

Policy Governing Research

Document 222041

1 – Context and purpose

This policy outlines the principles governing *sponsored research* and *contributed research* including the selection and oversight of *research providers* and the ownership of intellectual property created by *researchers*.

Research is intended to be a primary activity of the CIA. This is clear from the Act of Parliament that incorporated the CIA in 1965 (“the Act”), which states that “[t]he purpose of the Institute shall be the following:

- To advance and develop actuarial science,
- To promote the application of actuarial science to human affairs, and
- To establish, promote and maintain high standards of competence and conduct within the actuarial profession.”

This policy provides a comprehensive framework for:

- Selection, evaluation, approval, and *dissemination of sponsored research*,
- *Dissemination of contributed research*,
- Selection and oversight of *research providers*, and
- Treatment of intellectual property created in connection with *sponsored research*.

2 – Scope

2.1 – Research covered by this policy

Sponsored research is research that is initiated and/or financially supported by the Canadian Institute of Actuaries (CIA) in some way. This includes research involving partner organizations such as the Society of Actuaries (SOA) or the Casualty Actuarial Society (CAS).

Contributed research is research that is initiated by a CIA member or some other person or entity who is not acting as a representative of the CIA and submitted to the CIA for *dissemination*.

2.2 – Entities to which this policy applies

This policy applies to all persons, committees, councils, or other entities within the CIA engaged in, directing, or overseeing research that is conducted for or on behalf of the CIA or submitted to the CIA for *dissemination*. It also applies to all persons or committees tasked with selecting *research providers*.

Researchers are any persons or entities who conduct research. *Research providers* are persons or entities who undertake *sponsored research*.

The Research Council (REC) oversees and provides strategic direction for the research activities of the CIA. The REC is responsible for approving any funding of *sponsored research* and ensuring that this policy and any related procedures and guidelines are followed.

To enable the REC to fulfill these responsibilities, any research initiated by an entity within the CIA must be brought to the attention of and approved by the REC.

3 – Types of sponsored research

3.1 – Core research

Core research is research that supports practicing actuaries in the performance of their current duties or is likely to be necessary for the performance of their duties in the not-too-distant future. *Core research* includes, but is not limited to:

- Determining rate indications for mortality, morbidity, and other insurance risks;
- Determining calibration criteria for stochastic models;
- Determining criteria for the use of machine learning or related predictive analytics models in the setting of rates, reserves and/or capital/funding levels;
- Conducting experience studies to enable individual entities to benchmark their results against peers; and
- Providing data and tools, as appropriate, to support the research activities of CIA members and their employers.

3.2 – Exploratory research

Exploratory research is research that is focused on meeting the future needs of the actuarial profession and ensuring that the profession remains relevant in a changing world.

Exploratory research includes, but is not limited to:

- Applying actuarial methods and techniques in non-traditional ways,
- Developing new solutions to traditional financial security problems, and
- Exploring topics of emerging interest.

3.3 – Allocations to core and exploratory research

There should be an appropriate balance between *core research* and *exploratory research* to ensure that the current needs of members and the future needs of the profession are both met.

Ordinarily, about 80% of each year's budget for the REC would be allocated to *core research*, with the remaining 20% allocated to *exploratory research*.

Allocation decisions should be made after identifying and prioritizing anticipated *core research* needs over a multi-year timeframe.

4 – Academic research

Academic research is a type of *exploratory research* that is conducted under the auspices of the *academic research program*.

4.1 – Objectives of the academic research program

The *academic research program* is a research program overseen by the REC whose primary

objectives are to:

- Raise the profile of the CIA and the actuarial profession at Canadian universities, and
- Encourage Canadian universities to employ qualified actuaries and provide them sufficient support in teaching and research to further the CIA's educational mission.

To fulfill these objectives, the CIA could

- Provide funding for research scholarships or grants;
- Sponsor a symposium on actuarial research; or
- Provide awards for the best academic research papers completed during a given period.

4.2 – Limitations

Sponsored research conducted by persons who are employed by a university or other educational institution is not automatically categorized as *academic research*. Only research conducted under the auspices of the *academic research program* is deemed to be *academic research*.

This limitation is important since ownership of intellectual property is determined by the type of *sponsored research*, not the employment status or affiliation of the *research provider* (see section 6 – Ownership of intellectual property).

5 – Contracts associated with sponsored research

Depending on the circumstances, a *research provider* will enter into a *formal contract* or a *simplified agreement* with the CIA.

5.1 – Formal contract

If the total of anticipated payments to a *research provider* for *sponsored research* exceeds a *threshold amount* determined by the REC, the *research provider* will be required to enter a *formal contract* with the CIA.

The *threshold amount* should be confirmed by the REC every three years.

5.2 – Standard contract template

The *formal contract* will be based on the CIA's *standard template for sponsored research*. The CIA's *standard template for sponsored research* will be made available to persons or entities interested in submitting proposals for *sponsored research* upon request.

Some modifications to the *standard template for sponsored research* may be necessary from time to time depending on the nature of the *sponsored research*. However, these modifications should only be made on an exceptional basis.

