Central Performance and Impact Assessment Unit

23rd PPX Symposium

May 16th, 2019

Leading up to Budget 2018…

Horizontal Review of Business Innovation and Clean Technology Programs (HIR) observed* opportunity for:

> … **common and comparable assessment** of program performance,
>
> … employing a **horizontal approach,**
>
> … providing **greater coordination** of policy research, evaluation approaches, and performance data,
>
> … to better inform **resource allocation to and across programs**.
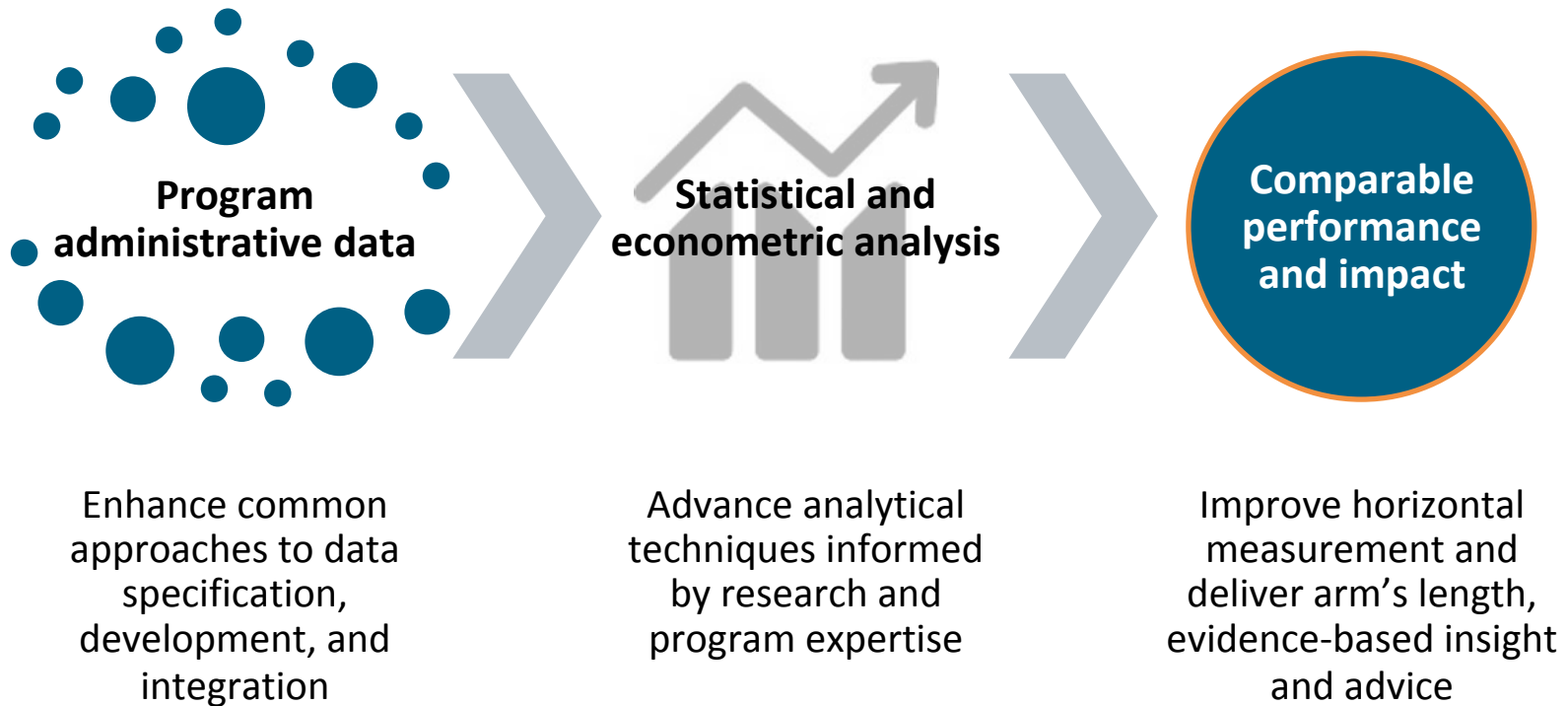
HIR demonstrated potential for:

