

**A paper prepared for the symposium on  
Growing the Economy of Newfoundland and Labrador  
Corner Brook, Newfoundland and Labrador, Oct 2004**

**The New Economy – How Does  
Newfoundland and Labrador Measure Up?**

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**Memorial University**



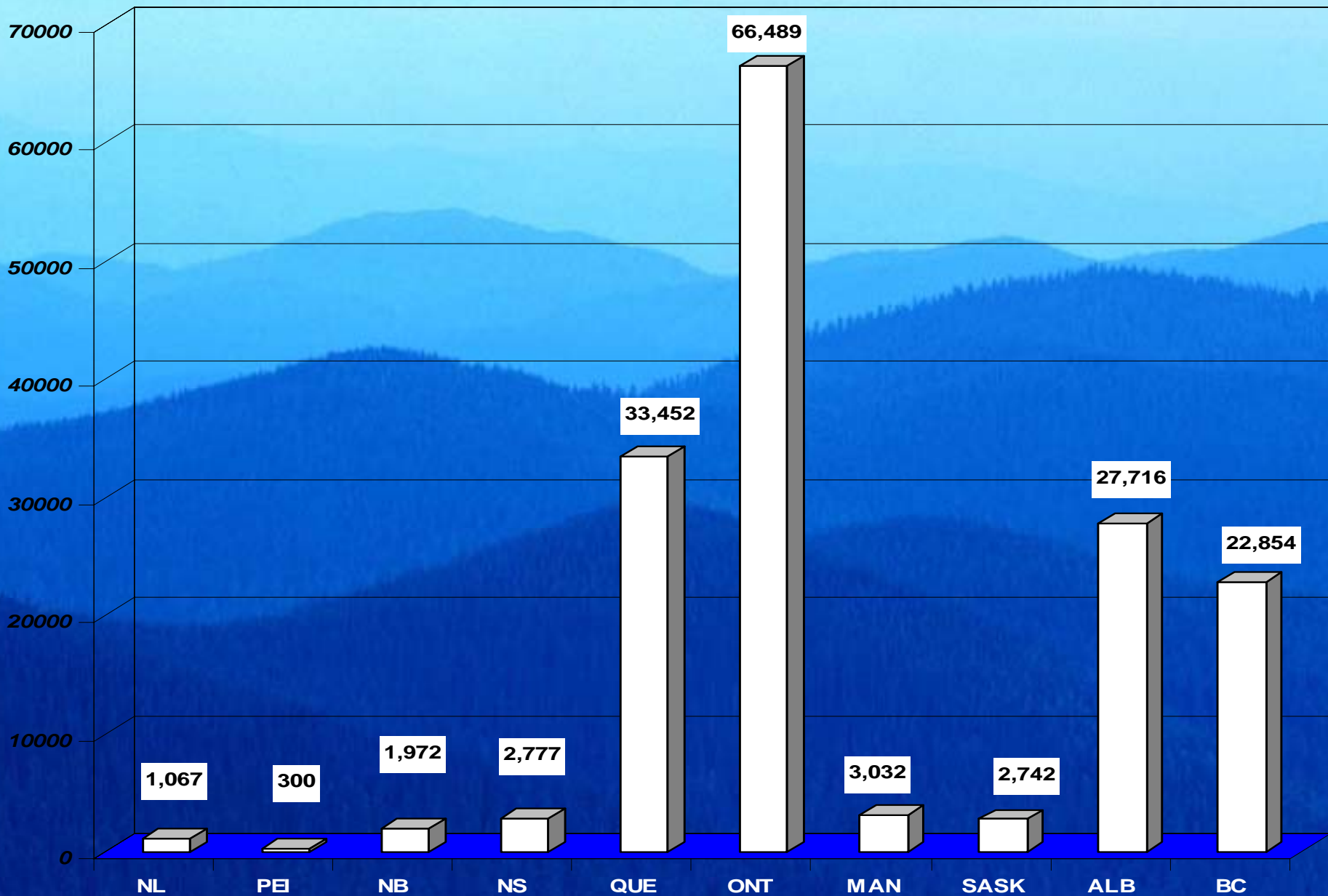
# Presentation Overview

- Introduction
- Defining the new economy
- Size and growth of new economy
- New Economy Framework
- Methodology
- Economy level results
- Disaggregate Industrial Analysis and Results
- Zonal Analysis and Results
- Policy Implications and Conclusions

# Defining the New Economy

- Being measured by examining establishment counts at the 4-digit SIC level
- The new economy consists of three distinct groups of industries (**Refer to Handout**)
  1. ICT (19 Industries)
    - i. Core ICT (4 industries)
    - ii. ICT Manufacturing (10 Industries)
    - iii. Other ICT (5 industries)
  2. Non-ICT Science-based Goods (29 Industries)
  3. Non-ICT Science-based Services (8 Industries)

