HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

Murat Bakeev

THE LINK BETWEEN THE ACADEMIC BACKGROUND AND THE RHETORIC OF MONETARY POLICYMAKERS: AN EPISTEMIC ASPECT

Working Paper WP11/2021/02
Series WP11
Economic Reforms of the Late 20th Century:
Experience and Lessons
from Contemporary History

Moscow
2021

Editors of the Series WP11
"Economic Reforms of the Late 20th Century:
Experience and Lessons from Contemporary History"
Vladimir Avtonomov, Oleg Ananyin

Bakeev, M.

The Link between the Academic Background and the Rhetoric of Monetary Policymakers: An Epistemic Aspect [Electronic resource]: Working paper WP11/2021/02 / M. Bakeev; National Research University Higher School of Economics. – Electronic text data (340 Kb). – Moscow: HSE Publishing House, 2021. – (Series WP11 "Economic Reforms of the Late 20th Century: Experience and Lessons from Contemporary History"). – 18 p.

Using the Latent Dirichlet allocation method, as well as the dictionary method of content analysis on the material of the transcripts of the meetings of the Federal Open Market Committee of the US Federal Reserve from 1979 to 2014, the paper explores the potential impact of aspects of the academic background of central bankers, such as the presence of a PhD degree in economics and links with certain research schools in macroeconomics, on their monetary policy rhetoric. The main attention is paid to the epistemic aspects of the rhetoric, rather than value preferences regarding the priority goals of policy. The results obtained show that the role of the background changed in different periods: if for the period from 1979 to 1993 there were no significant differences associated with rhetoric, then for later periods it can be noted that members of the committee with a PhD degree in economics more often mentioned terms and concepts of academic origin in their speech, were more likely to present their thoughts in a style characteristic of academic economics, and paid more attention to the discussion of econometric models, in contrast to those committee members who did not have a PhD degree in economics. This tendency was more typical for the graduates from the universities belonging to the "saltwater" tradition in American macroeconomics than for other holders of PhD degrees in economics.

Keywords: central bank, economics, academia, monetary policy, background.

Murat Bakeev, postgraduate student of the Faculty of Economic Sciences, HSE University, fellow of the Center for the History and Methodology of Economic Science, HSE University.

1. Introduction

Monetary policy is a unique area in which people from different educational and professional backgrounds often participate in collaborative decision-making. For instance, the former United States (hereinafter – US) Federal Reserve System (hereinafter – the Fed) chair Janet Yellen received her PhD in economics and taught economics before joining the institution. At the same time, the current chair of the Fed, Jerome Powell, is a lawyer by education and has no experience of working as a professor or economist-researcher in academic structures. The key decision-making body of the Fed, the Federal Open Market Committee (hereinafter – FOMC), consists of 12 voting members whose education and professional careers may be related to different areas.

On the one hand, this means that at least at some basic level these people need to understand each other and therefore they have to speak the same "language". As Abolafia (2010) depicts, such elite policy-making groups participate in the process of shared construction of a narrative that describes the actual condition of the economic and social environment, and the resulting "plausible" narrative is used as a starting point for negotiation of policy options. This shared narrative, as well as the sensemaking process that leads to its construction, does indeed constitute a kind of unifying language for policymaking, and people with different competencies, skills and perspectives need to adjust to its logic in order to contribute to the discussion.

On the other hand, members of decision-making bodies with different backgrounds may differ in terms of the rhetoric used in policy discussions. This can be expressed, for example, in a preference for certain topics, certain types of argumentation, certain ways of presenting thoughts, as well as a preference for certain policy goals, such as price stability or employment in the context of economic policy. The former can be called epistemic aspects of rhetoric because they are more related to the description of the environment and the process of sensemaking, while the latter can be called value aspects of rhetoric because they are more related to negotiation about different policy choices when a plausible descriptive narrative has already been created. Of course, those aspects are deeply connected to each other, but we can distinguish between them for analytic purposes.

