External Evaluation of the Research Unit of the Bank of Finland

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Final report: November 8, 2021

Executive Summary

Research plays an essential role in helping the Bank of Finland achieve its core mission. The Bank's current leadership clearly values cutting-edge research in monetary policy analysis, financial stability, and international economics (with a focus on Russia and China). However, recent developments (the Global Financial Crisis, the COVID-19 pandemic, and the increasing concern for climate change) highlight that central banks must also face up to new challenges, which require them to harness a wider array of research skills.

In the case of the Bank of Finland, this calls for branching out from its core research strengths into complementary fields such as labor and public economics, climate economics, and applied econometrics. We suggest that this can be done not only with a couple of good new hirings in these areas, but also by recalibrating the duties of existing staff in other units, and by attracting Finnish and foreign academic visitors working in these areas, some of whom can be enticed by the prospect of having access to Finnish data registries.

At the same time, the Bank ought to raise the quality level of its research. Even though the Bank has succeeded in hiring researchers on the international job market and has established a highly collaborative environment among its researchers, there is no detectable trend in the quality of its research publications. The Bank should provide clearer incentives to its researchers to become more ambitious in their research and publication targets, by clarifying expectations for promotion and retention, and by signaling that researchers should strive to publish in good general interest and field journals (categories 1 and 2 according to the Bank's journal classification system).

At the same time, the Bank ought to help its researchers to attain these objectives. We suggest a number of complementary ways to do so:
- expand the ranks of active researchers by involving researchers from other units at Bank;
- reorient the Bank of Finland Institute for Emerging Economics (BOFIT) towards an international research unit;
- expand the number of research assistants hired by the Bank, relying not only on Ph.D. students but also on undergraduate and master's students.

While these steps are likely to raise the reputation of the Bank in the international research community, it would also be advisable to raise its profile in Finnish society and media, as well as in the international media, especially in light of the increasing social relevance of the new challenges faced by central banks. To this purpose, we recommend applying the media strategy so far effectively pursued by BOFIT to the research produced by the Research Unit.

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1. Introduction

A changing world requires innovative solutions and adaptation. In this environment, research plays an essential role in helping the Bank of Finland[1] achieve its core mission. As part of the European System of Central Banks, this mission now extends beyond its service to the Finnish society. Regularly evaluating the Bank's research function ensures its operational readiness to confront new challenges at the national and supranational levels. Regular external reviews conducted by outside experts are standard practice in many central banks, international institutions, and academic departments. It is a practice that the Bank of Finland has pursued for many years, with laudable commitment, and which has prompted it to introduce substantial changes in its research function.

The Bank's current leadership clearly values cutting-edge research in three main areas: (1) monetary policy analysis, (2) financial stability, and (3) international economics with a focus on Russia and China for geostrategic reasons. In our review, we evaluate proficiency in these areas in a variety of ways, but we also consider how these three areas could be broadened to better encompass the needs of the Bank.

First, as is common practice, we evaluate research output in terms of the publication record of the staff in international, peer-reviewed journals, weighed by journal quality and impact.

Second, we compare this publication record against that of peer institutions (such as other central banks in the European System of Central Banks, as well as central banks in other jurisdictions), taking into account the size of the research staff at the Bank.

Third, we assess the two-way relationship between policy and research within the Bank and in the larger context of the European System of Central Banks. Research provides critical support

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[1] We will often simply refer to the Bank of Finland as the "Bank" in what follows.

to the policy function. Similarly, policy needs inform research about current and incoming areas of interest. A healthy exchange of views between research and policy is critical to ensure top flight central banking.

Fourth, we evaluate the management structure of the research units, that is, their organizational as well as their incentive structures. Both are critical in facilitating and encouraging progress toward stated goals and maintain a well-functioning and inclusive environment for the staff.

Fifth, based on our interviews with staff members, we assess their understanding of what is expected of them, how they perceive incentives to advance in their careers, and their views as to how the department could be further improved.

Previous reviews provided a useful baseline from which to evaluate the progress made along these metrics. In doing so, several of the themes highlighted by previous reviews will emerge in ours as well, though other issues will emerge as well.

We also recognize the limitations of our review as some of our recommendations are suggestions to rethink how other parts of the bank could be reorganized. Understandably, we do not have a complete picture of the functioning of the Bank, given the scope of our mandate: we did not comprehensively interview all managers and staff in other functional units. Nevertheless, we put forward these suggestions as they could prove useful avenues for further study by the leadership of the Bank.

Why do we venture into such uncharted territory? As is common of any review of any department inside a larger organization, there is an obvious dilemma. Throwing more resources, if well managed, is a natural way to improve research output and reputation, especially considering that there are legitimate minimum critical mass concerns for the long-term viability of the research unit, as we will discuss. However, we understand that the Bank's

resources are limited and need to be administered judiciously. Hence, we try to navigate this narrow strait by thinking carefully which additional resources are really essential and to what extent research activity may instead be enhanced via a limited restructuring of activities and tasks inside the bank. This is intended to avoid simply recommending throwing more money at research.

In stating our recommendations, we try as much as possible to provide concrete suggestions on how they could be implemented in practice, while framing such suggestions in the context of an overarching strategic vision for the Bank.