# The Number of Firms in the New Economy 2001



## Growth Rates for New Economy Firms: 1997-2001

Region	1998	1999	2000	2001
Newfoundland and Labrador	28.2%	2.0%	10.9%	11.1%
Prince Edward Island	16.3%	2.6%	9.4%	17.2%
New Brunswick	30.8%	3.6%	16.5%	13.9%
Nova Scotia	21.5%	0.9%	21.7%	14.4%
Quebec	56.7%	4.1%	18.5%	10.9%
Ontario	36.4%	4.6%	24.3%	16.5%
Manitoba	24.4%	2.8%	16.2%	12.5%
Saskatchewan	27.8%	1.4%	14.7%	10.8%
Alberta	38.7%	3.9%	18.9%	16.2%
British Columbia	29.2%	3.7%	21.0%	15.6%
Canada	38.6%	3.9%	21.1%	14.8%

# New Economy Framework

Research approached draws on:

- OECD: “Measuring the ICT Sector” – 2000
- Beckstead & Gellatly: “The Growth and Development of New Economy Industries” – 2003
- Baldwin and Johnson: “The Defining Characteristics of Entrants in Science-based Industries” - 1999

# Methodology

**Change in NE Firms = National Share of Overall Firm Growth (NS)  
+ Composition Shift Effect (CSE) + Provincial Shift Effect (PSE)**

- NS – ceteris paribus, change in NE firms in each province should follow the overall firm growth in Canada
- CSE - the adjusts for the differences in industrial composition (NE vs other type firms) between the nation and each the respective province. This captures the effect of an area having a higher proportion of firms that are experiencing higher or lower growth.
- PSE - this captures other location effects and identifies leading and lagging provinces and industries – i.e., leading industries are industries with growth rates above those experienced nationally in comparable industries.

# Methodology

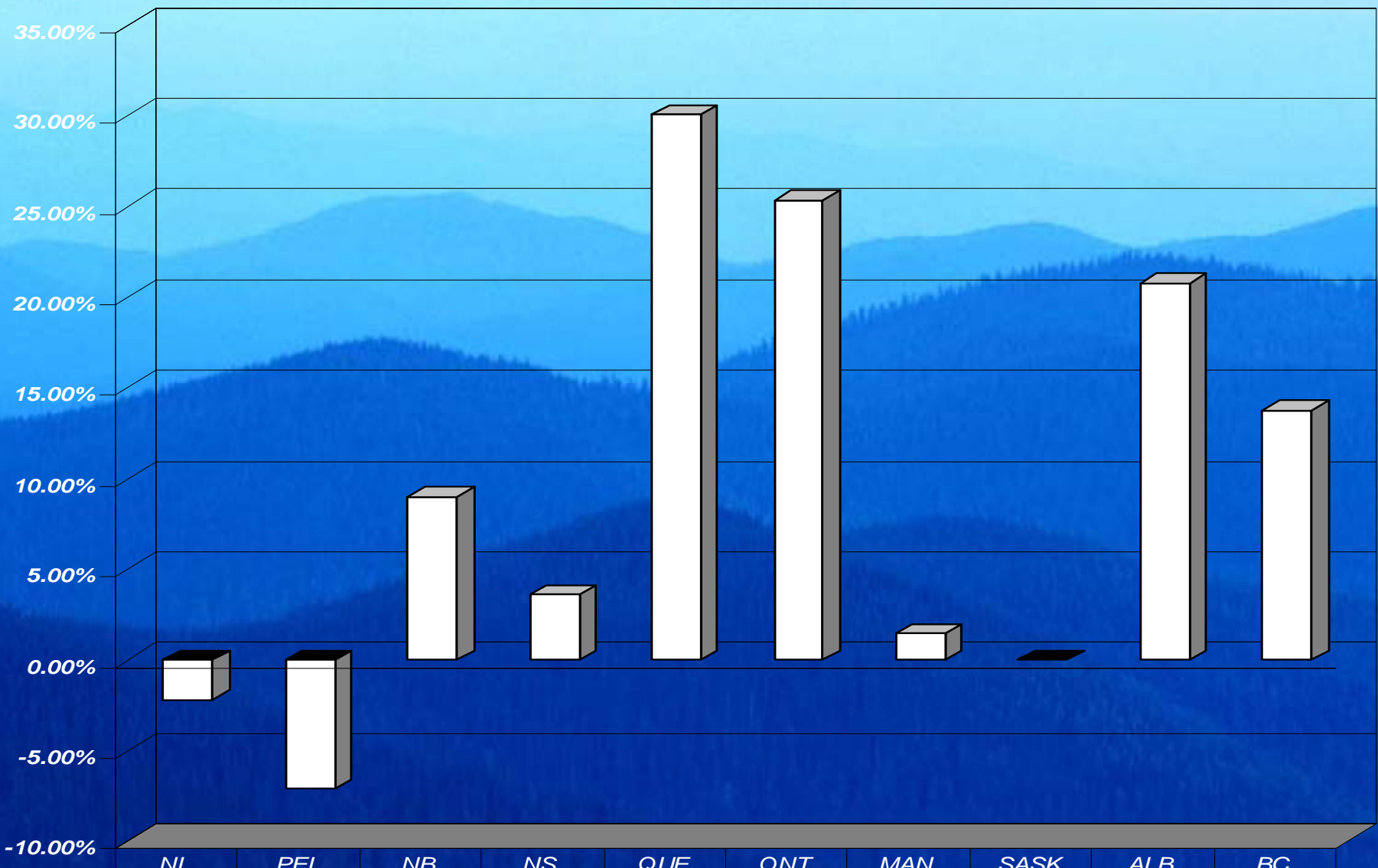
$$NS = f_i^{t-1} * \frac{F_i^t}{F_i^{t-1}}$$