The main hypothesis utilized in this paper suggests that the background associated with the academic institutions specializing in economic science influences what decision-makers say when they discuss monetary policy issues. In this paper, we mostly touch upon the epistemic aspects of

monetary policy rhetoric, which are described above. The link between the value aspects of rhetoric and academic background of the FOMC members has already been studied well in the literature (see Bordo & Istrefi, 2018), so it is difficult to provide new evidence in this case. Along with the academic background as such, the macroeconomic school with which this background is associated is of great importance. In the US macroeconomic science, for most of its modern history, there have been two opposing "epistemic communities", that is, associations of so-called "salt-" and "freshwater" economists (Kreps, 1997). When studying the role of the academic background, this division is taken into account as well.

2. Economic Science and the Fed

Until the 1950s, experience in law or banking provided the best credentials for the responsibilities of a central banker comparing to a background in economics (Whittlesey, 1963). However, during the William McChesney Martin's work as the Chairman of the Fed (1951-1970), the influence of professionally trained economists was rising (Axilrod, 2011). Whittlesey (1963, p. 40) wrote that the meetings of FOMC acquired the character of "graduate seminars" and that it became "difficult to differentiate, so far as qualifications are concerned, between the economist group and the management group." It is interesting to note that this happened despite evidence that Martin himself was not interested in using economic theory to guide monetary policy. Axilrod (2011, pp. 26-27) described him as an "artist of policy," although not the best in understanding theoretical economics, but very sensitive to market psychology.

As Claveau and Dion (2018) show, at the turn of the 20th and 21st centuries, there was a process that, following Marcussen (2009), can be called the "scientization" of central banks, and the Fed is the most important example here. One of its attributes is the growing number of research economists in the central bank staff. Although the line between employees with managerial duties and researchers whose main tasks are associated with forecasting and modeling is somewhat blurry, the two groups may be separated from each other and measured (Claveau and Dion, 2018). According to Claveau and Dion's (2018) estimate, the Fed's research staff has grown in relative terms from 21% to 47% between the early 1990s and 2017, and there is the evidence that this is an underestimation. Moreover, by the end of 2002, about 74% of the articles on monetary policy published by US-based economists in US-edited journals appeared in Fed-published journals or were co-authored by Fed staff economists (White, 2005).

Nevertheless, these external signs of the growing scientization do not show how the influence of economic science is reflected in the rhetoric of monetary policymakers. A role of

research staff and so the complexity and quality of forecasting and modeling may increase but senior decision-makers can hold their attitudes unchanged.

Indeed, as Sparsam and Pahl's (2022) case study shows, transfer of novel insights from academic macroeconomics to monetary policymaking was not easy and, even if it happened, it was very selective in order to be adequately situated in the context of policymaking. Particularly, these authors study two cases of attempts to introduce respectively the new classical (the "rational expectations" school) and monetarist thought during the Chairman Volcker era. At that time, the Minneapolis Fed was famous for promoting the rational expectations agenda in the structure of the Fed. Sparsam and Pahl note that Mark H. Willes, who served as president of this regional Fed bank from 1977 to 1980, was especially active in this and several times tried to raise at the FOMC meetings the issues that were paid attention to by the academic macroeconomists of the new classical school. However, he was not successful in persuading other FOMC members to take seriously his remarks about the problem of policy ineffectiveness and a need to incorporate rational expectations in Fed's forecasting models. These remarks were either simply ignored or dismissed as theoretical intellectual considerations with very little empirical support. Some research staff members could agree with the necessity to incorporate expectations into their forecasting models in a better way but the approach of Willes, who wanted to abandon the Keynesian models used, as suggested by his new classical researchers in Minneapolis, was too radical for them.

Another example of interventions from academic macroeconomics, which is examined by Sparsam and Pahl (2022), is the influence of monetarist ideas in the 1970s-1980s. As they note, at first, in the beginning of the 1970s, when presidents of the St. Louis Fed played the similar role for monetarism as Mark H. Willes did for the rational expectations school, they were ignored at FOMC in the very same way. However, in 1979, after Paul Volcker became the Chair, a policy regime labeled as "practical monetarism" was implemented until 1982, which implied that the Fed stopped targeting the nominal interest rates and focused only on money reserves targeting (Axilrod, 2011, p. 93).

Existing historical evidence clearly proves that there really was a big "rhetorical" aspect in the Fed's monetarist move. For a big part, it was "more a marriage of convenience than infatuation", as Blinder (1998, p. 29) puts it. In particular, he argues that the monetarist label was used as a political shield when interest rates had raised. Sparsam and Pahl (2022) agree with this estimation, stating that Volcker's practical monetarism was not a confession to the academic paradigm but "a powerful signifier for the policy shift".