We structure the report as follows. We begin with a brief baseline comparison with respect to previous reports to assess progress toward common goals described therein. Next, we provide a broad view of the main challenges and possible changes that could be implemented. We conclude by motivating and presenting our specific recommendations, which we present in the form of actionable measures.

2. Comparison with previous reports

The previous research assessment of the Bank of Finland covered the period 2010-2015, and its overall conclusion was that "the Research Unit is too small to adequately meet the various demands on it. Contributing policy relevant work, publishing in highly regarded refereed journals, and serving as public intellectuals are all important contributions of the Research Unit, but the current staff is too small to meet expectations along all of these dimensions". It concluded by echoing the 2009 review in recommending that "the number of full-time members of the Unit be considerably raised."

More specifically, the 2015 evaluation report made the following recommendations (*in italics*):

1) *Gradually increase the size of the Research Unit (excluding visiting scholars, research fellows, and scientific advisers) to 15.*

This recommendation was not fully embraced: as of January 2021, the research unit included 12 permanent, full-time employees: 1 Head of Research (Esa Jokivuolle), 4 senior advisers (Adam Gulan, Markus Haavio, Maritta Paloviita, Tuomas Takalo), 2 advisers (Mikael Juselius, Fabio Verona), 4 research economists/senior research economists (Gene Ambrocio, Eleonora Granziera (on leave), Michaela Schmöller, Nigel McClung, Markus Sihvonen), and 1 Research coordinator (Minna Nyman).

2) *Make the rules and regulations of the "tenure process" clear and transparent to newly hired PhD economists. This should involve an academic assessment of the candidate's research achievements.*

This recommendation was mostly disregarded. As explained in greater detail in Section 4 (see our Recommendation no. 1), our interviews with researchers from both the Bank of Finland Research Unit (RU) and the Bank of Finland Institute for Emerging Economies (BOFIT) revealed that researchers find the criteria for promotion and retention unclear.

3) *Establish a system for mentoring newly hired PhD economists.*

This recommendation was implemented. All members of the research unit reported that they could get good feedback on their research from the Head of Research and that the visitor program provides a source of mentorship too.

4) *Improve the annual review process of research staff. Make clear what post-tenure expectations are. Good performance should be rewarded, especially after the tenure review.*

Like recommendation 2, this was ignored. Members of the research unit understand that good performance is rewarded, but have no clarity regarding the standards of the tenure review and promotion.

5) *Increase the number and availability of research assistants.*

The current number of PhD interns is still quite low: currently the Research Unit only has 2 part-timers, with a 3-month effective duration each. Almost all the staff members that we interviewed suggested that it would be very helpful to increase the number of research assistants and extend the duration of their contracts. Some also agreed that some data management or simple reporting tasks could be delegated to high-quality master's students hired as interns.

6) *Increase the interaction of the Research Unit and BOFIT with Finnish academics.*

Based on our conversation with staff, it is not clear whether the cooperation of the Research Unit and Bofit and Finnish academia has increased since the last review. Currently, the Research Unit has a strong macroeconomic focus while research in Finnish academia is stronger in the fields of applied micro and finance, which suggests possible complementarities. In an effort towards rebalancing this strong specialization, the Bank has funded the creation of a macroeconomics chair at the University of Helsinki, with a donation to the Helsinki GSE, and some cooperation takes place between some staff of the Research Unit and former Bank employees now in academia (e.g., Seppo Honkapohja). But the Research Unit could itself benefit from hosting more experts in applied micro and finance from Finnish universities.

7) *Increase the target quality of research publications, especially in top field journals.*

No trend increase in the quality of research publications is detectable so far (see Section 4).

8) *Revisit the journal ranking system to ensure it reflects changing reputations of the journals, as well as the Bank's interest in certain areas.*

The journal ranking has been revisited and updated and is planned to be updated on a regular basis.

9) *Increase the weights assigned to Tiers 1 and 2 in the Bank's ranking system.*

The weights assigned to Tiers 1 and 2 were not changed but the number of journals in each has been increased. (For example, the *Review of Financial Studies* and the *Journal of Financial Economics* were elevated to Tier 1 and Journal of Financial Intermediation to Tier 2, up from Tier 3). Moreover, the Head of Research has stressed the importance of aiming at 1-2 categories both in meetings with the staff of the Research Unit and in reporting to the Board, so that there has been some implicit weight increase in Tiers 1 and 2.

10) *Clarify the strategic goals of the Bank as they relate to the role of the Research Unit to ensure there is a shared view on how research can best contribute to and be relevant for achieving these goals.*

There seems to be a shared view in the Bank that the main role of the Research Unit is to support the monetary policy function of the Bank and provide intellectual guidance to it. Accordingly, research in macroeconomics and especially on monetary policy issues, and to a lesser extent on financial stability issues, has been strongly prioritized.

Hence, although recommendations 3, 8, 9 and 10 of the 2015 review were implemented to some extent, others were not. Indeed, several of the recommendations offered in Section 4 of this Report follow in the footsteps of those made by the 2015 reviewers: in particular, the need to clarify incentives and promotion rules (recommendations 2 and 4 of the 2015 Report), to increase the number and availability of research assistants (recommendation 5), to exploit

synergies with Finnish academia (recommendation 6), and to raise the target quality of publications (recommendations 7 and 9). However, this review also offers new suggestions arising from a novel strategic vision of the research function of the Bank, which is laid out in Section 3.