- Common measurement concepts and methods to enable comparison and benchmarking
- Combining program administrative data with business microdata for statistical and econometric analysis to inform performance

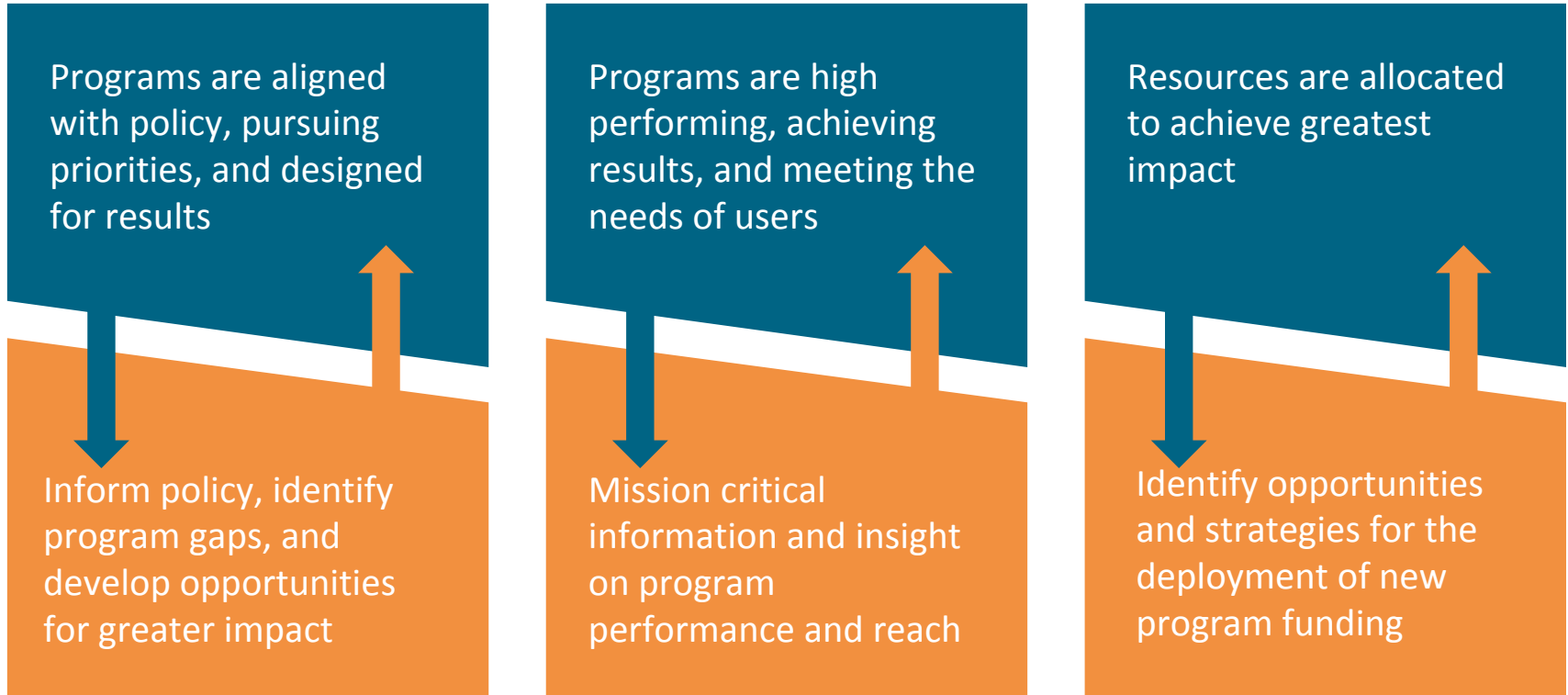**"Central Performance and Impact Assessment" for business innovation**