Despite the fact that academic roots of "practical monetarism" were questionable, still, we can indicate some kind of an impact, at least at the level of fashion and superficial rhetoric. Public activity of monetarists, headed by Milton Friedman, was serious enough at that moment to make monetarism a good political shield. New classical macroeconomics was also able to acquire an impact on policymaking after a decade or two after Willes's attempts. Although it was indirect since its main providers were from new Keynesian camp, who inherited the basic principles of the rational expectations school, it was much more persistent in comparison with the influence of monetarism. Chari and Kehoe (2006) point that the evolution of the US monetary policy in the long-run at the turn of the 20th and 21st centuries was in line with the propositions of rational expectations economists from new classical and new Keynesian camps, such as a move towards greater independence and transparency of monetary policy and to a more rule-based policy regime.

After World War II, neo-Keynesianism became a dominant approach in the US macroeconomics. Its pillars were the IS-LM (investment saving – liquidity preference money supply) model and Phillips curve. In addition, neo-Keynesians adopted the Cowles Commission (Christ, 1994) method of econometric modeling, characterized by large-scale models with hundreds of equations and various ad hoc adjustments made in order to obtain the best results from the point of view of reflecting observed data (De Vroey, 2016, p.189).

Neo-Keynesianism became very influential in policy due to a high level of applicability to practical problems and correspondence with data. The neo-Keynesian "engineering" style of modeling gained the popularity in the Fed as well. In particular, the first model designed for quantification of monetary policy and its effects on the economy used in the Fed was the MIT-Penn-Social Science Research Council (hereinafter – MPS) model developed in the 1960s (Blanchard, 2000), which was a large-scale model based on Keynesian equations describing the behavior of economic aggregates such as consumption, investment, and money demand (Goodfriend & King, 1997).

In spite of undoubtedly great influence of neo-Keynesianism on monetary policymaking at that time, we have to be aware that the first decades after World War II were still far from the peak of "scientization" process of central banking that, as we discussed, happened later. Younger members of the research staff with economic education could be influenced a lot, whereas several presidents of the regional banks and members of the Board of Governors could make decisions based on their own understanding that was developed independently. Prescientific speculations about the functioning of the economy, market and policymaking experience, the atheoretical data-oriented approach to analysis of business cycles in the style of Wesley Clair Mitchell could play a

big role as well. Particularly, Arthur Frank Burns, who served as the Chairman of the Federal Reserve from 1970 to 1978, authored with Mitchell a large work called "Measuring Business Cycles" (1946), where business cycles were studied based on the analysis of inductive generalities, and this project looked dated for mainstream academic economists of that time who asked for models with a behavior-explaining theoretical foundation.

While in academic macroeconomics during and after the stagflation of the 1970s in US economy, monetarism and then new classical macroeconomics gradually crowded out neo-Keynesianism in place of the mainstream of science, in the Fed, interventions of the adherents of the two schools were rather unsuccessful, as the cases discussed above show. The MPS model remained the main forecasting model and was replaced by the newer FRB/US model, which is in many respects similar to the former, in the 1990s (Taylor, 2016). Newer approaches were not able to give the required level of flexibility and correspondence with data.

A current stage of the development of macroeconomic thought is associated with new Keynesianism. New Keynesian economists are quite active in their participation in policymaking. Mankiw (2006) mentioned the names of Stanley Fischer, Larry Summers, Janet Yellen, John Taylor, Richard Clarida, Ben Bernanke, and himself as the new Keynesians who held leadership positions in public policy since the President Clinton years. Following the departure of Alan Greenspan in 2006, this trend was reinforced by the arrival of an economist with a strong academic background, Ben Bernanke, as the Chair of the Fed. One of the most important innovations associated with new Keynesians was the introduction of dynamic stochastic general equilibrium (hereinafter – DSGE) models into the Fed's arsenal in the 2000s (Sergi, 2020).