We wish to conclude this assessment of the past performance of the Research Unit of the Bank by noting two important achievements. First, in adherence to a recommendation made by the 2009 Review, the Bank has successfully kept recruiting staff on the international job market for its Research Unit. Second, all our conversations with staff members have revealed a highly collaborative environment both within the Research Unit and within BoFIT. Both of these achievements appear to be persistent and provide an important stepping stone for future progress.

3. Strategic vision

The Bank's website clearly states its vision as:

> *"The Bank of Finland is an influential and respected central bank that maintains price and financial stability in all circumstances with the aim of promoting citizens' well-being."*

In the context of this vision, it is important to provide some background about the challenges that the Bank will face in the coming years. These challenges will affect how the Bank implements its vision and in turn, how it structures the research function.

3.1. Context

The Bank of Finland, like many similar institutions worldwide, confronts an economic environment that is constantly evolving and presents new challenges.

Research in the mid-1980s and 1990s focused primarily on the benefits of central bank independence, optimal policy rules, and other classical topics in monetary economics. During this period, inflation came down globally, perhaps a reflection of greater clarity about the central role that the price stability goal plays in articulating the monetary policy framework required to meet the mandate of nearly all central banks.

The Global Financial Crisis shifted attention from price stability to macro-prudential regulation and to the nexus between the financial system and monetary policy. Moreover, it highlighted the international interconnectedness of financial systems across the globe. This is also in keeping with the financial stability mandate. This realization required broadening of the narrow confines of monetary economics up to that point. Financial stability research, which for a long while had been conducted at the microeconomic level, was expanded to account for the overall vulnerability of the system, and to focus on macroprudential policy issues.

Following the COVID-19 crisis, recent research on the effects of monetary policy on inequality are permeating the press (see, e.g., The New York Times editorial[2] by Karen Petrou on July 12, 2021) and the political discourse. Calls for a more thorough discussion about the heterogeneous welfare implications of monetary policy became louder in the recent review of the Federal Reserve's and the ECB's monetary frameworks. Such discussions fit squarely in the Bank's stated vision of "promoting citizens' well-being." But such awareness also requires expertise on labor and public economics and the analysis of micro-level data that can inform the Bank's leadership about the welfare implications of policy actions on different groups.

Climate change has emerged as a central policy issue for the European Central Bank (see, e.g., the ECB's July 8, 2021 press release[3] on the role of climate change in the new policy framework). The implications for price stability and the stability of the financial system, for example, are now clearly spelled out in the new monetary framework. Once again, expertise on climate economics stretches the narrow confines of traditional monetary economics.

Of course, monetary economics continues to play a central role. As more central banks consider whether to issue central bank digital currency, experts in cryptocurrencies and traditional monetary economists will have to closely collaborate in what promises to be a considerable shift from the traditional banking model.

This cursory and incomplete summary of the recent changes in central banks' role in society underscores the intellectual breadth and scope required of research departments nowadays and going forward. A narrow focus on monetary economics would be woefully inadequate to fulfill the vision statement, given the evolution of challenges just discussed. Even a narrow interpretation of the price stability mandate requires expertise in fields other than monetary economics, as the new policy framework launched by the ECB highlights. Carrying out the

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[2] https://www.nytimes.com/interactive/2021/07/12/opinion/covid-fed-qe-inequality.html?searchResultPosition=2.
[3] https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708_1~f104919225.en.html

mission and vision of the Bank therefore requires research on a variety of fields in economics, many of which are currently underrepresented or simply absent.

Meeting the moment

For instance, as we have remarked, the research department has a core strength in traditional monetary economics and financial stability. BOFIT has great expertise in international economics, narrowly speaking. These form a good place from which to branch out into complementary fields that prepare the bank to meet coming challenges. Such fields include, for example, labor and public economics, climate economics, and applied econometrics. We will provide more specifics in the next section as to which fields appeared to us to have the highest priority.

However, branching out into these fields requires more resources, as previous reports have emphasized. Perhaps somewhat differently than previous reports and acknowledging that the Bank's funds are limited, we think that there is scope to find those resources internally and not just by expanding externally. For instance, the total number of Ph.D. economists currently employed at the Bank rivals that in many similarly sized institutions. However, many of these economists are allocated exclusively to policy functions. Though efforts have been devoted to encourage these economists to continue doing research, currently there is little incentive to do so in practice. Research requires continued dedication rather than an episodic effort.

Therefore, a more carefully crafted incentive structure will need to be implemented if the bank is to reorient some of its Ph.D. staff towards research. At the same time, the Bank will have to evaluate the policy products that it really needs against those that have outlived their usefulness, and those that can be maintained by non-Ph.D. staff. These decisions, of course, fall outside the scope of this review. But we would be remiss not to point them out.

4. Specific Recommendations

4.1. Getting more out of existing resources

As previously stressed, mindful of resource constraints, most of our recommendations will focus on how to get more out of existing resources. At the end, we will also provide a few recommendations that would involve a modest use of additional resources, yet generate considerable benefits.

