), suggests that economic policy can be reduced to the practical application of economic theory. This vision became widespread in the 1950s and 1960s through the contributions of prominent theoreticians, including M. Friedman (Friedman, 1953).

International economics and international trade specifically follow the same pattern. Textbooks and handbooks are clear examples of “economics as art” approach as they distinguish between the theory – a review of theoretical literature, and policy – a historical account of measures, policies, and dynamics of economic indicators (Krugman, Obstfeld, Melitz, 2018; Gandolfo, 2014). On the contrary, trade liberalisation by “Chicago boys” in Chile during the second half of the 20th century (Edwards, Lederman, 2002) and Washington Consensus (Gore, 2000) can be interpreted as the applications of liberal economic theory to practical challenges, thereby illustrating the “scientific” approach in international economics.

At the same time, the development of international trade ideas both in the academic literature and among decision-makers can be sketched as a confrontation between the doctrines of protectionism (nationalism) and economic liberalism (globalism)¹. Lately, after the upsurge of globalisation and neoliberalism since the 1980s (May et al., 2024, p. 261–279), the contemporary challenges force the search for the alternatives. The COVID-19 pandemic, the strained US–China relations (Boylan, McBeath, Wang, 2021), and Russia–Ukraine conflict (Rutland, 2023) push the policy-makers and the academia towards economic nationalism (Helleiner, 2021) and neo-mercantilism (Yu, 2019).

This paper attempts to find evidence whether international trade follows the “economics as art” or the “scientific” approach. Namely, we analyse the development of academic discourse in international trade and its relation to the implemented policies in terms of economic liberalism vs protectionism confrontation. Unlike the majority of similar studies, we apply quantitative methodology to the research question. The application of quantitative methods is novel for the history of economic ideas; it allows us to test generalisations (Maltsev, 2018), discover new trends (Cherrier, Svorenčík, 2018; Maltsev, 2016), and increase the interdisciplinary features of the field (Edwards, Giraud, Schinckus, 2018).

This project employs two complementary methods. Firstly, we apply Natural Language Processing (NLP), i.e. an interdisciplinary approach in computer science, aimed at making computers “understand” the contents of natural language data (i.e. not artificially generated texts) (Bird, Klein, Loper, 2009, p. ix). In contemporary literature, NLP and its variations are used in different areas, e.g. behavioural finance (Ho, Shahid, 2022), macroeconomics (Banerjee et al., 2019), and history of modern economic analysis (Wehrheim, 2019; Bakeev, 2023). In this paper, we apply NLP to characterize the academic discourse in terms of liberalism-protectionism dichotomy.

¹ The “liberalism – protectionism” spectre (as constructed in section 2.2) presents a schematic overview of the academic discourse. Though such approach may indeed omit important theoretical nuances, its abstractness allows the authors to generalise and classify large amounts of text information.

We also apply econometric analysis to examine the causal relationship between the discourse and implemented policies².

Thus, de facto we test the following hypothesis. If the adherence of economic theory to either liberalism or protectionism helps predict the direction of economic policy (in terms of the same dichotomy) in the consequent periods, then the scientific approach is present in international trade. The absence of such causal relationship implies “economics as art” approach.

Before proceeding, we would like to acknowledge that time-series econometric causal analysis alone does not demonstrate causation in the common sense of the word. However, the traditional Granger-causality analysis can indeed provide robust and interpretable results, given “prior knowledge on the phenomenon” (Maziarz, 2015). In our case, extensive qualitative research literature provides a sound foundation for hypothesis formulation and later interpretation of the statistical inference.

The paper is structured as follows. Section 2 explains the construction of the semantic orientation index used to characterise the academic discourse. Section 3 describes the data on international trade policy. Section 4 reviews the results of econometric estimation of the relationship between theory and economic policy on the global level. We replicate the analysis on Russian data in section 5. Section 6 contains the discussion of the results and concluding remarks.

2. Characterising academic discourse

2.1. Data collection

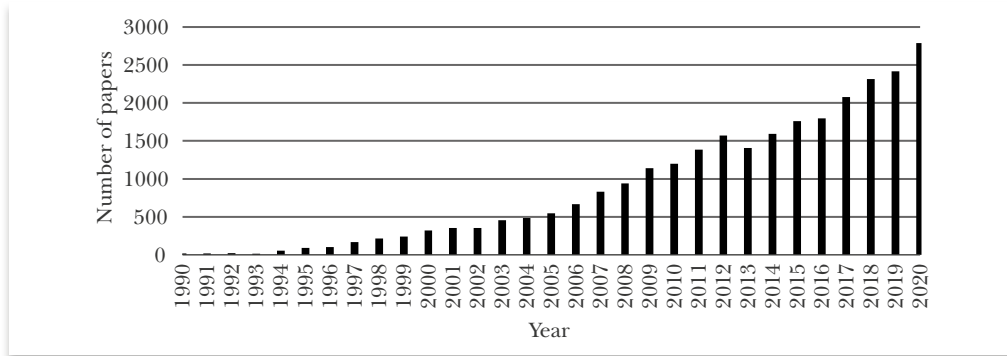
The first stage of our work is the construction of the academic papers’ database on international trade and their metadata. For this purpose, we choose Scopus bibliographic database system. Despite the known criticism of Scopus (Pranckutė, 2021), the database provides several advantages key to the specific project. Firstly, robust analysis on the global level across a lengthy time period requires the largest possible amount of relevant information. Scopus includes a wide range of journals of decent quality. Even though there are other similar databases available, such as EconLit and Web of Science, they lack the desired volume. According to the respective websites, EconLit indexes more than 500 journals³, Social Sciences Citation Index of Web of Science (which includes, but is not limited to economics) covers more than 3500 journals⁴, while Scopus includes more than 1200 journals in “Economics, Econometrics and Finance” subject area alone⁵. At the same time, we argue that Scopus provides an adequate benchmark in terms of the quality of indexed papers as the database is still

² We acknowledge the limitations of econometrics in determination of causal relationship (see section 6 “Conclusion and discussion”). Despite the presence of more complex and up-to-date methodologies (Pearl, McKenzie, 2018), e.g. Bayesian causal inference (Li, Ding, Mealli, 2023), we employ the fundamental econometric tools due to the following reasons. Firstly, time-series analysis (e.g. compared to Bayesian causal inference) tend to be more transparent and interpretable for economists. This reduces the risk of overcomplication without meaningful gains in insight (Saylor, Trafimow, 2021). Secondly, with the absence of any similar quantitative research, we believe that the initial inquiry should begin with the simplest adequate method, unless complexity demonstrably improves outcomes, i.e. Occam’s Razor. (Sober, 2015). Thus, we believe that traditional econometric analysis would offer efficiency, clarity, and robustness without compromising rigor. At the same time, we encourage investigating the topic further with more intricate techniques.

³ “EconLit.” American Economic Association. Accessed September 7, 2024 (<https://www.aeaweb.org/econlit/>).

⁴ “Social Sciences Citation Index – Clarivate.” Clarivate. Accessed September 7, 2024 (<https://clarivate.com/products/scientific-and-academic-research/research-discovery-and-workflow-solutions/webofscience-platform/web-of-science-core-collection/social-sciences-citation-index/>).

⁵ “Journal Rankings on Economics, Econometrics and Finance.” Scimago. Accessed September 7, 2024 (<https://www.scimagojr.com/journalrank.php?area=2000>).

**Figure 1.**

Distribution of papers in the constructed database (1990–2020)

employed in the publication activity assessments in various universities (Baas et al., 2020). Secondly, Scopus, unlike other databases, provides a user-friendly API for data collection that makes the database construction more efficient.