Thus, the era of new Keynesians in monetary policy of the US became the peak of "scientization" of central banking, described by Claveau and Dion (2018). According to them, the scientization resulted in the change of the image of central banking, when personalist, "discretionary, holistic, eclectic and pragmatic" art started to be replaced by the science of monetary policy closely tied to macroeconomic science and organized in accordance with the Mertonian norms of science, such as universalism, communism, disinterestedness and organized skepticism.

However, as policymaking has changed, so the economic science and economics education could go through similar process of scientization earlier. An increase of the role of mathematics and econometric modeling, which happened during the decades that followed World War II, could split the generations who acquired their academic training before and after the war. This may be a

potential source of the difference of the impact of older and younger generations of economists with academic background in FOMC determined by their different technical skills.

Moreover, as we have discussed above, there was an evolution from the point of view of substantive theory, when the pre-war institutionalism and older neoclassical approaches were replaced by neo-Keynesianism in saltwater universities and monetarism in freshwater universities and then later, in its turn, new Keynesianism gradually replaced neo-Keynesianism in saltwater universities, whereas new classical theory replaced monetarism in freshwater institutions. This history of American macroeconomic thought in the 20th century can be viewed from a variety of perspectives but one point of view seems to be especially interesting in the context of our discussion. This is definitely a movement towards more abstractness from the methodological point of view (Avtonomov, 2013), as academic economists start to pay their attention more to attaining general truths, which are less connected with the actual policy issues. Accordingly, this should alienate academic economists from economic policymakers in terms of the issues they are considering.

Summarizing, we may say that although it is obvious that the link between economic science and the Fed is very strong and solid, we do not know well how it evolved in time and what set academic economists who acted as policymakers apart in terms of rhetoric. In the next part of the paper, we describe our strategy to analyze the FOMC transcripts in order to answer these questions.

3. Data

From our choice of the object of this research, that is, the monetary policy rhetoric of the FOMC members, it becomes clear that we are interested in language. Therefore, our choice of data should not be surprising. It is textual data from historical transcripts of the FOMC meetings.

Our main task is to identify individual utterances, which can be attributed to people with a particular background. We decided not to include in our analysis utterances done by the chairpersons because they take up a significant proportion of the transcripts and can distort the sample. In addition, we did not consider the remarks of the staff, since their rhetoric is much more dependent on the working position, in comparison with the members of the FOMC. Our total sample consists of transcripts of the meetings held from 1978 until 2014 under four chairs: G. William Miller, Paul Volcker, Alan Greenspan and Ben Bernanke.

The examined period has been split into five subsamples that are analyzed separately from each other. The main reason for this is to see potential historical changes that can alter the way of influence of a particular background. In addition, we have considered the fact that in 1993, there was a major institutional change that could have affected the rhetoric of the FOMC members, when FOMC members realized that their utterances are made public (Hansen & McMahon, 2018). This particular change does not interest us directly, but it was decided to have it as one of dividing points between our subsamples in order to be able to attribute possible changes to it in an easier way, if such conjectures arise. Then we decided to divide the period before the October 1993 into two eight-year subsamples (1978-1985, 1986-1993), whereas the period after the October 1993 was divided into three seven-year subsamples (1993-1999, 2000-2006, 2007-2014). As a result, we get our first subsample including the years of the Chairman Miller and most of the years of the Chairman Volcker, our second subsample includes the last years of the Chairman Volcker and the first years of the Chairman Greenspan, our third and fourth subsamples include mostly the transcripts from the Greenspan era as well, while the last fifth subsample consists of the transcripts from the years of the Chairman Bernanke.

The analyzed individuals were divided into different groups by their background characteristics. We used the biographical data available on Fed's website to identify whether a person acquired a PhD degree in economics and, if yes, from which university. The total list of universities was separated between the "freshwater", "saltwater" and "other" group, based on the assessment done by Önder and Terviö (2015). We treat a PhD in economics as a proxy characteristic for the academic background in economics and gaining a PhD from a freshwater and saltwater university as a proxy characteristic for the freshwater and saltwater academic orientation respectively. Of course, these proxies are not ideal, but we believe that they are precise enough to prevent potential distortions of our results.

Therefore, for each temporal subsample, we have four minor subsamples: a sample that includes utterances of people with academic background, a sample that includes utterances of people with "freshwater" academic background, a sample that includes utterances of people with "saltwater" academic background, and a sample that includes utterances of people without academic background. According to our research strategy, this should allow to see if there are any important and considerable differences in monetary policy rhetoric of people with different backgrounds in different periods. In Table 1, basic descriptive information about the analyzed subsamples is given.

