

RESEARCH AT THE BANK OF CANADA

Response to the External Review of the Bank's Research

CONTEXT

The Bank of Canada's objective is to be second to none in carrying out its core responsibilities: preserving price stability, promoting the stability and efficiency of the financial system, designing and issuing bank notes that can be readily used with confidence, and providing cost-effective funds-management and banking services.

To meet these goals, the Bank needs to undertake high-quality research. Excellence in research will allow the Bank to:

- generate the knowledge that helps it to formulate and execute better policies
- attract and retain the talented people needed to do its work
- gain access to and influence in relevant international and academic discussions

Enhancing the Bank's research capability was identified as a priority in the Bank's 2003–06 medium-term plan, and it was recognized that this effort would take 5 to 10 years. In 2007, the Bank initiated a peer review of its research to help achieve this long-run goal. The review was conducted by an external committee of eminent academic and practising research economists. The committee was asked to gauge the quality of the Bank's research and to make recommendations for improving the Bank's research environment. This information will help the Bank to determine how much progress has been made in enhancing its research capability and will help to focus its efforts in the current and the next medium-term plan.

THE EVALUATION

Quality of Current Research

It is important to note at the outset that the external committee was asked to focus specifically on the Bank's research activities, as opposed to its short-term policy analysis or medium-term policy-related projects. Although this applied work is critical to the successful pursuit of the Bank's policy mandates, and highly complementary to basic research, it is difficult for an external body to assess its value. It is probably best evaluated by the Bank itself.

Consistent with their terms of reference, the external evaluation committee defined "research" as the term is normally understood in academia: work that is aimed at expanding the "general state of knowledge." Using this narrower definition of research, the committee members drew on their experience as editors and referees for professional journals, as well as their experience within policy-making institutions, to judge the quality of the Bank's research over the past four years and to suggest steps that might be taken to enhance the quality of research in the future.

The committee judged that the research carried out at the Bank of Canada is “of relatively high quality.” This was heartening, since the Bank is still in the early stages of enhancing its research capabilities, and the complementary investments in data and technology necessary to support a first-class research environment are not yet complete. Not surprisingly, given that the Bank is only halfway through this multi-year initiative, the committee also concluded that there remains significant room for improvement before the standards of other leading policy-making institutions are met.

The committee made a number of general recommendations regarding the research environment. The Bank has categorized these recommendations into two groups: (i) initiatives that represent significantly new ways of doing business and that must be considered in a broader Bank-wide context because they touch on areas that extend beyond research and (ii) initiatives that are generally in line with current practices but that might be modified to improve our research environment.

Recommendations

Recommendations for new initiatives

These recommendations can be clustered into three subgroups:

1. priority setting and allocation of work
2. organizational considerations
3. career proposition

1. Priority setting and allocation of work

The committee suggested that typical research economists might spend roughly 1/3 of their time on short-term policy analysis, 1/3 on medium-term projects, and 1/3 on research. It further suggested that this norm be applied flexibly, with the most talented researchers spending up to 80 per cent of their time on research and those more interested in policy work and current analysis perhaps spending as little as 20 per cent of their time on research. It recommended that new PhD recruits be given additional latitude and spend the bulk of their time pursuing their research interests during their first year or two at the Bank.

Research economists, especially in the early stages of their careers, want to devote a large proportion of their time to research, and this expectation must be met if the Bank is to attract high-quality researchers. After a few years, however, to fulfill the Bank’s mandate, most economists would be expected to move to a 1/3 to 2/3 allocation of time between research and policy/current analysis/projection work. The exception would be those who have demonstrated particularly strong research skills in fields and questions important to the fulfillment of the Bank’s mandate. The challenge is to effectively achieve this balance.

The Bank agrees with the committee's suggestion that all research economists should be expected to devote some of their time to short-term current analysis and medium-term policy-related projects. Moreover, this proportion should vary according to the interests, skills, and proven abilities of each researcher. While the appropriate minimum and maximum levels are yet to be decided, the annual performance appraisal and entente process should be used to determine the time spent on research versus other policy-relevant work. It is expected that a small number of the most talented researchers would be allowed to devote up to 80 per cent of their time to research on an ongoing basis. New recruits with demonstrated research talents would be given additional latitude and would spend the bulk of their time pursuing research interests pertinent to the Bank's mandate for the first year or two of their careers, should they so wish.