The paper selection process consists of multi-level filtering. Since we focus on the discourse in international trade, we have to pick the papers directly related to the field. To do so, firstly, we request a search query in Scopus by the word “trade”. Secondly, we limit the papers to three subject areas, i.e. economics (ECON), social sciences (SOC), and business (BUSI) since our work is focused on the discourse in economics. Finally, we limit the search results by the list of keywords characterising the paper’s research field as international trade. The words are selected from the list of the most popular keywords automatically generated by Scopus software after the search query. The selected keywords are the following (in alphabetical order): “ASEAN”, “Bilateral Agreement”, “Economic Integration”, “Export”, “Foreign Trade”, “Free Trade”, “Global Value Chains”, “Globalisation”, “Gravity Model”, “Import”, “International Cooperation”, “International Trade”, “Liberalisation”, “Neoliberalism”, “OECD”, “Protectionism”, “Regional Trade”, “Tariff Structure”, “Trade Agreement”, “Trade Flow”, “Trade Openness”, “Trade Policy”, “Trade Union”, “World Trade Organisation”, and “WTO.”

We use the Python implementation of the Scopus API in the “pybliometrics” library (Rose, Kitchin, 2019) to collect the metadata of the selected papers. After filtering the database from errors, the final database contains information on 27,334 papers published between 1990 and 2020⁶ and includes the names of the authors, their affiliation, paper title, journal title, year of issue, issue number, volume of the journal, and the abstract⁷.

Figure 1 shows a strong increasing trend in the annual number of published papers on international trade from 1990. The persistence of the trend coincides with the increasing number of published papers across the whole of Scopus (Thelwall, Sud, 2022).

⁶ We intentionally limit the research period by 2020 since this project focuses on the more historical perspective rather than the analysis of modern socio-economic challenges. We believe that the dramatic events of early 2020s deserve a special research subject.

⁷ The data was downloaded from Scopus API between February 18 and 28, 2022 via <http://api.elsevier.com> and <http://www.scopus.com>

2.2. Index construction

After constructing the database, we proceed to the academic discourse analysis. For this purpose, we focus specifically on papers' abstracts. On the one hand, we argue that the analysis of the abstracts alone can provide the necessary information about the papers in question. Despite the variability in requirements (including structure and word count), the abstracts must contain key findings and the authors' original conclusions (Dudenhefer, 2014, p. 54–55; Petchko, 2018, p. 72–73). On the other hand, the use of full texts is complicated by the lack of open access papers and the technical complexity of their processing. Firstly, the majority of journals in economics work on a subscription basis. The purchase of all the necessary subscriptions is impossible due to the financial constraints. Secondly, full texts are distributed as PDF-files in different templates. The variety of templates makes the task of text retrieval for a large number of papers impractically laborious. Thirdly, full texts contain a literature review, which does not represent the paper's original findings and, thus, cloak its main idea.

The analysis of academic discourse implies the construction of a semantic orientation index reflecting the adherence of a certain paper to either economic liberalism (globalism) or protectionism (nationalism). Such approach is a common application of NLP: examples include research on the emotional semantic orientation of the text (the “negative-positive” scale) (Hutto, Gilbert, 2014) and the perception of central bank statements (the “hawkish–dovish” scale) (Banerjee et al., 2019). For our research, we contrapose the doctrines and present a “liberalism–protectionism” scale embodied in the index.

The index construction starts from preprocessing the abstracts using NLP tools, which is standard for most works exploring semantic orientation. We tokenise and stem abstracts, i.e. bring words to their root form and clear the text of punctuation marks and “noise” words, which are insignificant to the main idea of the text. These procedures are executed via the Natural Language Toolkit (NLTK) module from Python and Lancaster Stemmer. This software is deemed as efficient in the respective literature (Paice, 1990).

The preprocessed corpus of abstracts allows us to form a dictionary, which is a list of the most frequently used keywords that can be attributed to either doctrine. We compile the dictionary ourselves due to the lack of works on international trade discourse with the application of NLP methodology. To do so, we follow rules described in other studies, e.g. (Riloff, 1996). We consider frequent words with more than 100 appearances (i.e. hits)⁸ and include only economic terms and concepts because non-economic words may clog up the results of the index. Finally, we select the words semantically oriented to either economic liberalism or protectionism in international trade. We pay special attention to verbs characterising authors' opinions on the political measures since authors tend to abstain from using emotionally charged vocabulary in academic literature. So, the verbs are likely to constitute the main source of semantic information.

⁸ Despite the growing interest in NLP application, there is still no unified standard procedure for creating dictionaries in general and choosing the correct hits threshold in particular. Every paper treats such issues according to the research question at hand. Alternatively to our approach, some papers focus on unique words (Haselmayer, Jenny, 2017), others measure their “importance” (Cann, Weaver, Williams, 2021). We acknowledge that our method corresponds with “a rule of thumb” approach. However, 100 hits allow us to incorporate the most frequent and relevant words.

Table 1.

Dictionary of liberal and protectionist words

Liberal words			Protectionist words		
Stemmed form	Hits	Example	Stemmed form	Hits	Example
op	8271	Open, openness	protect	4688	Protect, protectionism
coop	4155	Cooperate, cooperation	tax	2865	Tax, taxes
partn	3984	Partner, partnership	pref	2263	Preference, preferential
negoty	3164	Negotiations, negotiate	barry	2247	Barrier
neolib	2742	Neoliberal	restrict	1662	Restrict, restriction
facilit	1703	Facilitate, facilitation	clos	1616	Close
bargain	1213	Bargain	subsidy	1550	Subsidy
mitig	743	Mitigate, mitigation	interv	1110	Intervention, intervene
dereg	317	Deregulate	impos	879	Impose
allevy	230	Alleviate	oblig	554	Oblige
eas	193	Ease	bloc	409	Bloc
Total	26715		ban	392	Ban
			regul	232	Regulate, regulation
			prohibit	186	Prohibit, prohibition
			subsid	176	Subsidize
			confin	112	Confine
			Total	20941	

To measure the semantic orientation correctly, we also take into account the negatives and “polar” words (i.e. “never”). We apply templates as seen in (Banerjee et al., 2019). The first structure is:

$$(Polar\ word / verb + n\ t / verb + not) + keyword. \quad (1)$$

Here the keyword changes its meaning to the opposite due to the word coming before. To check the polarity of the previous word, we use the Python “VADER” library. Within the library’s dictionary, each word is assigned with a rating of its shade (Hutto, Gilbert 2014). We find 877 such negations in the total database. Notably, we check only negative polar words, since positive polar words only reinforce the meaning of the keyword, but do not change the full context. Therefore, we do not consider them in any special way.

The second structure implies the double negation, which nullifies the negative effect:

$$(\textit{verb} + \textit{not} / n^1t + \textit{polarword} + \textit{keyword}). \quad (2)$$

We find none of such structures in the collected database. Such a result is expected as the academics try to avoid complex linguistic constructions and deliver the ideas as straight as possible. We refrain from analysing more complex negations due to the absence of double negations in the data.

We count the number of hits of “liberal” and “protectionist” words (L_i and P_i , respectively) for each paper i in the database, and calculate the index value (I_i) according to equation (3), based on the work (Banerjee et al., 2019). The formula presents the scaled difference in shares of “liberal” and “protectionist” words⁹:

$$I_i = \ln\left(\frac{L_i}{L_i + P_i} + 1\right) - \ln\left(\frac{P_i}{L_i + P_i} + 1\right) = \ln\left(\frac{2L_i + P_i}{2P_i + L_i}\right). \quad (3)$$

Positive index values imply liberal orientation of the paper, while negative values are associated with protectionism. The higher the index, the more liberal the paper is according to our classification, and vice versa.