* These observations were also noted in the Review of Federal Support to Research and Development – Expert Panel Report (Jenkins et al., 2011)

Collaborative and data-driven performance measurement

Program administrative data

Enhance common approaches to data specification, development, and integration

Statistical and econometric analysis

Advance analytical techniques informed by research and program expertise

Comparable performance and impact

Improve horizontal measurement and deliver arm's length, evidence-based insight and advice

Platform for evidence-based decision making

Arm's length, evidence-based insight and advice with a horizontal perspective

Programs are aligned with policy, pursuing priorities, and designed for results	**Programs are high performing, achieving results, and meeting the needs of users**	**Resources are allocated to achieve greatest impact**
Inform policy, identify program gaps, and develop opportunities for greater impact	Mission critical information and insight on program performance and reach	Identify opportunities and strategies for the deployment of new program funding

Relevant data and analysis informed by departmental expertise

Strategic partnership with Statistics Canada

- Canada's national statistical agency has a legislative mandate to collect and compile data that can strengthen program evaluation

- Business innovation program administrative data:
  - Financial records of awards
  - Summary client service records

- Linking datasets by common identifier enables firm-level analysis of program activities and impact

Corporate Tax Data

Payroll Data

Patents

Business Register

Industry Surveys

Import / Export Register

Many others…
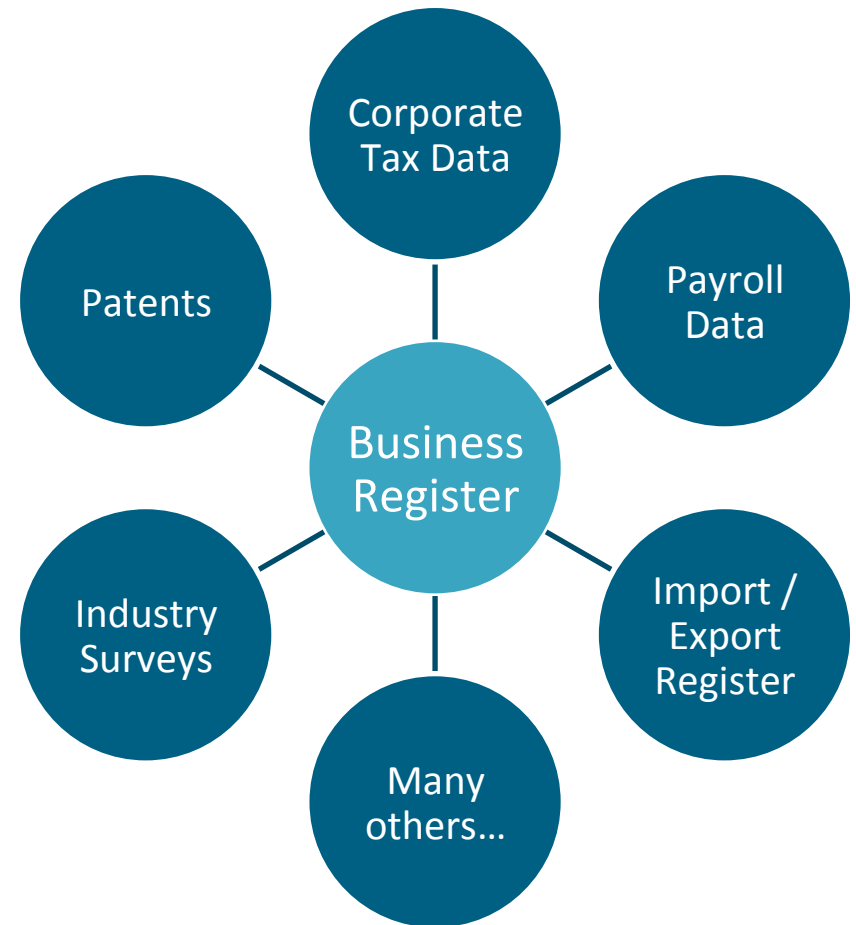
Analysing programs through the firms they support