The committee also indicated that research seemed to be overly directed by Bank management and that researchers did not have sufficient freedom with regard to choosing research projects. The perception that researchers cannot pursue questions of interest to them could pose a problem in attracting top-quality talent and promoting excellence in research. At the same time, it is clear that, as a public institution with a clear mandate, the Bank must ensure that the research its staff conducts is relevant.

The Bank agrees that economists should be allowed greater freedom with regard to the topics that they pursue in the portion of time allocated to longer-term research. Incentives should be aligned with Bank interests, however, through rewards for publications that enhance the Bank's reputation and for research that helps to answer policy questions of interest to the Bank of Canada. More effort should be devoted to devising and explaining broad research themes as part of the priorities under the Bank's medium-term plan, but these should not be regarded as the only research questions that Bank staff might investigate. Time spent on current policy issues will help in this regard, allowing clearer identification of policy questions that require deeper analysis.

2. Organizational considerations

The committee felt that research at the Bank was fragmented, with insufficient collaboration across departments. They suggested that the Bank consider reorganizing divisions and creating larger departments or "wings" structured along functional lines. The latter might involve two separate units: one for monetary policy and one for financial system issues. Alternatively, a three-way split might be considered, including monetary policy, financial stability, and financial market operations.

The Bank has four policy functions: monetary policy, financial system stability, funds management, and currency. All of these functions require research support. The Bank agrees that some realignment of its organizational structure would be appropriate, for reasons that include improving the research environment, but that also encompass several other important corporate objectives. To this end, the Bank has initiated a review of its current organization with a view to better

aligning it with the Bank's mandate over the coming year. This alignment should clarify policy objectives and strengthen links between research and policy issues. One of its core principles is to ensure that Bank of Canada research has greater influence on domestic and international policy.

The committee also suggested that special studies units be eliminated within departments. They believed that there would be more interaction between researchers and policy analysts if they were grouped together rather than organized in separate units.

The Bank agrees that all researchers need to be directly connected to the operational or policy-related aspects of its work. This can best be accomplished by having some minimum and variable portion of research time devoted to these activities (see above). However, the Bank is not persuaded, at this time, that abolishing all special studies divisions would be appropriate. Some flexibility in the organizational structures within departments is deemed desirable. This being said, all divisions of the Bank should clearly articulate their policy purpose and responsibilities to provide focus and clear accountability.

3. Career proposition

The committee argued that the Bank's salary scale for new PhDs, which is aligned on a total-compensation basis with the median for salaries at second-tier universities, does not enable the Bank to attract and retain the calibre of researcher necessary to achieve the Bank's objectives. They suggested that the Bank should align its salaries with those at first-tier Canadian universities. Furthermore, they suggested that promotions and performance pay give more recognition to indicators of top-quality research, such as publication in top-ranked journals and participation in conferences or in other professional pursuits that contribute to the other objectives outlined earlier.

In some instances, compensation has been a barrier to recruiting top researchers. At the same time, other issues identified in the committee's report must also be addressed to attract and retain the talent required to successfully fulfill the Bank's research objectives. It is further recognized that top-tier pay should be offered only to researchers with top-tier performance.

The Bank agrees that a competitive compensation package is essential if it is to meet its research objectives. In reviewing its compensation strategy, the Bank intends to re-examine its market comparators and to consider how rewards can be better directed to recognize high-quality research and management of high-performing researchers.

Career progression was also highlighted by the committee as requiring attention.

The Bank agrees that a career progression that allows top researchers to move up in the organization while continuing to devote a significant proportion of their time to long-term research is important. Indeed, several measures have been introduced over the past few years to help achieve this end. Further work will be

undertaken in this area, but this will be done as part of a broader initiative designed to ensure that all staff are better able to capitalize on their potential and interests, and contribute to the work of the Bank.