We perform several robustness checks for our methodology. Indeed, the resulting index values match the expected attribution of the paper to the specific doctrine. For example, the paper by (Baltagi, Demetriades, Law, 2009) demonstrates a strong adherence to economic liberalism with the index value of 0.53, while the work (Milovidov, Asker-Zade, 2020) is strongly protectionist with the index value of -0.56.

2.3. Approaches to aggregation

After calculating the index for each abstract, we aggregate them across time. The aggregated index reflects the orientation to either protectionism (negative index values) or economic liberalism (positive index values) of the academia at a certain time period. The aggregation procedure poses two major challenges.

The first challenge concerns the periodicity of aggregation. For our project, we calculate annual index values. This allows us to account for the difference in periodicity of the journals. Scopus includes annual and semi-annual editions, as well as quarterly and monthly journals. Thus, an annual period would reflect the total contribution of all possible editions. Furthermore, the publication process is time-consuming, so annual intervals encompass the general direction of the discourse development. In addition, annual periods allow to adequately map the direction of the discourse to the implemented policies in international trade, which also require significant time to be put in place.

The second challenge deals with journals' quality. We suppose that a paper published in a $Q1$ journal is more likely to be analysed by academics and is more visible to the policy-makers than a $Q4$ paper. Thus, we suggest several aggregation methods that include weighting the paper's index value.

The first aggregation method (\bar{I}_t or “index-abs”, or “DISCOURSE”) is a straight calculation of the mean value across the year t as presented in equation (4), where I_{it} is the index value for paper i published in year t , and N_t is the number of papers published in year t :

$$\bar{I}_t = \left(\sum_{i=1}^{N_t} I_{it}\right) / N_t. \quad (4)$$

⁹ In this case, adding 1 into the logarithms in the formula helps avoiding infinite index value in case of no keywords of one of the directions.

The second method ($I_{log t}$ or “index-log”) suggests treating all the papers published in year t as one big text and calculating its index as presented in equation (5), where L_{it} is the number of liberal words in paper i , published in year t ; P_{it} is the number of protectionist words in paper i , published in year t , and N_t is the number of papers published in year t :

$$I_{log t} = \left(2 \sum_{i=1}^{N_t} L_{it} + \sum_{i=1}^{N_t} P_{it} \right) / \left[2 \left(\sum_{i=1}^{N_t} P_{it} + \sum_{i=1}^{N_t} L_{it} \right) \right]. \quad (5)$$

The third method (I_{Q_t} or “index- Q ”) implies weighting each paper by the value of its journal quartile in Scopus at year t , as presented in equation (6), where I_{it} is the index value for paper i , published in year t ; Q_{it} is the quartile of the journal that published paper i in year t ; N_t is the number of papers published in year t , and M_t is the number of journals indexed in year t . Note that Q_{it} is coded in reverse order, where $Q1$ has the greatest value (4) and $Q4$ – the lowest (1):

$$I_{Q_t} = \sum_{i=1}^{N_t} \left(I_{it} Q_{it} / \sum_{j=1}^{M_t} Q_{jt} \right). \quad (6)$$

The fourth method (I_{SJR_t} or “index-SJR”) requires weighting each paper by the SCImago Journal Rank indicator (SJR) describing the journal’s impact, influence or prestige (Guerrero-Bote, Moya-Anegón, 2012) as presented in the following equation:

$$I_{SJR_t} = \sum_{i=1}^{N_t} \left(I_{it} SJR_{it} / \sum_{j=1}^{M_t} SJR_{jt} \right), \quad (7)$$

where I_{it} is the index value for paper i , published in year t ; SJR_{it} is the SJR value of the journal that published paper i in year t ; N_t is the number of papers published in year t , and M_t is the number of journals indexed in year t .

We investigated other opportunities for accounting the journal’s quality. The popular Impact Factor scientometric index is proprietary to Clarivate and thus the match to Scopus journals is not guaranteed. The h-index describes the citation activity, thus limiting its representation mostly to academic world and leaving non-academics (i.e. policy-makers) aside. Thus, we focus on Scopus quartiles and SJR as the most accessible indicators for the public that can show the journal’s general prestige¹⁰.

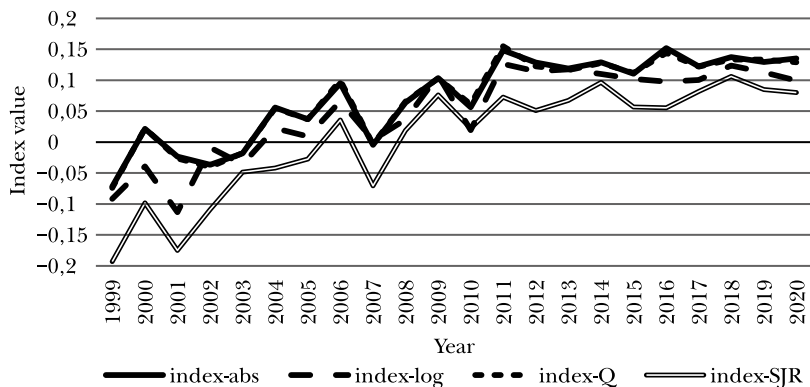
2.4. Index dynamics

To construct all the variations described in the previous section, we require SJR and Scopus quartile data, which are available only from 1999 to 2020. Additionally, we filter the errors that occurred while comparing journal names from the constructed database and SJR information. These new restrictions resulted in the shrinkage of the original database to 14,893 papers.

We consciously omit the analysis of \bar{I} and I_{log} for the period from 1990 to 1998. The small number of abstracts (as in Figure 1) provides confounding results. The index series for the corresponding period resemble a highly volatile random process, thus no clear conclusions can be inferred.

As seen in Figure 2, all the series start from negative values in 1999. This indicates that at the turn of the century, academia was more oriented towards protectionist ideas. However, for the whole presented period, all indices demonstrate a positive trend with minor fluctuations. Such a pattern signifies the formation and development of the liberal consensus in academia. From 2008 and onwards, all the indices are posi-

¹⁰ We also tried to combine SJR values and data on journal quartiles through principal component analysis, but the results did not differ from the ones presented in the current paper, so we dropped them for conciseness and logic of exposition.

**Figure 2.***Dynamics of indices (1999–2020)***Table 2.**

Correlation coefficients of indices, %

	\bar{I}	I_{log}	I_Q	I_{SJR}
\bar{I}	–			
I_{log}	94***	–		
I_Q	100***	94***	–	
I_{SJR}	94***	96***	95***	–

Note. Significance level is indicated as follows: “***” – $p < 0.01$, “**” – $p < 0.05$, “*” – $p < 0.1$.

tive, thus indicating the prevalence of liberal ideas. These results correspond with the general view on the rising popularity of liberalism over the early 21st century (May et al., 2024).

As we can observe both from the graph (Figure 2) and from the calculated correlation coefficients (Table 2), all the proposed indices are highly correlated with each other (> 94%). All the calculated coefficients are statistically significant at 1% significance level, thus weighting the index has little to no effect. We proceed with further analysis using the basic mean aggregation index (\bar{I}) as the most parsimonious measure that can be easily interpreted.

