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Contemplating a new survey on business sentiments ECONOMIC HORIZONS (ECHO)

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**Presentation to the UNECE Seminar
on the Role of National Statistical
Offices in the Production of Leading,
Composite and Sentiment Indicators**

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Outline

- Background, Context and Rationale
- A proposal for a dual-use instrument
 - Objectives
 - Frequency and timelines
- Proposed survey approach
 - Questionnaire content and testing
 - Methodology
 - Collection
 - Processing and estimation
 - Dissemination
- Sample content
- Guidelines for potential clients



Background, Context and Rationale

- Surge in the desire for evidence-based decision-making
- Statistics Canada is a leader in providing data about the Canadian economy and society. Data on business sentiments can be considered a gap area
- Used to conduct the Business Conditions Survey, focussing on Manufacturing – discontinued in 2008
- Gap is partially filled by small-scale or unofficial sources
- Also, need to respond with agility to certain types of new data requests for emerging needs – and do so fast
- Statistics Canada has been working on a proposed approach if sufficient interest and funding become available

A proposal for a dual-use instrument

Objectives

- Close a data gap by providing leading, forward-looking indicators on the economy on an ongoing basis (core component)
 - Produce info by industry (NAICS) and province, possibly firm size too
- Serve as an additional platform for fast response to emerging data needs, of the type not conducive to the lengthier process of a fully customized, stand-alone survey (cost-recovery component)

Frequency and timelines

- Quarterly survey, each production cycle will last 13 weeks and reference periods will be the calendar quarters
- Release very early in the reference quarter (e.g., early January for Jan-Mar)

Questionnaire Content

- Only 5-6 core questions are envisaged, mostly of the “soft”, qualitative type, answered easily by respondents
- Questions aiming at capturing business sentiments and intentions concerning near-term economic prospects - and possibly shed light on entrepreneurship
- Questions intended to be forward-looking, with reference to the next quarter rather than soliciting answers from books already closed
- Answers expected to come mostly in percentages, Likert scales, Y/N or some other simple form, without precluding simple numbers
- Questionnaire space will be reserved for an additional 5-6 questions for cost-recovery clients

Questionnaire Testing

- Many questions will be initially tested. This will provide sufficient options for any final content choices for the core survey component, as well as the creation of a bank of tested questions with the potential to be inserted at any given quarter
- New, cost-recovery content would need some testing on a quarterly basis – unless it's in the bank of questions. Options for quick turnaround include:
 - Combine testing with that of other questionnaires, when possible
 - Cognitive testing only - no need for application and/or end-to-end testing
 - Explore alternate testing methods, including remote testing
 - e-mail, with appropriate versions of questions
 - follow-up via videoconference or telephone calls

Methodology: Core component

- Economy-wide survey at the level of the statistical establishment, with systematic sampling derived from the Business Register
- Stratification will take place to support the production of estimates by industry (2-digit NAICS) and province/territory
- Scenarios for two sample sizes are contemplated (with cost implications) and will be discussed with stakeholders:
 - Lower sample: a max of 8,000 units can produce estimates by industry and province/territory but not both (margin +/-5%)
 - Larger sample: a max of 26,000 units can produce estimates both by province/territory and NAICS (margin +/-10%). This will also be more than sufficient to produce weighted domain estimates by firm size
- Each establishment will remain in the sample for a period of one year (4 quarters), with a rotation of one-quarter of the sample after the first year each reference quarter

Methodology: Cost-recovery component

- Flexible approaches are envisaged, depending on the exact nature of the request. Some indicative examples:
- The core sample is sufficient for the needs of the cost-recovery component – no sample adjustments are needed
- The new component requires boosting the sample:
 - in its entirety (e.g., due to the requirement to produce data by industry and by province in the low cost sampling or for more precision in the estimates)
 - in part (e.g., to produce data by industry and by province for some provinces, produce CMA or other sub-provincial data, produce some 3-digit NAICS or something else)
- The new component needs to only go to part of the sample (e.g. estimates are needed for one province or a few industries only)
- If an entirely new sample is needed, the methodology will be customized based on the information requirements - although it will use the same statistical infrastructure of the new survey (team, processes etc.), it will practically be a parallel exercise

Collection

- Collection will be done via electronic questionnaires (main method)
- Collection activities will take place over a period of 6 weeks, with the actual data collection window open for 3 weeks
- Follow-up efforts will comprise both e-mails and telephone calls to non-respondents, and will be prioritized based on response targets by stratum

Processing

- Processing will be done through one of our generic corporate systems
- To streamline the process, validity and consistency edits will be standardized for the core survey, while they will be incorporated immediately after the determination of the final content for the cost-recovery component
- The entire process will be set up in such a way that it will be automated from period to period
 - standard modules by design
 - metadata will be kept simple
 - minimal to no manual intervention
 - no macro adjustments
 - imputation will rely on our generic system
 - upfront specs for table production

Estimation

- Estimation will rely on our generalized G-EST system
- Both unweighted and weighted estimates can be produced, to account for different perspectives among respondents of different size
- With lack of correlated auxiliary variables, a simple Horvitz-Thompson will be the most likely estimator
- Confidentiality checks will be applied through our generalized G-Confid system – to the extent applicable

Dissemination

- Dissemination of results will be chiefly through **The Daily** (Statistics Canada's daily communication medium) in the form of a small set of standardized tables and analytical commentary
- Releases should take place during the first or second week of the reference quarter (e.g., the first week of January for the Jan-March quarter)
- Specialized cost-recovery tables and reports can be produced shortly afterwards, on demand

Guidelines for potential clients

Potential clients who wish to take advantage of this cost-effective infrastructure will have two options:

- Option 1: Select questions from our bank
 - up to 6 already tested questions can be selected
- Option 2: Submit their own questions
 - up to 6 simple questions, measurable largely through Y/N answers, percentages, Likert scales or simple numbers
 - no complex flows and skip patterns
 - content must be complete for testing by the end of t+2 weeks and output specs shortly afterwards
 - be ready to sign agreement

Potential sample questions

- Currently, how do you evaluate the state of the **overall economy/your industry**?
☐Positive ☐Neutral ☐Negative
- Over the next three months, do you expect economic conditions in the **overall economy/your industry** to be:
☐Better ☐Unchanged ☐Worse
- Over the next three months, do you expect employment in **your establishment/industry** to:
☐Increase ☐Stay the same ☐Decrease
- Over the next three months, do you expect the volume (or value?) of exports by **your establishment/industry** to be:
☐Higher ☐About the same ☐Lower ☐Don't export



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