Persons or entities submitting proposals for *sponsored research* must indicate in their proposals what modifications to the *standard template for sponsored research* would be necessary for them to enter a *formal contract* with the CIA. The number and nature of requested modifications are taken into consideration when evaluating proposals.

5.3 – Simplified agreement

If the total of anticipated payments to a *research provider* for *sponsored research* does not exceed the *threshold amount*, a *simplified agreement* covering the ownership and licensing

of intellectual property may be used in lieu of a *formal contract*.

The terms of the *simplified agreement* are firm and only negotiable in exceptional circumstances.

5.4 – Contributed research release

No contracts are required for *contributed research*. However, the CIA may require the *researcher* to sign a release before disseminating the results.

6 – Ownership of intellectual property

6.1 – Core research

The CIA retains ownership of all intellectual property created in connection with *core research*. Any exceptions must be documented and approved by the REC.

Research providers who are employed by or affiliated with a university or other educational institution and wish to conduct *core research* for the CIA must do so as separate entities and be willing to transfer all rights in any intellectual property created to the CIA.

6.2 – Exploratory research

The CIA retains ownership of all intellectual property created in connection with *exploratory research* that is not *academic research* unless otherwise negotiated with the *research providers*.

For *academic research*, the *research providers* retain ownership of the intellectual property.

6.3 – Licensing

In cases where the *research providers* retain ownership of intellectual property created in connection with *sponsored research*, they must agree to provide the CIA with a perpetual, fully paid-up, royalty-free license to disseminate the results of the research in whatever form the CIA deems appropriate.

Licensing of intellectual property in all other cases is covered in the *standard template for sponsored research*.

6.4 – Contributed research

Researchers submitting *contributed research* to the CIA for *dissemination* retain ownership of the intellectual property created in connection with the *contributed research* but must provide the CIA a release, if requested, to disseminate the results in the form the CIA deems most appropriate.

7 – Selection and oversight of sponsored research

7.1 – Structure

The REC should establish separate standing committees to oversee *core research* related to each of the following risks:

- Mortality risk
- Morbidity risk
- Property and liability risk

- Behavioral risk, e.g., lapse/termination risk
- Investment and credit risk.

The REC should also establish separate standing committees for:

- *academic research*; and
- *exploratory research* other than *academic research*.

7.2 – Responsibilities

7.2.1 – Standing committees for core research

Each standing committee is responsible for:

- Identifying projects that fall within the committee’s mandate and making recommendations to the REC on which projects to pursue and the timeframes for pursuing them;
- Evaluating potential *research providers* for projects that the REC has agreed to pursue and making recommendations to the REC on the *research providers* to retain;
- Overseeing the work of *research providers* and ensuring that they complete their work within agreed-upon timeframes;
- Conducting technical reviews of the work of *research providers* to ensure that the work is accurate and based on sound methodologies;
- Making recommendations to the REC regarding the acceptance of the work of *research providers* for *dissemination*;
- Providing advice to the REC regarding the continued feasibility of projects that have fallen behind schedule or face other challenges; and
- Coordinating with other CIA committees, as required.

Although a standing committee may engage subject matter experts to assist it in fulfilling these responsibilities, the ultimate responsibility for overseeing, reviewing, and making recommendations with respect to the acceptance of the work of *research providers* remains with the committee.

7.2.2 – Standing committee for exploratory research other than academic research

The standing committee for *exploratory research* other than *academic research* is responsible for:

- Identifying projects that seek to advance the actuarial profession and ensure it remains relevant in a changing world (ideas can come from many sources including CIA councils, committees, and task forces; standing committees on *core research*; CIA members; the REC; or the standing committee itself);
- Preparing requests for proposals for the projects the REC has agreed to pursue;
- Reviewing responses received from these requests for proposals and making recommendations to the REC on which proposals to accept;
- Establishing project-specific benchmarks for evaluating the work of the *research providers* whose proposals have been accepted;
- Evaluating the work of these *research providers* based on the established benchmarks;
- Making recommendations to the REC regarding the acceptance of the work of the *research providers*;

- Providing advice to the REC on the continued feasibility of projects that have not been completed within the timeframes originally proposed by the *research providers* and are unlikely to be completed in the foreseeable future; and
- Coordinating with other CIA committees, as required.

For projects where the members of the standing committee feel they do not have the expertise to evaluate the proposals received or conduct technical reviews of the work of the *research providers*, the REC may appoint a project oversight group (POG) to perform these tasks. In this case, the standing committee is responsible for supervising the work of the POG. However, the standing committee retains the ultimate responsibility for making recommendations to the REC regarding the acceptance of proposals and the acceptance of the work of retained *research providers* for *dissemination*.

7.2.3 – Standing committee for academic research

The standing committee for *academic research* is responsible for administering the *academic research program* and providing recommendations to the REC on how the profile of the CIA and the actuarial profession can be raised at Canadian universities through research activities.