3. Data on trade and policies

To analyse international trade policy, we employ two data sources to cover different points of view. We suggest using the volumes of total merchandise exports and imports provided by UNCTAD¹¹. Despite the growing relevance of international exchange of services in policy decisions (Chen, Shen, 2024), we focus on goods rather than services since international goods trade constitutes a greater share in trade flows (Sundberg, Tucker, 1988; World Trade Organisation, 2019).

¹¹ “UNCTADstat Data Centre.” UNCTAD. Accessed September 9, 2024. (<https://unctadstat.unctad.org/datacentre/>)

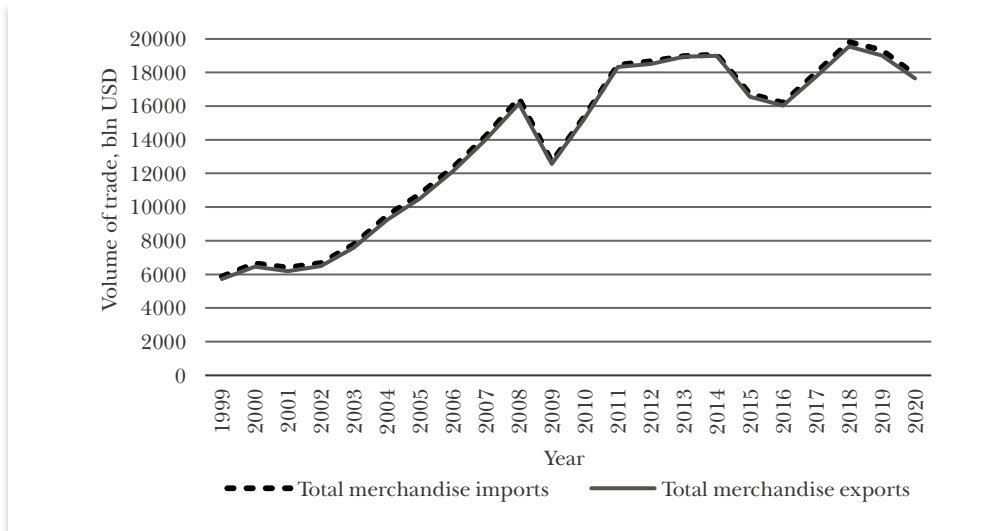


Figure 3.
World trade (1999–2000)

As we can observe in Figure 3, there is a strong positive trend that drives both import and export simultaneously. As expected, the import and export values are approximately identically equal, the series are barely distinguishable, and their correlation coefficient is 99.9% (at 1% significance level). Thus, in our project we use only the *volume of export*.

However, it might seem premature to suggest a causal relationship between an index characterising the academic discourse and the volume of trade based on econometric analysis. The latter appears only as a proxy for the policy in this situation. Thus, we introduce another variable describing the absolute number of implemented trade policies and employ data on political measures from the Trade Monitoring Database¹². Following the analysis of trade volume, we concentrate on measures regulating goods turnover between the countries. We also emphasize that the data provided by Trade Monitoring Database represents the number of active policies, not the cumulative amount. Therefore, if a policy is abolished it is excluded from our database for the respective year.

The Trade Monitoring Database provides a classification of various legislative acts, labelling them as restrictive measures, facilitating measures or trade remedies. The available period between 2008 and 2020 provides information on 34,286 policies. While interpretation of restrictive and facilitating measures in international trade is quite straightforward, trade remedies present a puzzle in their adherence to either protectionism or liberalism. Trade remedies imply “actions taken in response to subsidies (countervailing duties), sales at less than fair value (antidumping) and import surges (safeguards)”¹³. In this paper, we consider these measures to be neutral and do not attribute them to any doctrine. In general, we observe an approximately equal amount of restrictive and facilitating measures for the period in question as the facilitating pol-

¹² “TMDB @ Home – Open Trade Data Portal.” World Trade Organisation. Accessed September 9, 2024. (<https://tmdb.wto.org/en>).

¹³ “Trade Remedies | United States Trade Representative.” Office of the United States Trade Representative, Executive Office of the President. Accessed September 9, 2024. ([https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/trade-remedies#:~:text=Trade%20remedies%20are%20actions%20taken, and%20import%20surges%20\(safeguards\)\)](https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/trade-remedies#:~:text=Trade%20remedies%20are%20actions%20taken, and%20import%20surges%20(safeguards)))).

icies constitute 29% of all the measures in the database, restrictive – 28%, and trade remedies – 43%.

Considering trade remedies as neutral, we focus on facilitating and restrictive acts as the implementation of liberal or protectionist doctrines, respectively. In addition to using the absolute numbers of implemented policies, we suggest aggregating the information to be comparable with the “liberalism–protectionism” semantic index from Section 2. We suggest two aggregation approaches. Firstly, we calculate the share of net measures (\overline{MI}_t) for year t as presented in equation:

$$\overline{MI}_t = (F_t - R_t) / (F_t + R_t), \quad (8)$$

F_t is the number of facilitating measures in the year t , and R_t is the number of restrictive measures in the year t .

Secondly, we suggest calculating trade measures index (MI_t or “MEASURES”) for year t mimicking the semantic orientation index formula as seen in equation (3):

$$MI_t = \ln \left(\frac{2F_t + R_t}{2R_t + F_t} \right). \quad (9)$$

Notably, the suggested measures show the general orientation of the political climate, i.e. whether the global policy-makers favour liberal or protectionist doctrine. Weighting of indexes based on the size of the economy may only bias the results. Giving more weight to trade measures implemented by the EU or the US will result in ignoring the policies of smaller economies and thus skewing the index orientation.

We draw several conclusions from the resulting data as shown in Figure 4. We note that the quantities of facilitating and restrictive measures in absolute terms are highly correlated (99.5%, at 1% significance level). Hence, we have to use only one series to avoid multicollinearity. However, as we observe from the graph (Figure 4), both series represent a steady growing trend. Therefore, the inclusion of any of the two variables will result mainly in the addition of a time trend and bring very little extra information to the analysis. Thus, we abstain from using the absolute quantities of implemented policies. The *share of net measures* and *trade measures index* are also highly

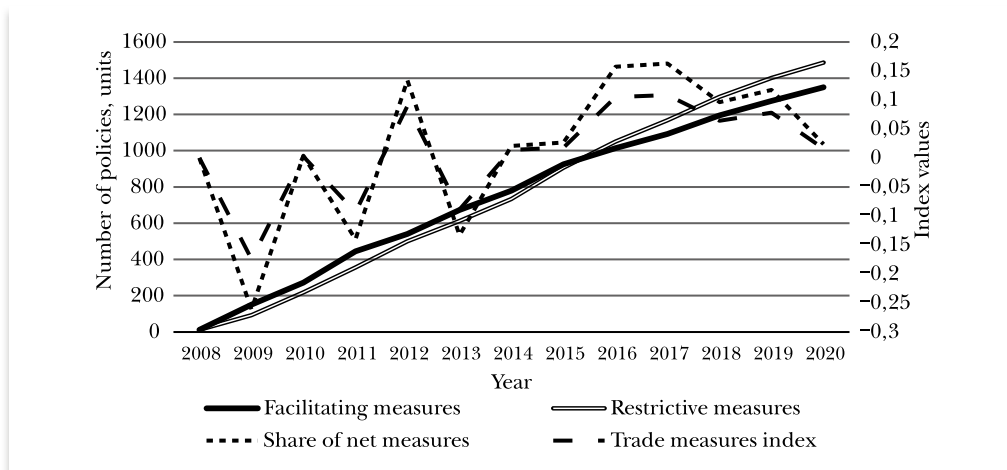


Figure 4.
Dynamics of active trade measures

correlated (99.9%, at 1% significance level), so we decide to use trade measures index due to its comparability with “liberalism–protectionism” index.