One of the great strengths of the Bank of Canada is the high calibre of the MA economists that have been recruited over the years. Some have strong research talents and interests. The committee recommended that those newly graduated MAs with the aptitude and the inclination for research be teamed up with experienced PhD researchers to work on research projects with them and learn from them.

The Bank agrees with the committee and believes that the high calibre of its MAs has been one of its great strengths. Indeed, many of the Bank's best researchers come from the MA ranks, and this is expected to continue in the future. In concert with the work on career progression, consideration will be given to methods to better develop the research skills of newly graduated MAs. At the same time, the Bank should make it clear that to advance in the Bank, employees will usually demonstrate strength in at least two of three areas: policy/current analysis, research, and management. It is not necessary or even desirable for everyone to be a researcher in the narrow sense of the term (i.e., expanding the body of knowledge).

Recommendations that build on existing programs and practices

Some of the committee's recommendations build on the Bank's existing programs and practices and therefore imply refinements or some modest increase in resources rather than new initiatives with broader Bank-wide consequences.

1. Budgeting provisions for data, conferences, travel, and visiting academics

The external committee underlined the importance of allowing researchers opportunities to present their work at top international and specialized conferences, have ready access to data, and collaborate with academics.

The Bank already has budgetary provisions for data, conferences, travel, and visiting academic speakers. Putting even greater focus on visiting academics and the formation of longer-term relationships with some of them, especially those with a strong track record of research and publication, could help to develop the Bank's own researchers.

2. Editorial support

The external committee suggested that external editorial support (or referees) be engaged, where appropriate, to reduce the burden on research directors and others.

Enlisting external editors should be considered when preparing departmental budgets and work plans.

3. Form a separate IT unit for the economics departments

The committee also noted that the technology currently available to researchers is inadequate, and suggested that a separate IT unit be established to support the economists.

The Bank has recognized the necessity of adequate IT tools to produce quality research and is building a research zone as part of a larger project under way to renew its analytic computing environment. The recommendation of a separate IT unit for the economics departments is not consistent with the Bank's new IT strategy. The appropriate IT support model will be determined in the context of the work of the Analytic Environment Program.

4. Benefits of the Fellowship Program

The committee questioned the value of the Bank's Fellowship Program as a means of promoting better research at the Bank.

It is important to note that the primary purpose of the Fellowship Program is not to advance research within the Bank. Its primary objective is to promote advanced economics education in Canada with the long-term objective of engaging more academics and students in research in the fields of interest to the Bank, thereby enlarging the body of knowledge and the pool of future recruits on which the Bank can draw. The Bank intends to continue its Fellowship Program.

IMPLEMENTATION

Achieving excellence in research is all about achieving the right balance: the balance between top-down and self-directed research priorities, and the balance between time spent helping the Bank deal with its immediate policy challenges and pursuing a longer-term research agenda. The Bank needs to capitalize on each employee's comparative advantage. The Bank also needs to be able to manage diversity, including different expectations for talented, productive researchers. To do this, the Bank must have strong managers with excellent coaching skills. The Bank also needs to focus on how it rewards results and on offering more opportunities for self-directed research in return for support on current policy issues from researchers.

Fundamentally, the committee's evaluation of the Bank's research highlights the need for the Bank to carefully consider three areas in formulating its next medium-term plan: (i) the allocation of effort directed at research relative to operations and policy-making; (ii) the organizational structure most effective for transferring knowledge from research to operations; and (iii) the compensation comparators and incentives necessary to attract, retain, and motivate the calibre of staff necessary to productively achieve the Bank's objectives.

The Bank has made significant progress in building its research capability over the past four years. Much high-quality work has been published and is in progress, and the Bank's research reputation is growing. The Bank recognizes that it faces challenges in the areas of compensation and career progression, and it must continue to work to meet these challenges to achieve its objective of excellence in research in the key areas that are essential for success in fulfilling its mandate. The Bank also recognizes that it must provide the tools necessary for high-quality research: the right information technology environment, data, and external partnerships. Priority initiatives are under way to address these important elements of a research environment that will support the Bank in achieving its objective of being "second to none" in executing its policy and operational mandates.