7.2.4 – Research Council

The REC is responsible for:

- Determining which projects to pursue based on the recommendations of the standing committees and CIA staff;
- Selecting *research providers* for the projects the REC has agreed to pursue based on the recommendations of the standing committees and CIA staff;
- Determining whether to accept the work of *research providers* for *dissemination* based on the recommendations of the standing committees and CIA staff;
- Determining whether to abandon a project that has fallen behind schedule or faces other challenges; and
- Providing guidance to the standing committees, as necessary.

Core research that falls outside the mandates of the standing committees will be overseen by the REC itself or assigned to a separate committee or task force that the REC establishes to oversee such projects.

Projects that are not deemed to be *core research* but that the REC believes are still worth pursuing will be treated as *exploratory research*.

8 – Selection of research providers

The selection process for *core research* should focus on the competence of the *research providers* and their ability to complete the required work on time.

The selection process for *exploratory research* should focus on the novelty and potential impact of the project rather than the qualifications or experience of the *research provider*. In the case of *academic research*, the selection process should recognize the unique characteristics of *academic research*.

Research providers should not be selected solely based on cost. What matters is the quality

and anticipated benefit of the research relative to the cost.

8.1 – Selection of research providers for core research

The selection process for *core research* depends on whether the project is undertaken only once or is ongoing or repeated at regular intervals.

8.1.1 – One-time projects

For *core research* projects that are undertaken only once or have not been undertaken for some time, a request for proposals should be prepared and a *research provider* selected based on criteria established by the REC.

The request for proposals should clearly state the work that is to be performed and the timeframe in which it should be completed.

Evaluation of the proposals should focus on the competence of the proposed *research provider*, the soundness of the methodology, and the ability of the proposed *research provider* to complete the work within the required timeframe.

8.1.2 – Ongoing projects

For *core research* projects that are ongoing or repeated at regular intervals, the REC may elect to retain a *research provider* who has previously done work on the project without preparing a new request for proposals provided that:

- the previous work of the *research provider* was considered acceptable to the REC;
- the *research provider* is not behind schedule on any contracts with the CIA; and
- the standing committee responsible for the project has no concerns retaining the *research provider* for the subsequent work.

The REC may also recommend that the CIA enter long-term contractual or similar arrangements with a *research provider* to undertake *core research* projects that are ongoing or performed at regular intervals.

8.2 – Selection of research providers for exploratory research

Proposals should be reviewed using criteria established by the REC for *exploratory research*. To recognize the unique characteristics of *academic research*, the criteria for *academic research* and *exploratory research* other than *academic research* can be different.

To encourage reviewers to focus on the proposals rather than the *researchers*, the name(s) of the potential *researchers* should initially be withheld from the members of the committee and if applicable the POG. The name(s) of potential *researchers* should only be disclosed after the proposals have been ranked and a short list created.

Potential *researchers* should not be eliminated from consideration solely because they have no prior experience working with the CIA or a similar organization. However, potential *researchers* can be eliminated from further consideration if work that they previously performed for the CIA was deemed unsatisfactory or not completed within an acceptable timeframe.

9 – Acquisition and maintenance of data

An advisory group established by the REC and reporting to CIA Head Office will assist and

advise in the identification of:

- Data required for *core research*;
- Companies or organizations that are likely to possess this data; and
- Potential contacts at these companies or organizations.

CIA Head Office staff are responsible for:

- Determining which data to acquire;
- Acquiring and maintaining this data;
- Selecting and overseeing the work of any contractors retained to prepare the data in a form that can be used by *research providers*; and
- Ensuring that appropriate protocols regarding data handling and management are followed.

10 – Dissemination of research results

Dissemination means the distribution of research results by the CIA.

Dissemination can take many forms and includes, but is not limited to:

- Announcing the results of the research on the CIA's website or by email;
- Providing a summary of the research;
- Publishing a paper or article on the research;
- Giving a presentation on the research;
- Describing the research in a podcast, webcast, or some other form of electronic media; and/or
- Contributing to a public statement.

The REC is responsible for approving the *dissemination* method of all *sponsored research* and *contributed research*.

11 – Sponsored research involving partner organizations

Sponsored research projects involving partner organizations such that the SOA or the CAS have additional complexities that need to be considered before they are undertaken.

These complexities include, but are not limited to:

- Determining which organization will take the lead on a given project;
- Determining how costs will be shared among the partner organizations;
- Determining how contracts with *research providers* will be drafted;
- Determining what processes for reviewing and approving the work of the *researcher providers* will be followed; and
- Ensuring the CIA's right to disseminate the work of the *research providers* is protected.

Drafting contracts with *research providers* can be particularly challenging if each partner organization is a signatory to the contract. Provided that the CIA's right to disseminate the work of the *research providers* is protected, the REC and the CIA should explore alternative contracting arrangements whenever possible.

Exemptions

n/a

Escalation Procedures/Management of Non-compliance with this Policy

n/a

Definitions and Abbreviations

n/a

Associated Documents[Policy Governing Data for Sponsored Research](#)**References**

n/a

Monitoring, Evaluation, and Review

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