4. Estimation of causal relationships

The resulting database contains information for the 2008–2020 time period and includes the following variables: semantic orientation index (DISCOURSE), trade measures index (MEASURES), and volume of exports (EXPORT). To estimate the causal relationship between these three variables, we follow standard econometric methodology to perform the time series analysis.

We employ Augmented Dickey–Fuller (ADF) and Kwiatkowski–Phillips–Schmidt–Shin (KPSS) unit root tests to check each of the three series for stationarity. As expected (considering the visual representation of the series), they all appear to be non-stationary at levels. The same tests on first-differenced series suggest the latter to be stationary at first differences, i.e. integrated of order 1 – I(1).

We treat all variables as endogenous and carry out pairwise Granger causality tests to determine whether our variables can be treated as exogenous and discover a bivariate relationship thereof (Table 3). The number of lags (2) is chosen based on the lag length selection criteria.

Pairwise Granger causality tests indicate that semantic orientation index Granger-causes (i.e. precedes) trade measures index (at 10% significance level); semantic orientation index Granger-causes volume of exports (at 5% significance level) and trade measures index Granger-causes volume of exports (at 5% significance level). This makes semantic orientation index the most exogenous variable and volume of exports – the most endogenous variable in our system, thus ordering variables in VAR (in the decreasing order of exogeneity).

We estimate the trivariate VAR (2) model specified by the system of equations:

$$\begin{aligned} \Delta DISCOURSE_t &= \alpha_1 + \beta_{11} \Delta DISCOURSE_{t-1} + \beta_{12} \Delta DISCOURSE_{t-2} + \beta_{13} \Delta MEASURES_{t-1} + \\ &+ \beta_{14} \Delta MEASURES_{t-2} + \beta_{15} \Delta EXPORT_{t-1} + \beta_{16} \Delta EXPORT_{t-2} + \varepsilon_{1t}; \\ \Delta MEASURES_t &= \alpha_2 + \beta_{21} \Delta DISCOURSE_{t-1} + \beta_{22} \Delta DISCOURSE_{t-2} + \beta_{23} \Delta MEASURES_{t-1} + \\ &+ \beta_{24} \Delta MEASURES_{t-2} + \beta_{25} \Delta EXPORT_{t-1} + \beta_{26} \Delta EXPORT_{t-2} + \varepsilon_{2t}; \\ \Delta EXPORT_t &= \alpha_3 + \beta_{31} \Delta DISCOURSE_{t-1} + \beta_{32} \Delta DISCOURSE_{t-2} + \beta_{33} \Delta MEASURES_{t-1} + \\ &+ \beta_{34} \Delta MEASURES_{t-2} + \beta_{35} \Delta EXPORT_{t-1} + \beta_{36} \Delta EXPORT_{t-2} + \varepsilon_{3t}. \end{aligned} \quad (9)$$

Table 3.

Pairwise Granger causality tests results

Null Hypothesis	F-Statistic	P-value
$\Delta MEASURES$ does not Granger Cause $\Delta DISCOURSE$	0.52	0.62
$\Delta DISCOURSE$ does not Granger Cause $\Delta MEASURES$	5.67	0.05
$\Delta EXPORT$ does not Granger Cause $\Delta DISCOURSE$	0.79	0.49
$\Delta DISCOURSE$ does not Granger Cause $\Delta EXPORT$	6.76	0.02
$\Delta EXPORT$ does not Granger Cause $\Delta MEASURES$	0.11	0.90
$\Delta MEASURES$ does not Granger Cause $\Delta EXPORT$	7.05	0.04

Table 4.

VAR Granger causality tests (block exogeneity Wald tests) results

Excluded	χ^2	P-value
Dependent variable: $\Delta DISCOURSE$		
$\Delta MEASURES$	1.22	0.54
$\Delta EXPORT$	1.88	0.39
All	2.89	0.58
Dependent variable: $\Delta MEASURES$		
$\Delta DISCOURSE$	7.52	0.02
$\Delta EXPORT$	0.36	0.84
All	7.98	0.09
Dependent variable: $\Delta EXPORT$		
$\Delta DISCOURSE$	2.13	0.34
$\Delta MEASURES$	8.01	0.02
All	16.61	0.002

Estimated VAR model satisfies the stability condition since all reverse characteristic roots are less than one in absolute value and lie inside the unit circle. Using Box–Pierce / Ljung–Box, VAR residual cross-correlations, and Jarque–Bera tests, we find that VAR residuals are not autocorrelated, not cross-correlated, and are normally distributed, respectively. Thus, the model is correctly specified and adequate.

To examine a multivariate causal relationship among the variables, we perform the VAR Granger causality tests (i.e. block exogeneity Wald tests) (Table 4).

The outcomes of the tests denote that semantic orientation index Granger-causes trade measures index (at 5% significance level), which in its turn Granger-causes volume of exports (at 5% significance level). Note that the discourse affects the volume of exports through the implemented policies. This result is consistent with common sense. Thus, the semantic orientation index is block-exogenous with respect to a group of variables: trade measures index and volume of exports.

Regarding our series being integrated of the same order, we apply the Johansen cointegration test to determine cointegration rank. We run a set of rank tests for different deterministic assumptions and reveal that there are two cointegrating equations, in particular in the basic specification with no constant or trend in both cointegrating relations and in the corresponding VAR. Due to the limited data availability (i.e. short time period), we estimate the VEC model with no lags. Hence, our model shows only long-run causal relationships, but not short-run (Zhen-Yu, Yan, 2009). Long-run Granger causality implies that regressors contribute to the speed of adjustment of the dependent variable towards the stable state of the system (i.e. long-run equilibrium). At the same time, VAR estimates could be interpreted as short-run causality, implying precedence of change in regressor to change in dependent variable within the period corresponding to the duration of included lags.

Therefore, we estimate the VEC model specified by the system of equations:

Table 5.

The VEC model estimates

Cointegrating Eq.:	CointEq1	CointEq2	
<i>DISCOURSE</i> (-1)	1.0	0.0	
<i>EXPORT</i> (-1)	0.0	1.0	
<i>MEASURES</i> (-1)	-4.44 (1.64) [-2.70]	-631241.3 (242886.) [-2.60]	
Error Correction:	$\Delta DISCOURSE$	$\Delta EXPORT$	$\Delta MEASURES$
CointEq1	-1.25 (0.23) [-5.43]	20327.81 (23121.0) [0.88]	2.65 (0.68) [3.90]
CointEq2	8.66×10^{-6} (1.6×10^{-6}) [5.35]	-0.14 (0.16) [-0.85]	-1.72×10^{-5} (4.8×10^{-6}) [-3.59]
R-squared	0.75	0.08	0.78
Adj. R-squared	0.72	-0.007	0.76
Sum sq. resids	0.004	40497182	0.04
S.E. equation	0.02	2012.39	0.06
F-statistic	29.30	0.92	35.84
Log likelihood	30.98	-107.22	17.99
Akaike AIC	-4.83	18.20	-2.66
Schwarz SC	-4.75	18.28	-2.58
Mean dependent	0.006	125.06	0.001
S.D. dependent	0.04	2005.43	0.12

Note. Standard errors – in () and t-statistics – in [].