EXPANDING OVER THE LAST 10 YEARS...
Both spending and the number of recipients have increased

Legend:
- Spending on Innovation *(as % of 2016)*
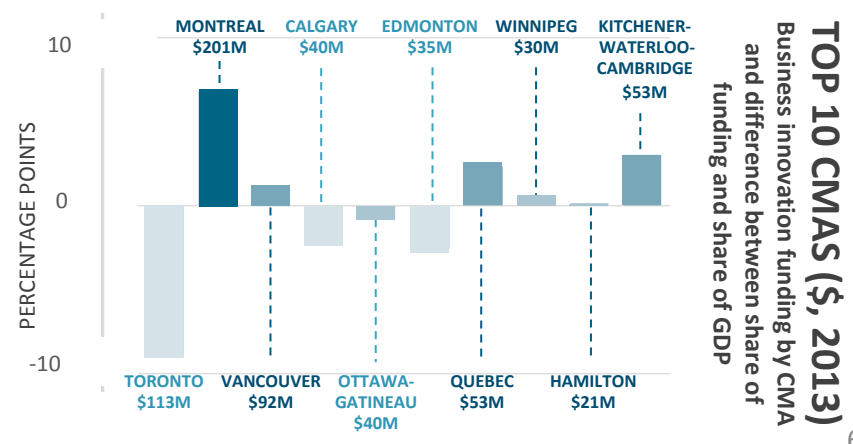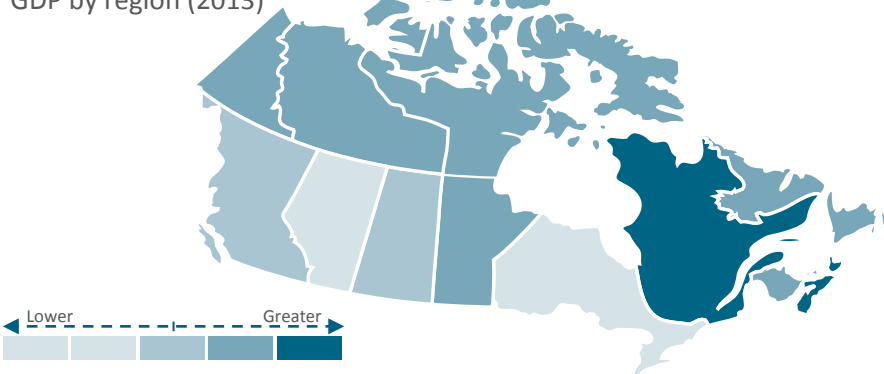- Enterprises supported *(as % of 2016)*
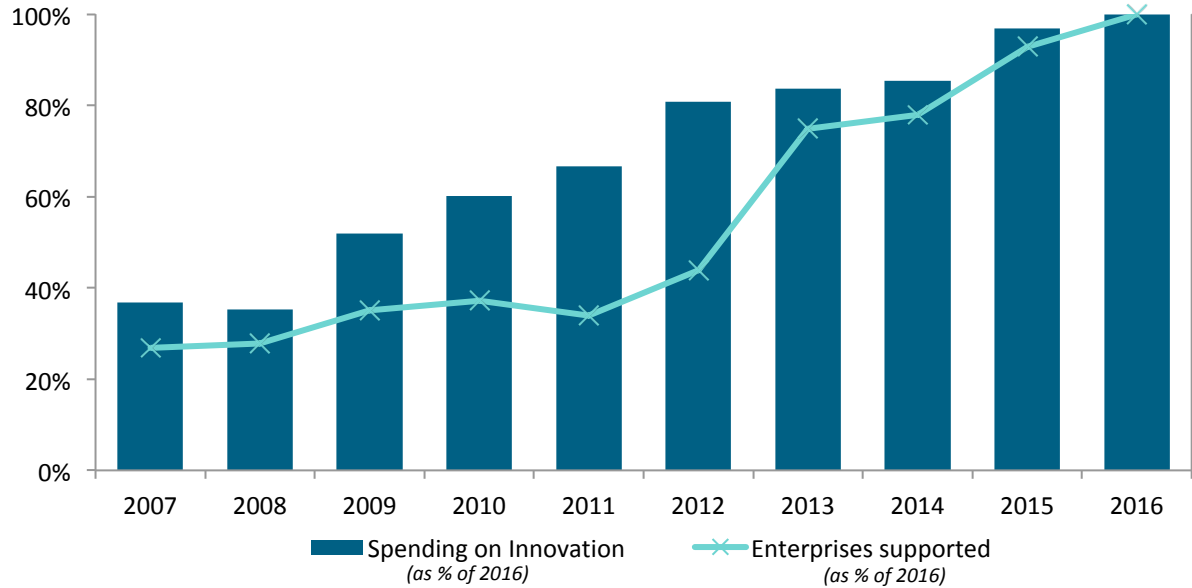
EXPORTING FIRMS