Recommendation 1: Clarify expectations for promotion/retention

While the Bank of Finland does not have a formal tenure track system, it does have a promotion and retention scheme. Researchers at the Bank have a 5-year contract after which their contract is either renewed or they are moved to a different part of the Bank. Thus, there is a high level of job security, but no guarantee of continuing in research.

In our discussions with researchers from both the Bank of Finland Research Unit (RU) and the Bank of Finland Institute for Emerging Economies (BOFIT), it became apparent that researchers find the criteria for promotion/retention unclear. It is understood that publishing well is important for continuing in research, as it should be. This in itself, however, is rather vague. There is an annual research output target, but it is specified at the Bank level. There are no specific targets for the RU or BOFIT, nor for individual researchers. Researchers also seemed uncertain about the degree to which engaging in policy work was expected of them or would be rewarded at the time of evaluation.

The lack of clarity regarding expectations is problematic, as it lowers the incentives to produce high quality research and may also implicitly incentivize researchers to focus their policy work narrowly on the perceived priorities of the Board (monetary policy), rather than widening the scope of the policy issues to be investigated. It may also generate the impression of opacity

and/or arbitrariness of promotions and contract extensions, which in turn may generate frustration or ill will.

We recommend setting clear expectations of researchers not only at each bi-annual review meeting, but also in terms of longer career goals. There should be clearly defined expectations regarding the quality and quantity of research needed for promotion/retention. Our recommendation echoes that of the previous evaluation report, which called for making the rules and regulations of the 'tenure process' clear and transparent to newly hired PhD economists and clarifying the 'post-tenure' expectations of researchers.

Such longer-term discussions are important, not only from the perspective of the Bank's own interests, but from the perspective of the individual researchers. Having well defined publication goals and the resources to reach those goals should benefit the international reputation and visibility of the research staff. This symbiotic relationship therefore should be seen as benefiting both the Bank and the researcher.

While research is and should be the main function of those working in the RU and BOFIT, research economists should be expected to contribute in three areas: research, policy, and service. Research is easily observable through the publication record. The expectations regarding policy work also need to be articulated more clearly by the manager: there should be an understanding of what is good performance in this area and how it is valued relative to research. Service refers to tasks typical of any unit, such as organization of seminars or workshops, serving on recruitment committees, etc. All economists should be expected to shoulder their share of service and this is easily assessed by the relevant manager.

Recommendation 2: Raise the ambition level in publishing

The Bank has its own journal ranking. Journals are classified into four categories. Journals in category 1 receive a quality weight of 8, journals in category 2 receive a quality weight of 4,

journals in category 3 receive a quality weight of 2, and journals in category 4 receive a quality weight of 1. There are 15 journals in category 1, including the top 5 economics journals, plus the *Journal of Monetary Economics*, the *American Economic Journal: Macroeconomics* and the *Journal of the European Economic Association*. There are 31 journals in category 2, including the *Journal of Money, Credit and Banking*, the *Review of Economic Dynamics*, the *Journal of Economic Dynamics and Control*, the *Journal of Labor Economics* and the *Economic Journal*. There are 62 journals in category 3, including *Management Science*, *Labor Economics*, the *Scandinavian Journal of Economics*, *Macroeconomic Dynamics* and *China Economic Review*. Category 4 includes any peer-reviewed journal or book outside categories 1-3.

Quality-weighted publication points are the central annual performance target for research output and are reported to the Board. The Bank has a performance target of 32 points annually. Publications from all units of the Bank are counted toward the total. This target is for the whole Bank: there are no separate targets for the RU or BOFIT. Only publications in which permanent staff members are co-authors give points. There is no dilution factor from external co-authors (and no double counting from multiple co-authors from the Bank).

Figure 1 shows the evolution of the number of published articles during the period 2010-2020, annual values and 3-year averages reported. Figure 2 plots the evolution of publication points over the same period, again annual and 3-year moving averages reported. There are of course some fluctuations from year to year, but both the number of articles and the number of publication points have stayed more or less constant over this time period. The Bank is meetings its publication points target. It should be noted that while there was a dip in 2020, there are several promising papers currently in the pipeline.