$$\begin{aligned}
 \Delta DISCOURSE_t &= \alpha_{11} (\beta_{11} DISCOURSE_{t-1} + \beta_{12} MEASURES_{t-1} + \beta_{13} EXPORT_{t-1}) + \\
 &\quad + \alpha_{12} (\beta_{21} DISCOURSE_{t-1} + \beta_{22} MEASURES_{t-1} + \beta_{23} EXPORT_{t-1}) + \varepsilon_{1t}; \\
 \Delta MEASURES_t &= \alpha_{21} (\beta_{11} DISCOURSE_{t-1} + \beta_{12} MEASURES_{t-1} + \beta_{13} EXPORT_{t-1}) + \\
 &\quad + \alpha_{22} (\beta_{21} DISCOURSE_{t-1} + \beta_{22} MEASURES_{t-1} + \beta_{23} EXPORT_{t-1}) + \varepsilon_{2t}; \\
 \Delta EXPORT_t &= \alpha_{31} (\beta_{11} DISCOURSE_{t-1} + \beta_{12} MEASURES_{t-1} + \beta_{13} EXPORT_{t-1}) + \\
 &\quad + \alpha_{32} (\beta_{21} DISCOURSE_{t-1} + \beta_{22} MEASURES_{t-1} + \beta_{23} EXPORT_{t-1}) + \varepsilon_{3t}.
 \end{aligned} \tag{10}$$

The VEC model estimates give us evidence of a long-run relationship between the variables, namely there is a long-run causality running from all variables to semantic orientation index as well as from all variables to trade measures index.

Similarly to the VAR postestimation procedure, we find the VEC model residuals to be not autocorrelated, not cross-correlated, and normally distributed. Hence, the model is correctly specified, the results are valid and allow further analysis.

5. Analysis of Russian academic discourse and policy-making

Following the results from the previous section, we test their validity exclusively on Russian data. The country-specific analysis has several aspects. We compare the semantic orientation index dynamics of the global and Russian academia. Then we test whether Russian academia influences Russian economic policy and vice versa (as seen in section 4). Finally, recognising the superficiality of the previous hypothesis, we explore the relationship between Russian and international academic discourses and politics on a deeper level.

Let us begin with the study of the global and Russian discourses dynamics. We calculate the semantic orientation index values for Russia accounting for the individual input of every Russia-affiliated author. For example, a paper by two authors, one – from Russia and one – from abroad, is also included in the calculation of the country-specific index; a paper by three authors (two from Russia, one from abroad) is included in the calculation of index only once to avoid double-counting. However, transitioning to a country-specific level leads to a dramatic reduction in the number of papers available for analysis; significant results are available only for time-period since 2009¹⁴.

As seen previously on the global level, unweighted and weighted indexes are highly correlated with each other, while all calculated coefficients are statistically significant at 1% significance level (Table 6). Thus, we drop excessive weighted versions of index and proceed with using the basic mean aggregation.

The comparison of index reflecting the orientation of global academia (index-abs) with index of Russian academic discourse (index-abs-Rus) indicates the following (Figure 5). The Russian index (2009–2013) is characterised by mainly negative values,

Table 6.
Indices correlation coefficients for Russian academia, %

	\bar{I}_{Rus}	$I_{Q_{Rus}}$	$I_{SJR_{Rus}}$
\bar{I}_{Rus}	–		
$I_{Q_{Rus}}$	94***	–	
$I_{SJR_{Rus}}$	89***	94***	–

Note. Significance level is indicated as follows: “***” – $p < 0.01$, “**” – $p < 0.05$, “*” – $p < 0.1$.

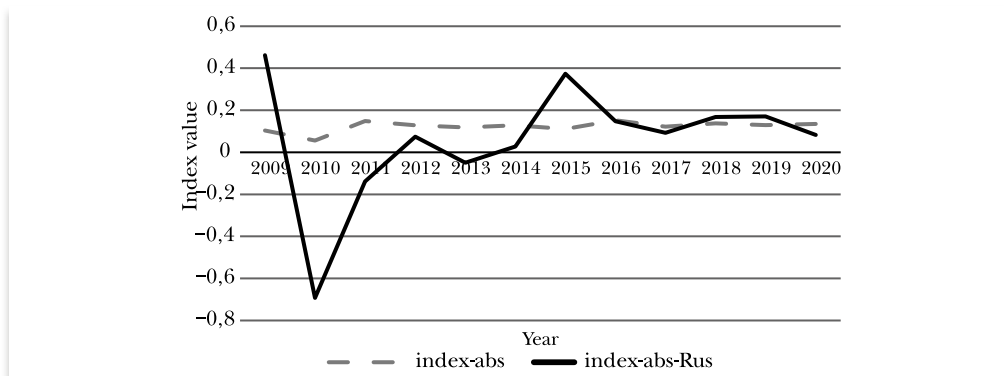


Figure 5.
Dynamics of global and Russian indices (2009–2020)

¹⁴ We suggest using local bibliographic database systems for further country-level analysis. In case of Russia, it may be Russian Science Citation Index.

implying an inclination towards protectionist views. This highly volatile period can be attributed to the small number of available papers (less than 10 papers per year). However, over the next seven years both series demonstrate similar positive patterns indicating the prevalence of the liberal doctrine.

We proceed with the analysis of the relationship between Russian academia and Russian policy-making. Following the methodology described in section 3, we obtain data on volumes of trade and economic policies from the same sources (UNCTADstat Data Centre and Trade Monitoring Database). Unlike on the global level, volumes of export and import of a specific country are not identically equal, thus we use “Total trade” as the sum of export and import volumes in absolute values (Figure 6).

The data on restrictive and facilitating measures allows to replicate the analysis on the global level. As seen in Figure 7, the number of both facilitating and restric-

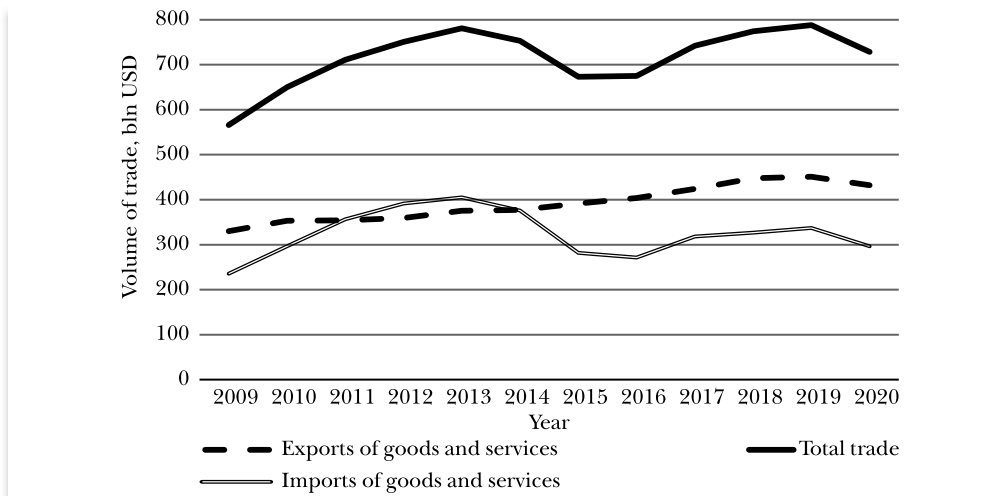


Figure 6.