Table 1. Numbers of speakers and utterances in the examined minor subsamples

	1978-1985	**1986-1993**	**1993-1999**	**2000-2006**	**2007-2014**
Speakers with "freshwater" background	9 speakers; 5109 utterances	9 speakers; 3315 utterances	8 speakers; 2155 utterances	12 speakers; 2510 utterances	11 speakers; 4738 utterances
Speakers with "saltwater" background	4 speakers; 3796 utterances	5 speakers; 1119 utterances	8 speakers; 1430 utterances	7 speakers; 1018 utterances	7 speakers; 1768 utterances
Speakers with academic economics (PhD) background	18 speakers; 11334 utterances	21 speakers; 8404 utterances	21 speakers; 4854 utterances	21 speakers; 4077 utterances	19 speakers; 6873 utterances
Speakers without academic economics background	15 speakers; 8727 utterances	10 speakers; 3010 utterances	8 speakers; 1999 utterances	8 speakers; 1605 utterances	9 speakers; 1712 utterances

Source: author's calculations, based on the data extracted from https://www.federalreserve.gov/monetarypolicy/fomc_historical_year.htm.

4. Methods

The main "text-as-data" research method that is utilized in our study is topic modeling using Latent Dirichlet allocation (hereinafter – LDA), firstly introduced by Blei et al. (2003). Simply speaking, it is a soft clustering algorithm, which allows to reveal hidden division of textual sources into various topics that are interpreted as groups of words with a higher probability of co-occurrence.

LDA presupposes that each analyzed textual document is a probabilistic mixture of topics, whereas each topic is a probabilistic combination of the set of words in all documents. Respectively, its outputs include probability distributions of documents over topics and of topics over words. This means that the same word can belong to different topics (with different probabilities) and each document can consist of several topics (with different weights). Such probabilistic nature of the method makes the interpretation of topics easier for researchers who can pick only those words from the list of most probable words in the topic, which are relevant according to their understanding.

Important feature of LDA is that it is an unsupervised machine learning algorithm, which does not require particular word lists formulated by a researcher before its estimation. This

excludes the possibility of researcher's expectations influencing the formation of topics. Nevertheless, the definition of resulting topics is subject to researcher's judgment. Where it is possible, we try to follow existing experience of naming the topics, presented in such studies as Edison and Carcel (2021) and Jegadeesh and Wu (2017), in order to decrease a presence of subjective bias in our interpretation.

Our basic approach is to compare the resulting topic structures corresponding to our minor subsamples that contain utterances of individuals with different background characteristics in terms of composition of topics. A presence of differences may signal that the background may be an influencing factor and we are going to discuss possible links between the background and difference in rhetoric in such cases.

In addition to topic modeling, we have decided to include in our analysis a simpler technique of content analysis, the so-called dictionary method, which implies that we define a set of words of interest and then compute their frequencies in documents. Here our task was to select words that occur only in same contexts and with same meaning in order to make the results interpretable.

After preliminary analysis of the sources assigned to check general relevance of various terms in the context of the examined sources, we settled on the following terms. First, we have here names of the main models utilized in the Fed: it is the older MPS model and the newer FRB/US model (after 1993, since it was not present earlier). Higher frequency of references to them may indicate a higher interest of a FOMC member in modeling. In addition to these structural models with a neo-Keynesian basis, we have decided to add a class of models developed by new Keynesians and now dominant in the academic research, that is, DSGE models. In the Fed, they began to be used as supplementary models in the 2000s (Sergi, 2020).

Second, a couple of terms that occurred in the works of academic macroeconomists and then adopted by monetary policymakers, were added to our analysis, that is, Taylor rule (starting from 1993-1999) and NAIRU (non-accelerating inflation rate of unemployment). We want to know whether people with academic background can be seen as providers of such terms with academic origin into the monetary policy rhetoric and to what extent people without academic background are prone to use them in their utterances. Our choice of these particular terms is due to their relative presence in the rhetoric of central bankers, as our exploratory analysis has shown.