Figure 1: Number of Articles
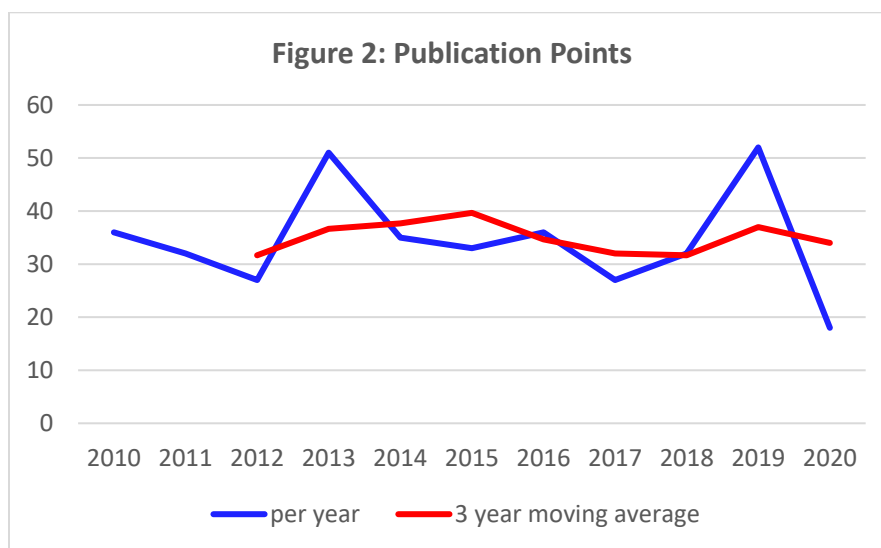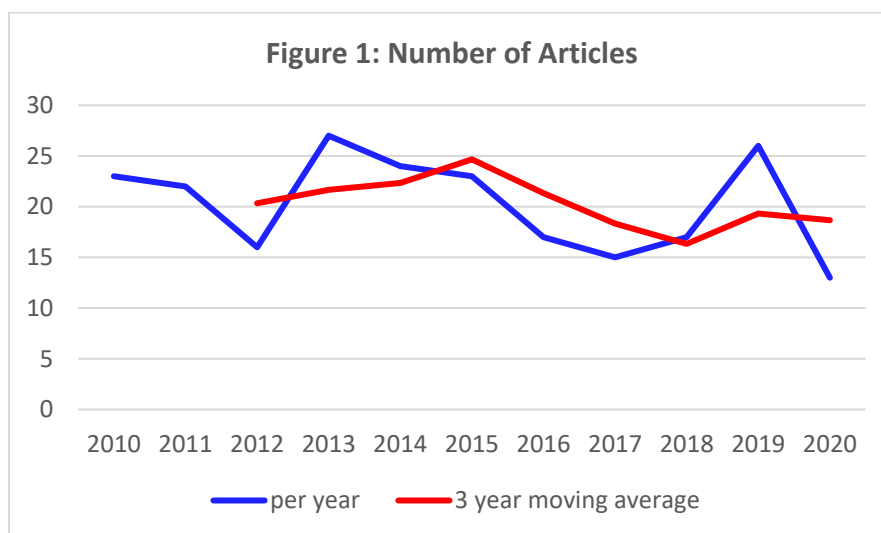

Figure 2: Publication Points

Table 1 reports the breakdown of publications across the different units at the Bank – RU, BOFIT and the rest – since the last evaluation. Table 2 does the same for publication points. A substantial share of publications is produced outside the RU.

Table 1: Number of Publications Across Different Units

	2015	2016	2017	2018	2019	2020	Average 2015-2020
RU	7,5	8	7	3,5	11	6,5	7,3
BOFIT	10	6	6	7	8	0	6,2
Rest	4,5	2	1	5,5	7	7,5	4,6
Total*	23	17	15	17	26	13	18,5

*Total is the true total, not always the sum of the values shown in the previous rows.

Table 2: Publication Points Across Different Units

	2015	2016	2017	2018	2019	2020	Average 2015-2020
RU	15	23	16	8	26	11	16,5
BOFIT	11	9	8	8	9	0	7,5
Rest	6	3	2	16	17	9	8,8
Total*	33	36	27	32	52	18	33,0

*Total is the true total, not always the sum of the values shown in the previous rows.

Figure 3 plots the number of articles in the top two journal categories, according the Bank's journal classification system, during the time period 2010-2020, annual values and 3-year moving averages reported. It is evident from the graph that only a small share of published articles appears in the journals ranked in the two highest categories, although their number features a slight upward trend. During the time period 2015-2020, the average publication points per published paper was 2.3 in the RU, 1.2 in BOFIT and 1.9 in the rest of the Bank.

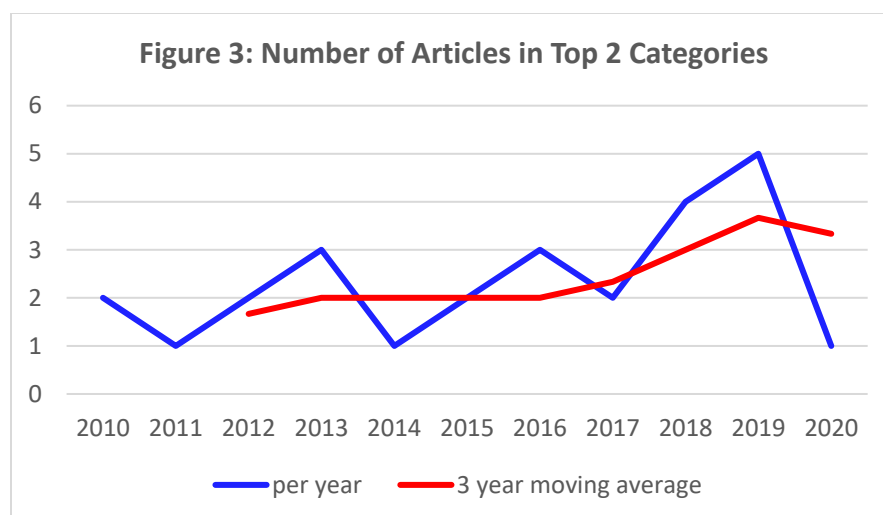**Figure 3: Number of Articles in Top 2 Categories**

Table 3 presents the RePEc ranking of the top 25% of central banks as of January 2021. The Bank of Finland is ranked 30/30 on the list. This is the 2nd time since 2010 that the Bank of Finland made it to the ranking: it was also ranked among the top 25% of central banks in 2017.