Volume of Russian trade (2009–2020)

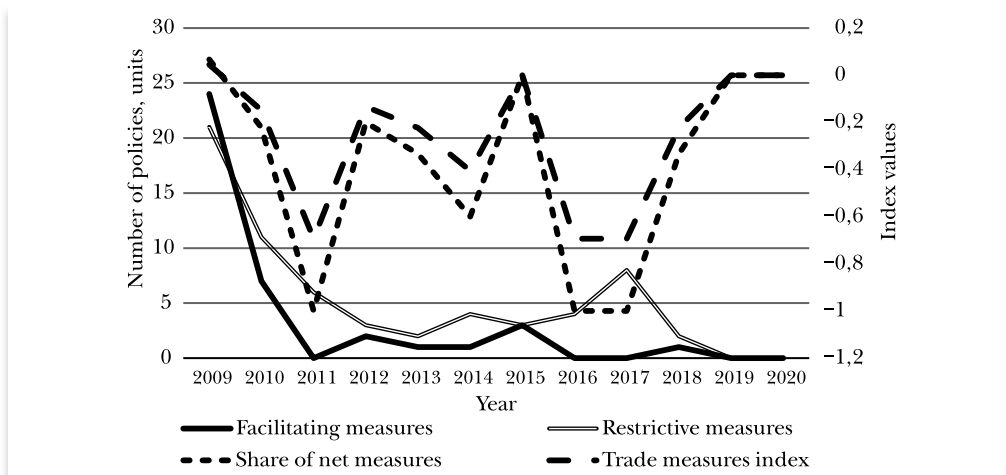


Figure 7.

Dynamics of active trade measures in Russia

Table 7.

Pairwise Granger causality tests results for Russian data

Null Hypothesis	F-Statistic	P-value
DISCOURSE-RUS does not Granger Cause MEASURES-RUS	0.64	0.56
MEASURES-RUS does not Granger Cause DISCOURSE-RUS	0.34	0.72
TRADE-RUS does not Granger Cause MEASURES-RUS	4.27	0.07
MEASURES-RUS does not Granger Cause TRADE-RUS	0.06	0.94
TRADE-RUS does not Granger Cause DISCOURSE-RUS	0.75	0.51
DISCOURSE-RUS does not Granger Cause TRADE-RUS	0.22	0.81

tive measures in absolute terms decreases throughout the period (highly correlated – 88.8%, at 1% significance level). Again, to account for both facilitating and restrictive policies we construct share of net measures and trade measures indexes for Russia, which are also highly correlated (99.9% – at 1% significance level). Both indexes demonstrate a tendency towards more protectionist policies since the index values are negative. Therefore, we again (as seen in section 3) use trade measures index due to its comparability with “liberalism-protectionism” index.

Finally, we estimate several econometric models. Our base specification replicates the logic described in the previous section. We test the causal relationships between Russian academic discourse (DISCOURSE-RUS), Russian policy-making (MEASURES-RUS), and volume of trade (TRADE-RUS). The stationarity tests (ADF and KPSS unit root tests) suggest all series being stationary at levels, i.e. integrated of order 0 – $I(0)$. We treat all variables as endogenous and perform pairwise Granger causality tests (Table 7). The number of lags (2) is chosen based on the lag-length selection criteria.

Preliminary pairwise Granger causality tests suggest that volume of trade Granger-causes trade measures index (at 10% significance level), thus trade measures index is the most endogenous variable in VAR.

Table 8.

VAR Granger causality tests (block exogeneity Wald tests) results for Russian data

Excluded	Chi-sq	P-value
Dependent variable: DISCOURSE-RUS		
TRADE-RUS	15.49	0.0004
MEASURES-RUS	13.35	0.0013
All		
Dependent variable: TRADE-RUS		
DISCOURSE-RUS	0.26	0.88
MEASURES-RUS	0.05	0.98
All	0.35	0.99
Dependent variable: MEASURES-RUS		
DISCOURSE-RUS	1.20	0.55
TRADE-RUS	6.38	0.04
All		

We estimate the trivariate VAR (2) model using series in levels and perform VAR Granger causality tests (i.e. block exogeneity Wald tests) (Table 8).

The test outcome shows that both – volume of trade and trade measures index – Granger-cause semantic orientation index (at 1% significance level), while volume of trade Granger-causes trade measures index (at 5% significance level). Therefore, Russian academia tends to discuss current economic situation rather than have a direct impact on the policy-making.

However, it might be too naïve to ignore the influence of both global academia and global trade on a specific country. Thus, we include the global characteristics (DISCOURSE and EXPORT) as exogenous variables in the model. The results of preliminary pairwise Granger causality tests suggest that trade measures index for Russia is the most endogenous variable in VAR.

Based on lag-length criteria, we estimate a VAR (1) with exogenous variables (i.e. an open VAR) (Table 9).

Table 9.

Open VAR model estimates for Russian data

Independent Variable	TRADE-RUS	MEASURES-RUS	DISCOURSE-RUS
TRADE-RUS (-1)	0.72 (0.17) [4.35]	1.96×10^{-12} (1.3×10^{-12}) [1.48]	1.86×10^{-12} (1.1×10^{-12}) [1.73]
MEASURES-RUS (-1)	-3.79×10^{10} (2.9×10^{10}) [-1.29]	-0.07 (0.23) [-0.30]	-0.24 (0.19) [-1.25]
DISCOURSE-RUS (-1)	2.07×10^{10} (3.4×10^{10}) [0.61]	-0.14 (0.27) [-0.53]	0.15 (0.22) [0.70]
C	1.77×10^{11} (1.1×10^{11}) [1.60]	-0.58 (0.88) [-0.65]	-1.99 (0.72) [-2.76]
Δ EXPORT	18573153 -4912381 [3.78]	-7.60×10^{-5} (3.9×10^{-5}) [-1.94]	-7.35×10^{-6} (3.2×10^{-5}) [-0.23]
Δ DISCOURSE	1.33×10^{11} (4.3×10^{11}) [0.31]	-8.87 (3.47) [-2.56]	5.03 (2.83) [1.78]
R-squared	0.83	0.71	0.76
Adj. R-squared	0.69	0.47	0.55
Sum sq. resids	4.35×10^{21}	0.28	0.18
S.E. equation	2.69×10^{10}	0.22	0.18
F-statistic	5.86	2.92	3.72
Log likelihood	-301.06	5.57	8.01
Akaike AIC	51.18	0.07	-0.33
Schwarz SC	51.42	0.31	-0.09
Mean dependent	7.35×10^{11}	-0.33	0.04
S.D. dependent	4.82×10^{10}	0.29	0.26

The inclusion of exogenous variables adds to the interpretation. Significant coefficients of world export in equations for Russian volume of trade and trade measures index indicate the following. Firstly, the greater is the world export the greater is the Russian volume of trade. This is an expected result as export from Russia contributes to the global export. Secondly, the influence of the world export on Russian trade measures index is negative. This result is consistent with figures 6 and 7 as well as the corresponding literature (Grinberg, Komolov, 2022).

The global academic index supports the previous thesis. Namely, the more liberal is the global academia, the more protectionist policies the Russian government pursues. At the same time the global and Russian academic indexes are co-directional: an increase in the global academic index leads to an increase in the Russian one. The relationship between Russian volume of trade and semantic orientation index (i.e. TRADE-RUS Granger-causes DISCOURSE-RUS) remains constant in the final block exogeneity Wald tests. Simultaneously the relationships between Russian volume of trade and trade measures index as well as between trade measures index and semantic orientation index become insignificant with the addition of exogenous global variables.

6. Conclusion and discussion

To sum up, we use interdisciplinary methods (namely, NLP and econometrics) to answer a fundamental question of the history of economic analysis, i.e. does theory influence policy? Our analysis results in the following conclusions. Firstly, the index of semantic orientation demonstrates the formation of a consensus and further dominance of liberal doctrine in academia, notably, accounting for the journals' quality does not result in significant changes in the discourse analysis.

