



Creating jobs and economic  
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# A RURAL CHARACTERIZATION OF QUEBEC'S TERRITORY

**Frédéric Laurin**

Professor of Economics at Université du Québec à Trois-Rivières

**Stéphane Pronovost**, Senior Analyst, Research and Analysis  
Directorate, Canada Economic Development

**Mathieu Carrier**, Research intern at Canada Economic Development

## OBJECTIVES:

# **Two preliminary objectives:**

## **1. Define a typology of rural regions**

98 Regional Municipal Counties in the province of Quebec (Canada)

## **2. Characterize rural firms**

# DEFINE A RURAL TYPOLOGY

## Heterogeneity in the definition of rurality

### Classify regions according to geographical-related variables:

<b>Urbanity</b>	<b>Forest land</b>
<ul style="list-style-type: none"><li>• Urban density</li><li>• Share of the active workforce working in an outside urban region</li></ul>	<ul style="list-style-type: none"><li>• Forest land-coverage (% of territory)</li><li>• Share of workforce in forestry</li></ul>
<b>Agricultural land</b>	<b>Other geographically-related sectors</b>
<ul style="list-style-type: none"><li>• Agricultural land-coverage (% of territory)</li><li>• Share of workforce in agricultural sector</li></ul>	<ul style="list-style-type: none"><li>• Share of workforce:<ul style="list-style-type: none"><li>• related to natural resources sectors</li><li>• in the fishing sector</li><li>• related to tourism</li></ul></li></ul>

# DEFINE A RURAL TYPOLOGY

## 12 types of regions, clustered in four groups

Level of rurality

### Group 1: Montreal's metropolis

1. **Montreal** and two closest suburbs (Laval and Longueuil)

### Group 2: Peri-urban

2. **Peri-urban A** regions: high pop density closest suburbs of Montreal and Quebec city

3. **Peri-urban B** regions: second circle of Montreal's suburbs

4. **Medium urban** regions (cities of more than 100 000 hab.)

5. **Peri-urban C** regions: low pop density but high working pop. in Montreal metropolitan area or Quebec city.

### Group 3: Agricultural regions

6. **Peri-urban agricultural**: agri + city of +50 000 hab.