The ranking favors larger institutions such as the IMF, the ECB and the Federal Reserve Board. The most relevant comparison is to other European Central Banks. The central banks of Italy, England, Spain, France, Germany, the Netherlands, Sweden, Portugal, Switzerland, Austria and Belgium are all in the top 25% of central banks and ranked ahead of the Bank of Finland.

In light of these statistics, we recommend raising the ambition level for publishing. Despite the fact that the Bank's journal ranking system places much greater weight on publications in category 1 and 2 journals, the vast majority of publications by its staff are in lower ranked journals. It is possible to hit the Bank's target for publication points without aiming for the better journals. At most economics departments ranked in the top 50 worldwide, or even the top 100 for that matter, faculty is expected to strive for publishing in top field journals, with the occasional paper landing higher at a top-5 journal. The profession places little value on publications in low-ranked journals. Thus, we see little value for the Bank from publications in, for example, category 4 journals. Category 3 is also very broad, and includes several little-known journals.

Table 3: RePEc Ranking – Top 25% Central Banks as of January 2021

Note: all authors, all publication years

Rank	Institution	Score	Authors	Author shares
1	International Monetary Fund (IMF)	1.09	454	417.23
2	European Central Bank	2.71	239	219.99
3	Federal Reserve Board	2.88	197	190.42
4	Federal Reserve Bank of New York	4.67	84	78.77
5	Bank for International Settlements (BIS)	5.81	80	76.97
6	Banca d'Italia	6.81	261	254.71
7	Federal Reserve Bank of Chicago	7.77	60	56.52
8	Federal Reserve Bank of St. Louis	8.24	68	53.5
9	Federal Reserve Bank of Minneapolis	8.53	36	24.71
10	Federal Reserve Bank of San Francisco	10.07	38	33.67
11	Banco de la Republica de Colombia	11.29	120	114.97
12	Bank of England	11.47	206	185.76
13	Banco de España	11.78	118	115.46
14	Federal Reserve Bank of Dallas	12.02	62	53.47
15	Banque de France	13.35	172	154.75
16	Bank of Canada	14.43	166	157.91
17	Deutsche Bundesbank	15.35	164	155.42
18	Federal Reserve Bank of Philadelphia	17.08	43	40.12
19	Federal Reserve Bank of Cleveland	18.23	58	51.55
20	Federal Reserve Bank of Atlanta	18.98	29	25.15
21	Federal Reserve Bank of Boston	21.07	46	42.5
22	de Nederlandsche Bank	21.89	86	80.72
23	Federal Reserve Bank of Richmond	23.19	25	23.37
24	Sveriges Riksbank	23.83	39	36.26
25	Banco de Portugal	25.61	49	42.41
26	Schweizerische Nationalbank (SNB)	26.42	107	104.24
27	Federal Reserve Bank of Kansas City	27.65	39	37.93
28	Oesterreichische Nationalbank	29.12	35	30.94
29	Nationale Bank van België/Banque national de Belgique (BNB)	29.34	30	27.44
30	Suomen Pankki	31.16	31	27.27

Having individual career goals and assessments of publication record is therefore critical toward focusing the staff's efforts into publishing in higher quality journals. Citations from articles published in the top tiers are overwhelmingly higher than in the lower tiers. Research visibility is more than proportionally gained by publishing in top general interest and field journals.

Of course, it takes time to improve the quality of publications. The first step, however, is to clearly signal that this is a priority. We urge the Bank to try to capitalize on successful recruitments on the international job market by raising the ambition level of the journals targeted by researchers. The visitor program provides a source of mentorship, which can aid in this goal. Capitalizing on high-quality Finnish registry data could also help with this goal. We elaborate on this point later in the report. Here we point to the recent success of researchers at the Bank of Spain and the Norges Bank (with publications in *Econometrica*, a top-5 general interest journal in Economics), based on similar detailed microeconomic data not easily available in other countries. Moreover, as we later discuss, there is a new trend in using big data available in real time to learn more quickly and to test more powerfully different economic theories.

This recommendation is in line with the recommendations from the previous evaluation, which called for increasing the target quality of research publications, especially in top field journals.

Recommendation 3: Broaden the scope of research

Currently, the research conducted in the RU is firmly centered around monetary policy topics. Monetary policy is naturally a core interest for the Bank. However, as outlined in the Strategic Vision Section, we find the focus too narrow given the current landscape. Questions pertaining to labor markets, inequality and climate, to name but a few, are central to understanding the functioning of economies.

We find that the Bank is missing the expertise of an applied microeconomics researcher. When there is turnover in the RU, we recommend increasing the variety of talent in this direction. Such a researcher is likely to have positive externalities for the rest of the group. Given the availability of more micro-level data, it is important to have in-house expertise on the latest empirical methods to organize and analyze these data. In addition to providing better understanding on applied microeconomic issues (such as labor markets, firm productivity, etc.), it is becoming increasingly clear that detailed micro-level datasets can provide important insights into the monetary policy transmission mechanism, and greater real-time predictive ability. The October 23rd-29th issue of *The Economist* dedicates its Briefing section to this issue.