Third, a frequency of the term "equilibrium" and its derivatives was counted, which, as we believe, may be a word that signals about the relative importance of a basic economic science-oriented type of argumentation and framing economic observations.

Finally, the term "model" and its derivatives were counted in all the examined subsamples, in order to see a rhetorical significance of economics models and modeling for people with different backgrounds in general. Of course, these terms may appear in a very broad number of contexts, so the potential for interpretation of the results in this case is rather limited and we plan to refer to them only as to a supplementary evidence for the results of LDA analysis, which may identify a presence of a topic or several topics associated with modeling.

5. Results and Conclusions

Generally, our findings suggest that the differences associated with the presence of academic background are not big. The distribution of discussed topics is almost the same in the groups with and without such background, as well as in the groups of academic economists with freshwater and saltwater background. This result supports Sparsam and Pahl's (2022) general assertion that the monetary policy and academic macroeconomics are quite autonomous and different spheres, and the interventions from the latter to the former are rarely successful. Academic economists are embedded in the general logic of monetary policymaking in accordance with the positions held, and their personal background does not lead to many deviations from this logic. The pragmatic attitude is dominant enough to rule out serious differences in rhetorical perspectives.

In the first two analyzed periods, that is, 1978-1985 and 1985-1993, there are barely any significant rhetorical differences. The profiles of the FOMC members with and without economics PhD generally look the same or differ in insignificant matters. Nevertheless, starting from the period of 1993-1999, we can see some differences occurring, which are mainly associated with economists with the saltwater background. They introduce the more economic science-oriented way of framing the monetary policy rhetoric, which later becomes partially adopted by other central bankers including those who do not have a PhD degree in economics. This is manifested both at the surface level associated with the adoption of specific terms and research instruments that can be utilized in by policymakers (e. g., NAIRU, Taylor rule) and at the deeper level associated with the basic manner of economists to do reasoning (e. g. equilibria-related talk).

The period of 2000-2006 is important because the talk related to modeling firstly occurs there as a part of the topic generated by the LDA algorithm for economists with the doctoral degree

in economics. Whereas in 2000-2006 modeling is connected to forecasting, in 2007-2014 it was singled out as a separate topic, which suggests that the modeling-related discussions have taken a consistent and separated part in the speech of people with academic background. Another important thing in the 2007-2014 period is the relative frequency of references to DSGE models, the rationale of using which was to a big extent to do the same "as in better academic journals", as Wren-Lewis (2012) put it.

Our results generally show that policymakers with the saltwater background were more deviant from the no PhD profile in comparison with those with the freshwater background. Our speculation here is that this is due to different established career paths of people with such backgrounds. As Mankiw (2001) argued, the adherents of new Keynesianism are more likely to be involved in policymaking, while there is barely any new classical economist who works in policy and not in academia. Strong connections with a particular academic research direction are likely to suggest that the person has a more significant type of academic background, and so economists who got a PhD degree in economics from a freshwater university and who are more involved in academic research are much less likely to participate in economic policymaking in future in comparison with their saltwater counterparts. This disproportion may create a situation when people with the saltwater background in policymaking generally have more pronounced links to academia compared to central bankers with the freshwater background.

A significant problem of our results is also that they are quite different regarding the time period. Why did we find that there are no important differences in 1978-1985 and 1985-1993? As we have discussed in the literature review section, our speculation here is that this is due to, on the one hand, gaps between the time of education and time of being active as a policymaker, and, on the other hand, changes that occurred in American economic science and economic education during the 20th century. Our suggestion is that the older generations obtained the education that was less abstract and closer to a practical policy-oriented type of talk, and so their knowledge did not tremendously differ from that of those who acquired their competencies not in universities but in government policy institutions or the private sector. These were rather interchangeable units, the "substitutes", we may put it. However, younger economists who obtained their PhD degrees several decades after the World War II were taught the more abstract and more mathematically and statistically advanced type of economic science, which differed from the economic policy style of reasoning in a more distinctive way. Consequently, the connections to academia in their personal background became more visible at the level of monetary policy rhetoric. Their experience in building econometric models allowed them to engage in a deeper way in the

discussions about modeling, whereas before a greater "division of labor" in this respect seems to exist, when several research staff members specialized in model building and the FOMC members worked mostly only with the resulting forecasts produced by the models.