While programs interacted with **twice as many exporting firms in 2016** than 2010, the proportion of enterprises relative to the total **shrank**

34% 2010 > **25%** 2016

Legend: Exporters | Non-exporters

REGIONAL BREAKDOWN
Business Support activity relative to GDP
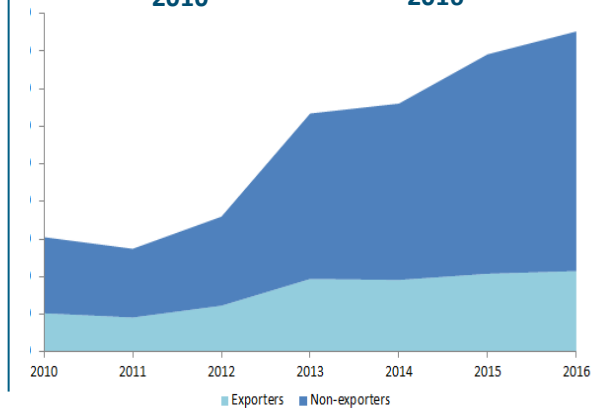
Distribution of business support varies in relation to GDP by region (2013)

Lower ← → Greater

TOP 10 CMAS ($, 2013)
Business innovation funding by CMA and difference between share of funding and share of GDP