Perhaps somewhat surprisingly, most researchers in the RU would prefer to concentrate future recruitments firmly in the current core, namely in the field of monetary policy. This desire likely stems, at least in part, from the fact that essentially all monetary policy research in Finland takes place within the Bank, while Finnish academia more broadly is generally geared toward applied microeconomics.

However, modern macroeconomics has a strong microeconomic foundation and utilizes rich micro data, as highlighted earlier. Improved data availability and computational capabilities are spurring this trend. It is common nowadays for central banks to employ applied microeconomists alongside macroeconomists. We think that there would be considerable synergies to be exploited from such diversification, while at the same time providing important policy relevant insights.

Broadening the scope of the research conducted at the Bank would also allow researchers to take advantage of the high-quality registry data available in Finland, as well as other detailed databases that are now more commonly used to get real-time information. From the interviews it became apparent that existing researchers currently feel ill-equipped to work with the registry data, or big datasets in general. Capitalizing on access to high-quality registry data and other more recent databases is clearly one potential and highly viable pathway toward

increasing the ambition level in publishing. Moreover, it would build a natural bridge to researchers at other Finnish institutions. Beyond these goals, of course, having a better understanding of how the Finnish economy functions is central to the core mission of the Bank.

Recommendation 4: Refocus the visiting scholar program

Related to our previous recommendation of broadening the scope of talent in future replacement recruitments in order to take advantage of high-quality Finnish registry data, we recommend utilizing the visiting scholar program toward the same goal, among others.

Bringing in visitors with an applied microeconomics or finance profile and expertise working with large-scale registry data would allow for new collaboration opportunities with Bank staff. Currently the visitor program mainly provides networking opportunities rather than co-authorships. With an eye toward gaining knowledge working with registry data, it would be natural for some of the visitors to be from Finnish academia, which would further strengthen ties to this community.

At the same time, increasing the number of collaborations with academic visitors that result in co-authored published articles would probably require a realignment of incentives and expectations on the part of visiting scholars. One way to do so is to advertise the opportunity to work with such data at the Bank, jointly with its staff, issuing regular public calls. An interesting precedent in this area is that established by the European Systemic Risk Board (ESRB), which sought to stimulate research using the wealth of transaction-level derivatives contract data accessible at the ESRB for the whole of the EU, on the basis of the European Market Infrastructure Regulation (EMIR). The full dataset consists of approximately one hundred million observations per day. In order to exploit this huge dataset, the ESRB, together with the ECB, runs the Alberto Giovannini Programme for Data Science (previously known as the EMIR Bridge Programme for Data Science). The program seeks to develop novel analytical methods and to build a bridge between the policymaking and research communities, so as to foster

interaction and collaboration. To this purpose, the ESRB and the ECB regularly issue a public call for proposals directed to researchers, and selects the best applicants, assigning them to specific areas in accordance with their research projects.[4]

A similar initiative by the Bank of Finland, directed at soliciting outside researchers to present research projects to be performed using its registry data, would certainly raise the profile of the Bank in the international research community, beside expanding the opportunities for collaborations between its staff and outside researchers.

Recommendation 5: Involve researchers from other units at the Bank

Currently, the various units of the Bank tend to operate separately rather than jointly. The Bank employs a large number of Ph.D. economists outside the RU. Many of them are allocated exclusively to policy functions. As noted in Section 3, we feel that there is potential for exploiting the synergies between the RU and Ph.D. economists at other units. This has the potential not only to increase research output at the Bank, but to improve discourse between research and policy. After all, research should support the policy functions, and policy in turn should inform research about potential topics of study.

Currently, there is little incentive for economists outside RU and BOFIT to engage in research – although some do. A clear incentive structure would be critical to successfully reorient some of the Ph.D. economists towards research. It is important to bear in mind that conducting research, particularly at a high level, requires continued dedication rather than sporadic activity.

Moreover, there should be a clear signal from management that collaboration across units is valued. In other central banks, such signals are made very clear. Promotion is based on hitting publication targets alongside with high performance on policy work. Going forward, a

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[4] See https://www.esrb.europa.eu/pub/bridge/html/index.en.html.

realignment of the incentive structure in this direction in other parts of the Bank could bear substantial benefits.

However, we speculate that if such realignment of incentives were introduced, a ramp up period would be necessary to give enough time for researchers outside of RU to refresh and update their skill set. Research at the highest levels requires staff to be motivated to invest in their own skill set and to engage in research as a continuous activity, not a sporadic one, as already mentioned.

Recommendation 6: Consider reorienting BOFIT towards an international research unit

BOFIT's focus is firmly on Russia and China. We feel that BOFIT's mandate could be adapted to better serve the future needs of the Bank. We recommend considering gradually turning BOFIT into an international section, with a somewhat broader focus. This does not mean abandoning the historical emphasis on Russia and China: it means gradually broadening the scope of BOFIT's research to encompass other economies that are relevant for the Bank.