Summarizing, our results suggest that the role of personal background in monetary policymaking can drastically differ in various periods and may be important for understanding some aspects of monetary policy rhetoric. This kind of rhetoric is associated mainly with the autonomous discourse of monetary policymaking with its distinctive features and is not largely determined by personal background characteristics. Nevertheless, certain considerable impact may be indicated. We see that starting from the 1990s policymakers with academic background and predominantly those with the saltwater background played a significant role in the diffusion of academic science styles of reasoning into the discourse of monetary policymaking, as well as in increasing the role of discussion of economic modeling in the meetings during the 2000s.

References

Abolafia, Mitchel Y. "Narrative construction as sensemaking: How a central bank thinks." *Organization studies* 31, no. 3 (2010): 349–367.

Avtonomov, Vladimir. "Metodologicheskie aspekty vzaimosvjazi mezhdu ekonomicheskoj naukoj i ekonomicheskoj politikoj" [Methodological aspects of the relationship between economic science and economic policy]. In *Politika institucional'nyh preobrazovanij: ot teorii k prakticheskim rekomendacijam* [Institutional Change Policy: From Theory to Practical Guidelines], edited by S. A. Afoncev, 9–25. Moscow: IMEMO RAN, 2013.

Axilrod, Stephen H. *Inside the Fed: Monetary Policy and Its Management, Martin through Greenspan to Bernanke*. Cambridge, MA: The MIT Press, 2011.

Blanchard, Olivier. "What Do We Know about Macroeconomics that Fisher and Wicksell Did Not?" *Quarterly Journal of Economics* 115, no. 4 (2000): 1375–1409.

Blei, David M., Andrew Y. Ng, and Michael I. Jordan. "Latent Dirichlet Allocation." *Journal of Machine Learning Research* 3 (2003): 993–1022.

Blinder, Alan S. *Central Banking in Theory and Practice*. Cambridge, MA: The MIT Press, 1998.

Bordo, Michael D., and Klodiana Istrefi. "Perceived FOMC: the making of hawks, doves and swingers." NBER Working Paper No. 24650, 2018.

Burns, Arthur F., and Wesley C. Mitchell. *Measuring business cycles*. New York: National Bureau of Economic Research, 1946.

Chari, Varadarajan V., and Patrick J. Kehoe. "Modern macroeconomics in practice: How theory is shaping policy." *Journal of Economic Perspectives* 20, no. 4 (2006): 3–28.

Christ, Carl F. "The Cowles Commission's contributions to econometrics at Chicago, 1939-1955." *Journal of Economic Literature* 32, no. 1 (1994): 30-59.

Claveau, François, and Jérémie Dion. “Quantifying central banks’ scientization: why and how to do a quantified organizational history of economics.” *Journal of Economic Methodology* 25, no. 4 (2018): 349-366.

De Vroey, Michel. *A History of Macroeconomics from Keynes to Lucas and Beyond*. New York: Cambridge University Press, 2016.

Edison, Hali, and Hector Carcel. “Text data analysis using Latent Dirichlet Allocation: an application to FOMC transcripts.” *Applied Economics Letters* 28, no. 1 (2021): 38–42.

Goodfriend, Marvin, and Robert G. King. “The New Neoclassical Synthesis and the Role of Monetary Policy.” *NBER Macroeconomics Annual* 12 (1997): 231–283.

Hansen, Stephen, Michael McMahon, and Andrea Prat. “Transparency and deliberation within the FOMC: a computational linguistics approach.” *The Quarterly Journal of Economics* 133, no. 2 (2018): 801-870.

Jegadeesh, Narasimhan and Di Andrew Wu. “Deciphering Fedspeak: The Information Content of FOMC Meetings.” *Monetary Economics: Central Banks – Policies & Impacts eJournal* (2017): 1–58. https://www.aeaweb.org/conference/2016/retrieve.php?pdfid=1136

Kreps, David M. “Economics: the current position.” *Daedalus* 126, no. 1 (1997): 59–85.

Mankiw, N. Gregory. “US monetary policy during the 1990s.” NBER Working Paper No. 8471, 2001.

Mankiw, N. Gregory. “The macroeconomist as scientist and engineer.” *Journal of Economic Perspectives* 20, no. 4 (2006): 29–46.