7. **Agricultural** regions

### Group 4: other rural regions

8. **Agri-forestry** regions

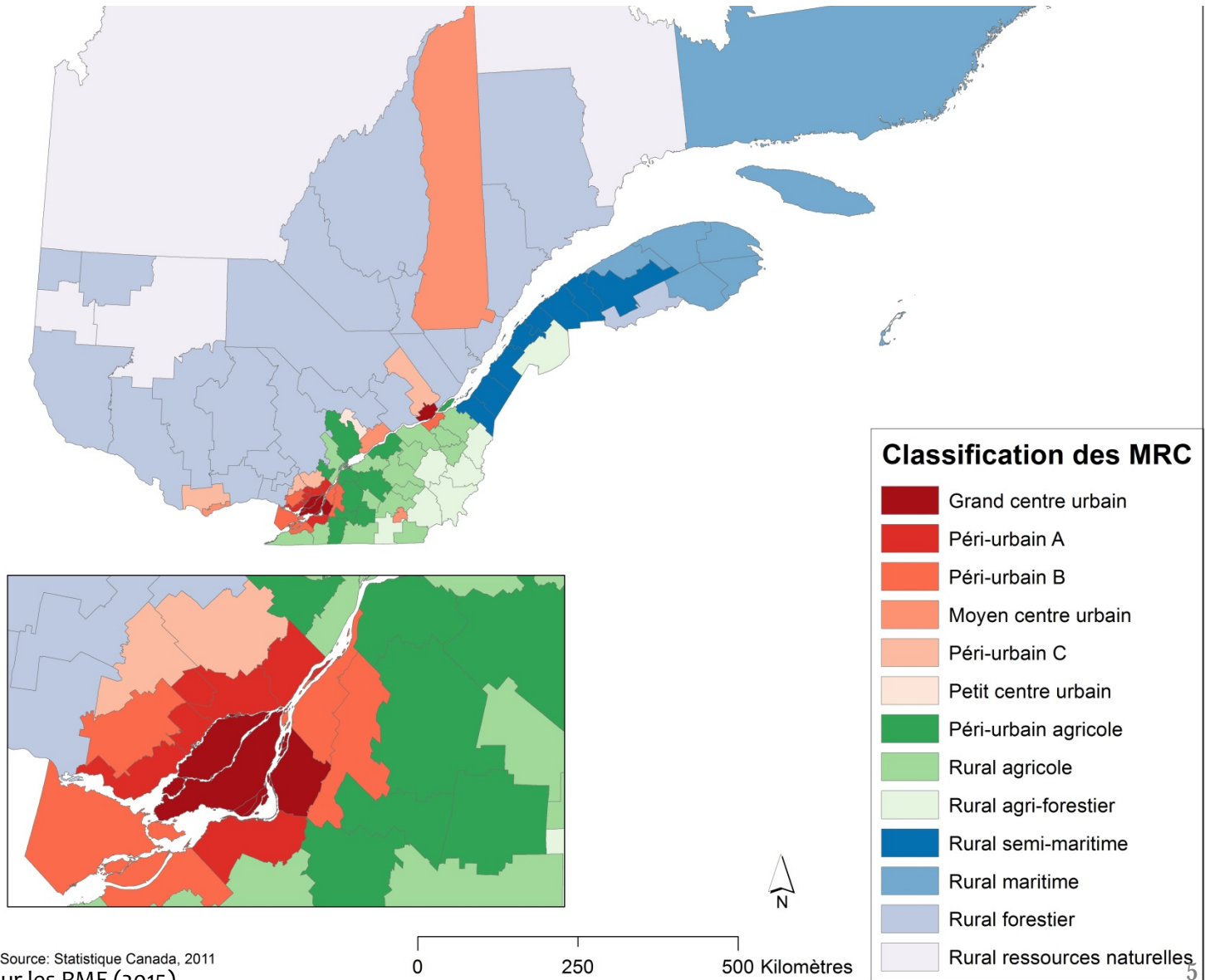
9. **Semi-maritime** regions

10. **Forestry** regions

11. **Maritime** regions

12. **Natural resources**

# DEFINE A RURAL TYPOLOGY



# CHARACTERIZE RURAL FIRMS

## Four Sources of Data

### 1. Databank on SME internationalization

#### **Large survey on a sample of 588 SMEs (province of Quebec)**

- Survey implemented by a professional and well-established polling company, by phone.
- Questions about different dimension of the internationalisation process (imports, exports, sub-contracting, etc.).
- Manager's profile and firm characteristics.
- Implemented between May 2010 and February 2011.

### 2. Quebec's Enterprise Register

#### **Computation of the number of new firms created (entrepreneurship).**

### 3. Economic Development Index (DEC Canada)

### 4. Vitality Index (Gouv of Quebec)

# CHARACTERIZE RURAL FIRMS

## F-test of significant differences between group means

### Firm characteristics

Turnover	Group 3 smaller
Employment	Group 4 larger
Extent of network	Group 1 > Group 4

### Innovation/tech level

% employment in R&D	Group 1 better
Product sophistication	Group 2 more specialized products
Holds copyrights , patents or industrial design	Group 2 greater
Uses scheduling software, computerisation barcodes, or ERP	Group 4 lower
Uses inspection and control systems or quality assurance syste	Group 1 > Group 3-4
Uses FAO, DAO or CAO.	Group 4 lower

## Determinants of firm performance

### Advantage over competition

Innovation capacity	Not sign
Product characteristics (design, etc.)	Not sign
Capacity to react to new consumer requests	Not sign
Share of first 3 clients in turnover (dependence to clients)	Group 1 less dependent

### Owner's characteristics

Age	Not sign
Level of education	Group 1 higher

# CHARACTERIZE RURAL FIRMS

## F-test of significant differences between group means

### Level of internationalization

Export status	Group 2 greater
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Import status	Group 4 lower
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Does FDI	Group 1 greater
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International sub-contracting status	Group 4 lower
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International collaboration status	Not sign
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### Factors favoring internationalisation

Owner has had experiences living/studying abroad	Group 1-2 > Group 3-4
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Owner speaks more than 3 languages	Group 1 stronger
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### Entrepreneurship

Rate of new firm creation	Group 1 > group 2 > Group 3 > Group 4
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Positive growth of new firms over 5 years	Not sign
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### Other regional economic indexes

Economic Development Index (DEC Canada)	Group 1 > group 2 > Group 3 > Group 4
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Vitality Index (Gouv. of Quebec)	group 2 > Group 3 > Group 4 and Group 1 > group 4
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# CHARACTERIZE RURAL FIRMS

## Summary of Results

- **Overall regional economic performance**  
(vitality Index, Economic Development Index, Entrepreneurship)
  - ▶ Follows level of rurality
- **Firm characteristics**
  - ▶ In general, urban regions (Group 1-2) stronger than far rural regions (Group 4)
  - ▶ Group 2 regions:
    - Product more tech sophisticated
    - Greater use of patents, copyrights, industrial designs
    - Export more
  - ▶ Group 4 regions less competitive:
    - Lower internationalisation status
    - Lesser innovation
    - Lower tech level



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# QUESTIONS and DISCUSSION

# Thank you!

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