For example, the supply chain disruptions experienced globally require a knowledgeable team that can inform the leadership of the Bank of the transitory or permanent nature of such disruptions, its impact on inflation in the short- and medium-runs, its effect on growth, and any spillovers into labor markets, on wage indexation, etc. These themes require a more global perspective than just a narrow focus on China and Russia.

This type of broader international economics focus would also allow for better synergies between BOFIT and the RU. The pandemic offers a clear example of how international research topics blend into monetary policy research, as the previous example illustrates.

Recommendation 7: Apply BOFIT media strategy to research produced by RU

BOFIT has an active media strategy to promote its research. The expertise provided by BOFIT is regularly sought after and provides a great platform to enhance the visibility of the group. Likewise, the RU could benefit from having a similar strategy. The RU undoubtedly produces important research that can be repackaged in a way that facilitates its diffusion across specialists, to the financial press, and to the public in general. One communication specialist could serve both BOFIT and RU. This expert would target traditional media as well as social media, and other outlets. Enhancing the visibility of research done by the Bank, as BOFIT currently does, would improve the standing of the Bank in the eyes of society at large.

4.2. Doing more with more resources

As we stress throughout our report, we focus our recommendations on how to get more out of existing resources. We are very conservative in recommending measures that would require additional resources to be devoted to research. However, here we provide a few such recommendations. We feel that these measures would require only a modest increase in resources and yield substantial benefits to the Bank.

Recommendation 8: Hire 1-2 applied microeconomics and/or finance researchers

As noted previously, we find that the Bank is missing expertise in applied microeconomics and finance. In the previous section we recommended directing future replacement hires in this direction. Ideally, however, the Bank would recruit 1-2 additional researchers with this focus. It is worth elaborating a bit more our thinking behind this recommendation.

Understanding the behavior of labor markets is critical for monetary policy. The recovery from the pandemic, for example, has revealed fissures in the labor market with important consequences for labor force participation, wages, and therefore measures of economic slack,

and inflation. Both of these are central to conducting monetary policy. Aggregate statistics are likely to provide quite an imperfect picture on these issues. Experts in labor markets, and applied microeconomics more generally, are critical.

Of course, labor markets are not the only dimension in which applied microeconomics is important. Distributional issues also have become much more important as they affect the transmission mechanism itself, but also because more attention is being paid to how monetary policy affects different income groups.

Finance occupies another important position in modern thinking on monetary policy. This became painfully obvious following the Great Recession. Beyond that, a better understanding of credit markets, financial markets, and cryptocurrencies has become top in the list of many central banks.

Recommendation 9: Use undergraduate research assistants

We recommend hiring additional student research assistants. This would be an inexpensive way to try to boost researcher productivity and would go hand-in-hand with our recommendation of capitalizing on the use of Finnish registry data and other real-time, micro-level databases. Undergraduate and M.Sc. students are often quite good at working with big data (such as web scraping and organizing big datasets using R or Python). They typically require little monetary compensation, as they are motivated by gaining experience and potentially recommendation letters. Moreover, selection into the program, as well as the training gained, are usually seen as worthwhile ways of boosting one's chances of getting admitted to top graduate programs or entering the job market in a better position.

Undergraduate research assistants are frequently used at other central banks. Depending on the degree of training offered, research assistants can liberate considerable amounts of time for research economists. Updates, data retrievals, first-round coding, database management,

project management and cleanup are among the most time-consuming tasks and these can easily be done by research assistants.

5. Conclusions

Our evaluation of the research conducted at the Bank of Finland contains a number of rather specific recommendations. However, it has also led us to two overarching conclusions.

First, the Bank of Finland can improve the **relevance** of its research to the new challenges facing central banks by widening its scope: branching out from its core research strengths in monetary policy analysis, financial stability, and international economics into complementary fields such as labor and public economics, climate economics, and applied econometrics.

Second, the Bank can and ought to raise the **quality** of its research: while successful in hiring researchers internationally, and in creating a collaborative environment among its researchers, so far it has not been able to improve the quality of its research publications. We argue that a key ingredient to step up the quality of its research is to provide sharper, clearer incentives to its researchers. In turn, the staff will become more ambitious in their research and publication targets. Clarifying expectations for promotion and retention, and clearly signaling the value of publishing in good general interest and field journals is critical in achieving these goals.

Appendix I

List of individuals interviewed by the evaluation committee:

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Zuzana Fungacova, Senior Adviser, BOFIT

Adam Gulan, Senior Adviser, Research Unit

Markus Haavio, Senior Adviser, Research Unit

Esa Jokivuolle, Head of Research, Research Unit

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Eeva Kerola, Senior Economist, BOFIT

Juha Kilponen, Head of Monetary Policy and Research Department

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Nigel McClung, Research Economist, Research Unit

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Riikka Nuutilainen, Senior Economist, BOFIT

Marja Nykänen, Deputy Governor

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Michaela Schmöller, Research Economist, Research Unit

Markus Sihvonen, Research Economist, Research Unit

Heli Simola, Senior Economist, BOFIT

Laura Solanko, Senior Adviser, BOFIT

Katja Taipalus, Head of Financial Stability and Statistics Department

Tuomas Takalo, Senior Adviser, Research Unit

Fabio Verona, Adviser, Research Unit

Tuomas Välimäki, Member of the Board