Marcussen, Martin. “Scientization of central banking: The politics of a-politicization.” In *Central banks in the age of the euro: Europeanization, convergence, and power,* edited by Kenneth Dyson and Martin Marcussen, 373–390. Oxford, UK: Oxford University Press, 2009.

Önder, Ali Sina, and Marko Terviö. “Is economics a house divided? Analysis of citation networks.” *Economic Inquiry* 53, no. 3 (2015): 1491–1505.

Sergi, Francesco. “The Standard Narrative about DSGE Models in Central Banks’ Technical Reports.” *The European Journal of the History of Economic Thought* 27, no. 2 (2020): 163–193.

Sparsam, Jan, and Hanno Pahl. “Macroeconomics and monetary policy as autonomous domains of knowledge and power: rational expectations, monetarism and the Federal Reserve.” In *Power and influence of economists: Contributions to the social studies of economics,* edited by Jens Maesse, Stephan Pühringer, Thierry Rossier and Pierre Benz, 36–52. Abingdon: Routledge, 2022.

Taylor, John B. “Central Bank Models: Lessons from the Past and Ideas for the Future.” *Bank of Canada, November,* 17 (2016). https://web.stanford.edu/~johntayl/2016_pdfs/Text_Keynote_BoC_Workshop_Taylor-2016.pdf

White, Lawrence H. “The Federal Reserve System's influence on research in monetary economics.” *Econ Journal Watch* 2, no. 2 (2005): 325–354.

Whittlesey, Charles Raymond. “Power and influence in the Federal Reserve System.” *Economica* 30, no. 117 (1963): 33–44.

Wren-Lewis, Simon. “Microfoundations and Central Bank models.” Mainly Macro, March 26, 2012. https://mainlymacro.blogspot.com/2012/03/microfoundations-and-central-bank.html

Бакеев, М. Б.

Связь между академическим бэкграундом и риторикой людей, ответственных за денежно-кредитную политику: эпистемический аспект [Электронный ресурс]: препринт WP11/2021/02 / М. Б. Бакеев; Нац. исслед. ун-т «Высшая школа экономики». – Электрон. текст. дан. (340 Кб). – М.: Изд. дом Высшей школы экономики, 2021. – (Серия WP11 «Экономические реформы конца XX в.: опыт и уроки новейшей истории»). – 18 с.

С помощью метода латентного размещения Дирихле, а также словарного метода контент-анализа на материале стенограмм собраний Федерального комитета по операциям на открытом рынке ФРС США с 1979 по 2014 г. в работе исследуется потенциальное влияние таких аспектов персонального бэкграунда центральных банкиров, как наличие докторской степени по экономике и связей с определенными исследовательскими школами в макроэкономике, на особенности риторики в рамках обсуждения денежно-кредитной политики. При этом главное внимание уделяется эпистемическим аспектам их риторики, а не ценностным предпочтениям относительно приоритетных целей политики. Полученные результаты показывают, что роль бэкграунда изменялась в различные периоды: если для периода с 1979 по 1993 г. значимых различий, связанных с риторикой, в работе выявлено не было, то в более поздние периоды можно заметить, что члены комитета с докторской степенью по экономике чаще использовали в речи термины и концепты, имеющие академическое происхождение, чаще представляли свои мысли в стиле, характерном для академической экономики, и уделяли больше внимания обсуждению эконометрических моделей, в отличие от тех членов комитета, у которых докторская степень по экономике отсутствует.

Ключевые слова: центральный банк, экономическая наука, академия, денежно-кредитная политика, бэкграунд.

Бакеев М.Б., аспирант факультета экономических наук Национального исследовательского университета «Высшая школа экономики» (НИУ ВШЭ), сотрудник Центра истории и методологии экономической науки НИУ ВШЭ.

Препринты Национального исследовательского университета «Высшая школа экономики» размещаются по адресу: http://www.hse.ru/org/hse/wp

Препринт WP11/2021/02
Серия WP11
Экономические реформы конца XX в.:
опыт и уроки новейшей истории

Бакеев Мурат Булатович

Связь между академическим бэкграундом и риторикой людей, ответственных за денежно-кредитную политику: эпистемический аспект

(*на английском языке*)

Изд. № 2498