Secondly, we achieve predictable results with the econometric analysis at the global level. According to our VAR (2) model, in the short-run, the discourse helps predict the policies and volume of exports, while the policies help predict the volume of exports. At the same time, the VEC estimates suggest that in the long-run policies and volume of exports help predict the discourse, while the discourse and volume of exports help predict the policies. The obtained results are favourable as they are consistent with common sense and do not contradict the consensus ideas presented in contemporary literature. Indeed, the results can be interpreted as follows: on the one hand, academics discuss the economy in the literature, hence the relationship between the discourse and the policy-side variables (measures and volume of trade). On the other hand, policies (represented by trade measures index) are based on what is happening in the economy (represented by volume of trade) while the economic science (represented by semantic orientation index) acts as an auxiliary tool. The uniform straight causal relationship from the discourse to the policy-side variables in both long-run and short-run would constitute the "scientific" approach in international trade. However, the results suggest a complex relationship between the discourse, the policies and the economic activity. Thus, we reject the initial hypothesis about the presence of "scientific" approach in international trade in favour of "economics as art" approach at the global level.

Finally, we perform the same analysis on the Russian data. Same as on the global level, the journals' quality does not affect the semantic orientation index. The juxtaposition of the global and Russian indexes suggests co-directional movement and the

prevalence of the liberal doctrine in both series. The basic econometric analysis demonstrates that the Russian academia is more inclined to analyse the current economic situation than to exert a direct influence on policy-making. The inclusion of data on global trade and global semantic orientation index offers a better insight on the relationship between academia and policy making. Notably, the estimation results imply that the Russian academia follows the global scientific trends in terms of adherence to either economic liberalism or protectionism. On the contrary, Russian policy-makers tend to follow an opposite pattern as they turn to more protectionist measures the more liberal the global discourse becomes. The presented results advocate for the absence of “scientific” approach to economic theory in Russia as the government tends to pursue its own political course regardless of either domestic or global academic opinions.

At the same time, we acknowledge the obvious limitations of our research. Firstly, we recognise the drawbacks of the data on trade measures. The short period of available data may distort the outcome. Some tests are asymptotic, and they may provide the approximations differing from the true values, when performed on our small sample. Furthermore, the inclusion of “trade remedies” in the policies classification may skew the results.

Secondly, Scopus journals may be biased towards a certain agenda. By limiting the database only to Scopus journals, we fail to capture the broader discussion within the country’s academia that may occur in domestic periodicals not covered by Scopus. For example, according to our semantic index, Belarus shows one of the highest levels of “liberal” orientation in 2020. However, there is likely to be a handful of “protectionist” papers not included in Scopus (Pranevich, Shkutsko, 2019).

Thirdly, the analysis at the global level gives us an attempt to make an engaging generalisation at the expense of ignoring country-specific aspects. The model does not account for the social factors associated with a particular country, such as “ideology” (being more prone to globalist or nationalist policies), corruption, lobbying, or politician’s personal interests. At the same time the content of the papers may reflect political opinions of the academics themselves rather than interpretation of pure research evidence.

Fourthly, we recognise the presence of a third unaccounted factor that both academics and policy-makers react to in their own way. The example of such a factor may be a global pandemic resulting in the breaking of global value chains or military conflicts provoking active implementation of economic sanctions.

Media can also be such a factor; its influence on policy-makers’ decisions is known for a long time (Gittins, 1995). The current literature notes that modern media takes on a more active role in forming a certain narrative and advocating certain policies rather than merely reporting the news (McBeth, Tokle, Schaefer, 2018). The contemporary rise of social media puts an even higher pressure on the government (Ausat, 2023). Thus, policy-makers may consider not only the opinions of academia, but also public opinion. Whether academia or media is more influential on policy decisions is a question that lies beyond the scope of our paper.

Finally, we acknowledge the simplification of relationship between theory and policy. On the one hand, the reduction to “scientific” or “economics as art” approaches allows us to formulate a hypothesis. On the other hand, we overlook the nuances of complex conjunctions of academic and real worlds. For example, the contemporary litera-

ture puts forward the hypothesis claiming the “performativity” of economics as a science (MacKenzie, Leung-Sea, Muniesa, 2007). This concept suggests that economic theories and models do not just describe a pre-existing reality but actively create and shape the economic world they claim to analyse. Thus, performativity of economics creates another channel of how theory can influence policy decisions. Although the claim remains contested (Cochoy, Giraudeau, McFall, 2014) many academics note the explanatory power of this concept, e.g. in analysing central bank policies (Boldyrev, Svetlova, 2016). At the same time the concept of “folk economics” highlights the importance of intuitive reasoning of untrained people concerning economic activity (Rubin, 2003). Moreover, current research attributes the success of certain political agendas to their appeal to the intrinsic (almost common sense) understanding of economic mechanisms by the public (Swedberg, 2018). These explanations indicate that the relationship between academia and policy-makers are much more intricate than we portray them here.

The paper suffers from the same limitations as any econometric research as it “cannot produce an accurate representation of the working of the economy” (Moosa, 2017, p. 237). The presented model refers to a mathematical abstraction of a high degree, where the results show correlation, not causation in the general sense, and describe patterns and trends rather than explain how people (not agents or observations) behave (or think) (Freedman, 2009; Phillips, 2003).

Thus, we acknowledge all the limitations in our research and suggest considering it not as a standalone project or let alone the absolutistic “Truth”, as defined by M. Blaug (Blaug, 1996, p. 2), but a quantitative augmentation to a broad discussion.

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Влияет ли теория на политику? Количественный анализ взаимосвязи между академическим дискурсом и экономической политикой в международной торговле

Аннотация. В статье рассматривается взаимовлияние экономической теории и политики в международной торговле с использованием междисциплинарной методологии, включающей обработку естественного языка (NLP) и эконометрический анализ. Проверяется гипотеза о возможности характеризовать взаимные связи между экономической теорией и экономической политикой с точки зрения подхода «экономика как искусство» (где теория служит вспомогательным инструментом политики), сравнивая ее с гипотезой о характеристике этой взаимосвязи с точки зрения «сциентистского» подхода (где экономическая политика интерпретируется как практическое применение теории). Для этого с помощью алгоритмов NLP дается оценка академического дискурса с точки зрения приверженности протекционизму или экономическому либерализму. Результаты указывают на формирование доминирующего либерального консенсуса в академической среде, независимо от поправок на качество журналов. Для анализа связи между академическим дискурсом, торговой политикой и экономической активностью (измеряемой объемом торговли) в динамике оцениваются модель векторной авторегрессии (VAR) и векторная модель коррекции ошибками (VEC). На мировом уровне выявлена сложная двунаправленная взаимосвязь: академический дискурс помогает прогнозировать политику и торговлю в краткосрочной перспективе, в то время как в долгосрочной перспективе политика и экономическая активность способствуют прогнозированию дискурса. Это опровергает «сциентистскую» интерпретацию прямого теоретического влияния в пользу подхода «экономика как искусство». Аналогичный анализ российских данных позволяет глубже понять взаимосвязь теории и политики на уровне страны. С одной стороны, российский академический дискурс соответствует мировым либеральным тенденциям и, как правило, изучает экономическую среду, а не оказывает на нее прямого влияния. С другой стороны, российские политики руководствуются определенными политическими целями, проводя протекционистскую политику, несмотря на более либеральный мировой академический дискурс. Таким образом, «сциентистский» подход не является характерным для России.

Ключевые слова: *международная торговля, экономическая политика, академический дискурс, протекционизм, либерализм.*

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