PERCENTAGE POINTS

- MONTREAL $201M
- CALGARY $40M
- EDMONTON $35M
- WINNIPEG $30M
- KITCHENER-WATERLOO-CAMBRIDGE $53M
- TORONTO $113M
- VANCOUVER $92M
- OTTAWA-GATINEAU $40M
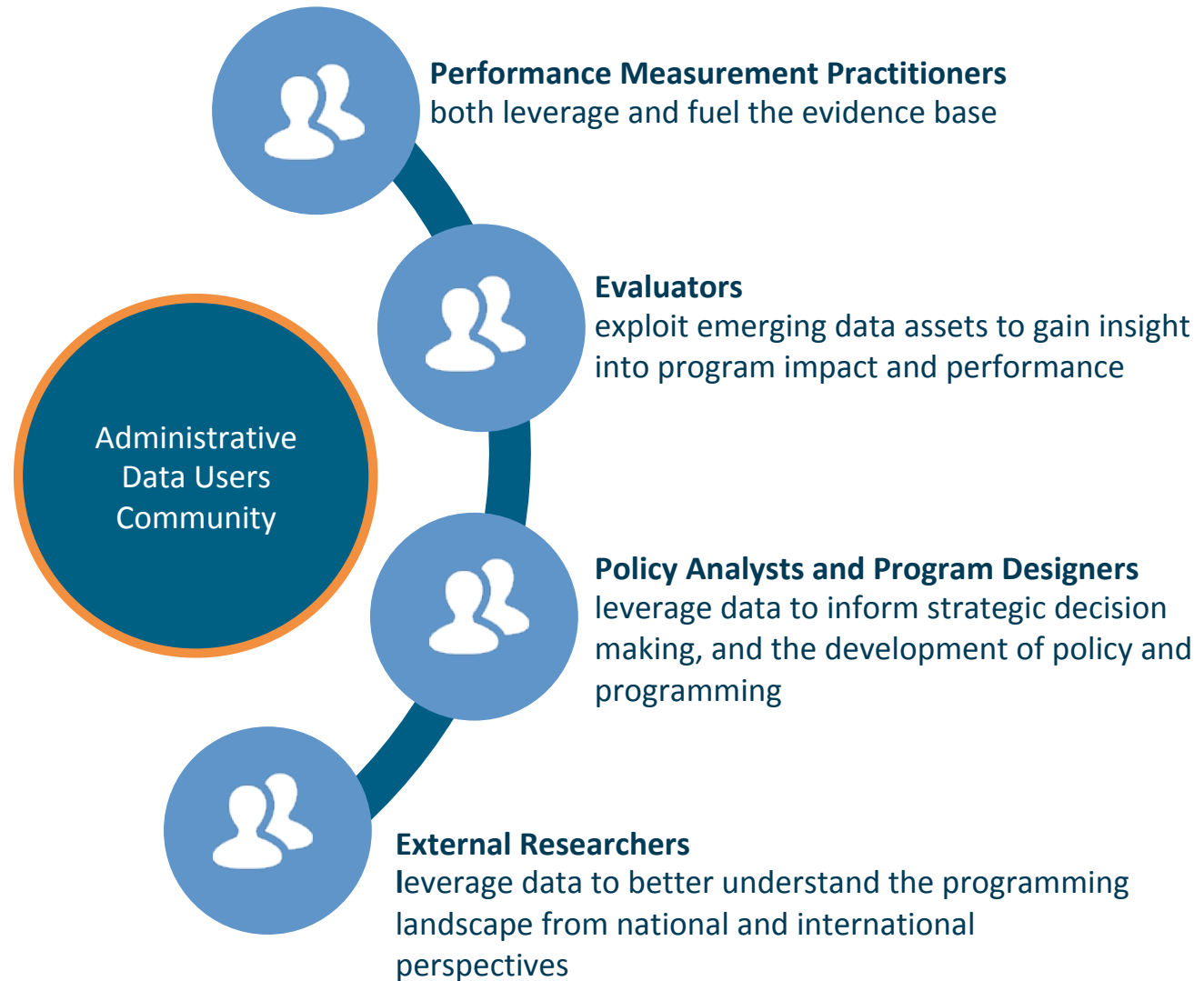- QUEBEC $53M
- HAMILTON $21M

Econometrics can inform impact assessment

- Natural experiments in data to generate counterfactuals to improve attribution of outcomes

- Estimate induced economic impacts for key indicators measurable in individual firms

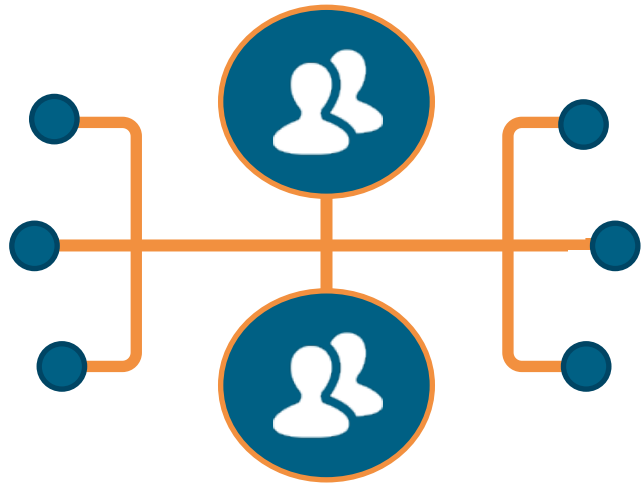Differential growth (beneficiaries - control group)
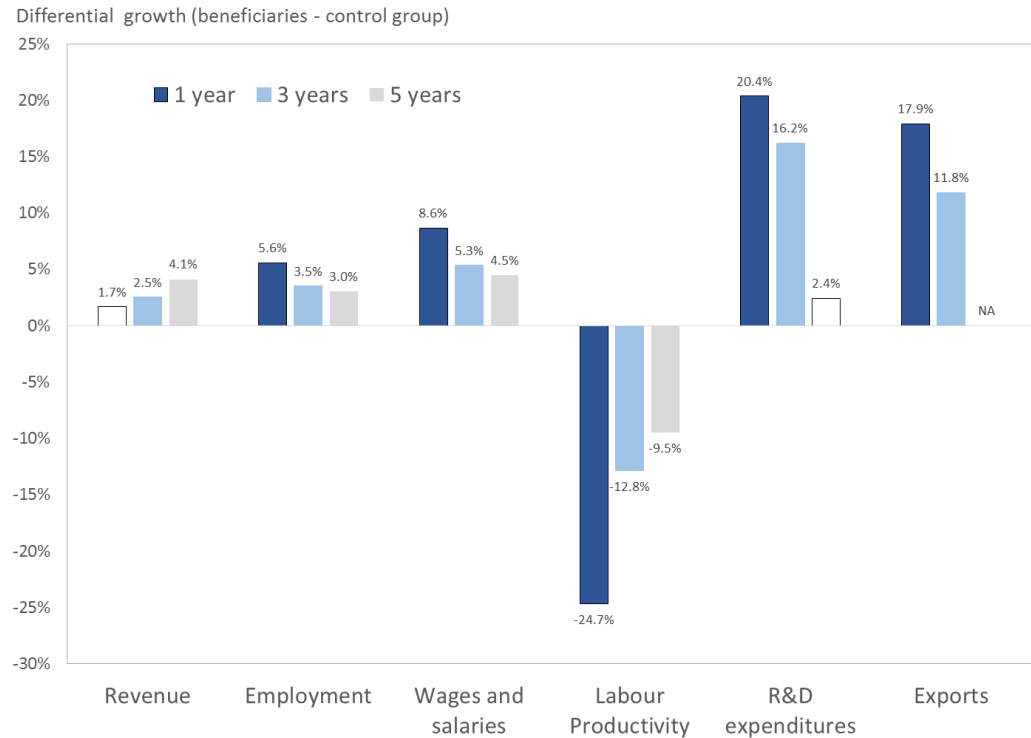
Beneficiaries of CPIA data

A coordinated effort with a view to create, maintain and fully leverage high quality data assets is required to bring about shifts in methods, internal reporting capacity, and the culture around data management.

Administrative Data Users Community

Performance Measurement Practitioners
both leverage and fuel the evidence base

Evaluators
exploit emerging data assets to gain insight into program impact and performance

Policy Analysts and Program Designers
leverage data to inform strategic decision making, and the development of policy and programming

External Researchers
leverage data to better understand the programming landscape from national and international perspectives

Empowering Performance Measurement and Evaluation

Creating new evidence on the impact of GoC's programs and services

- Business Innovation and Growth Support (BIGS) data is produced via multiple new business practices within the Government of Canada, moving data out of silos and into a common database.

- Leadership on pathfinding efforts to apply new evidence to policy, performance measurement and evaluation questions and to better understand our data and its potential applications.

- CPIA will be engaging with experts across a variety of functions as we move to create new insights and seek input.

Questions?