$$CSE = f_i^{t-1} * \left( \frac{F_i^t}{F_i^{t-1}} - \frac{F_i^t}{F_i^{t-1}} \right)$$

$$PSE = f_i^{t-1} \cdot \left( \frac{f_i^t}{f_i^{t-1}} - \frac{F_i^t}{F_i^{t-1}} \right)$$

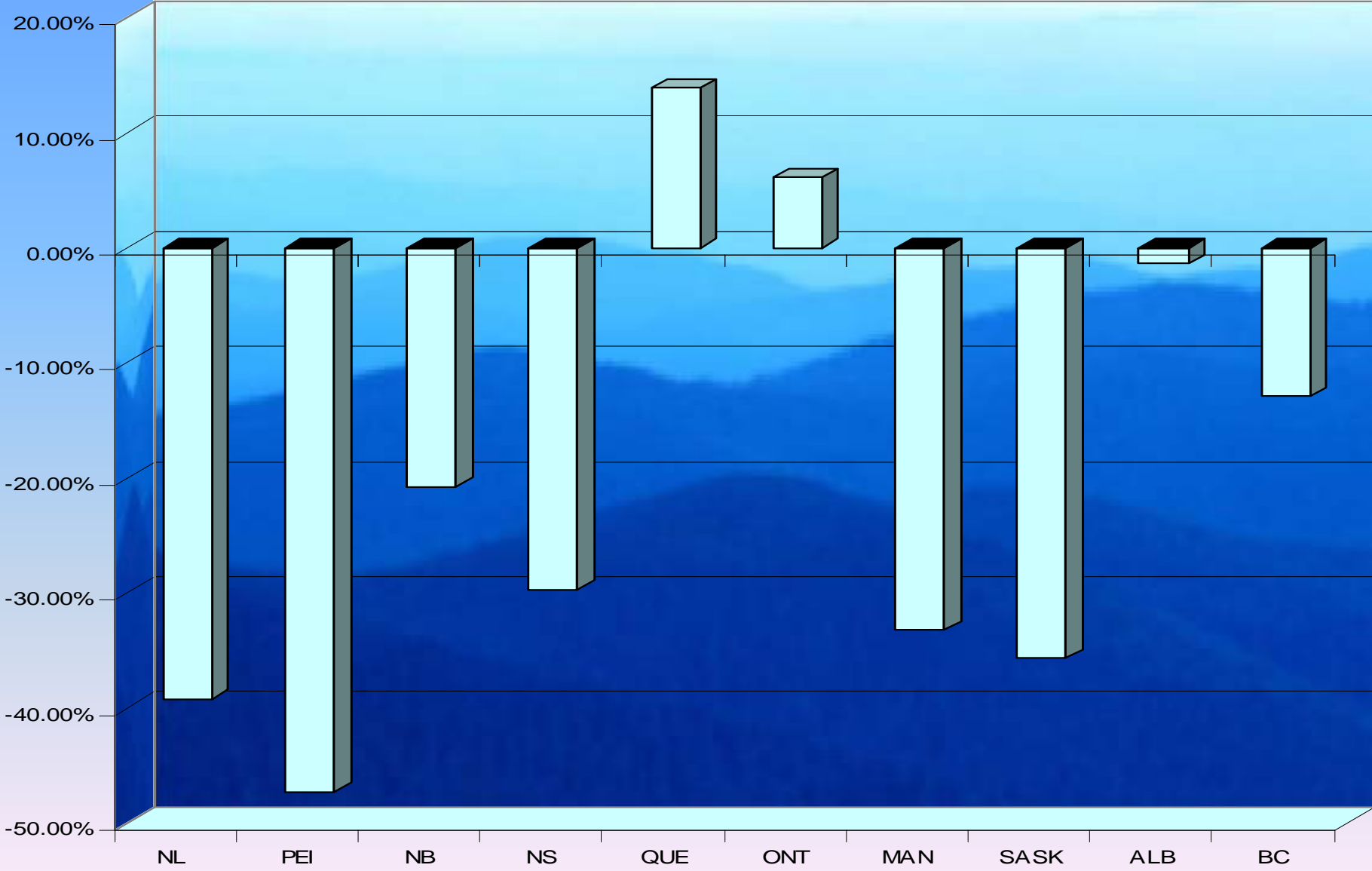


**Establishment of New Economy Firms 1997-2001  
Growth Above/Below National Average**



■ Series1	-2.16%	-7.09%	9.02%	3.61%	30.06%	25.33%	1.46%	-0.03%	20.78%	13.78%
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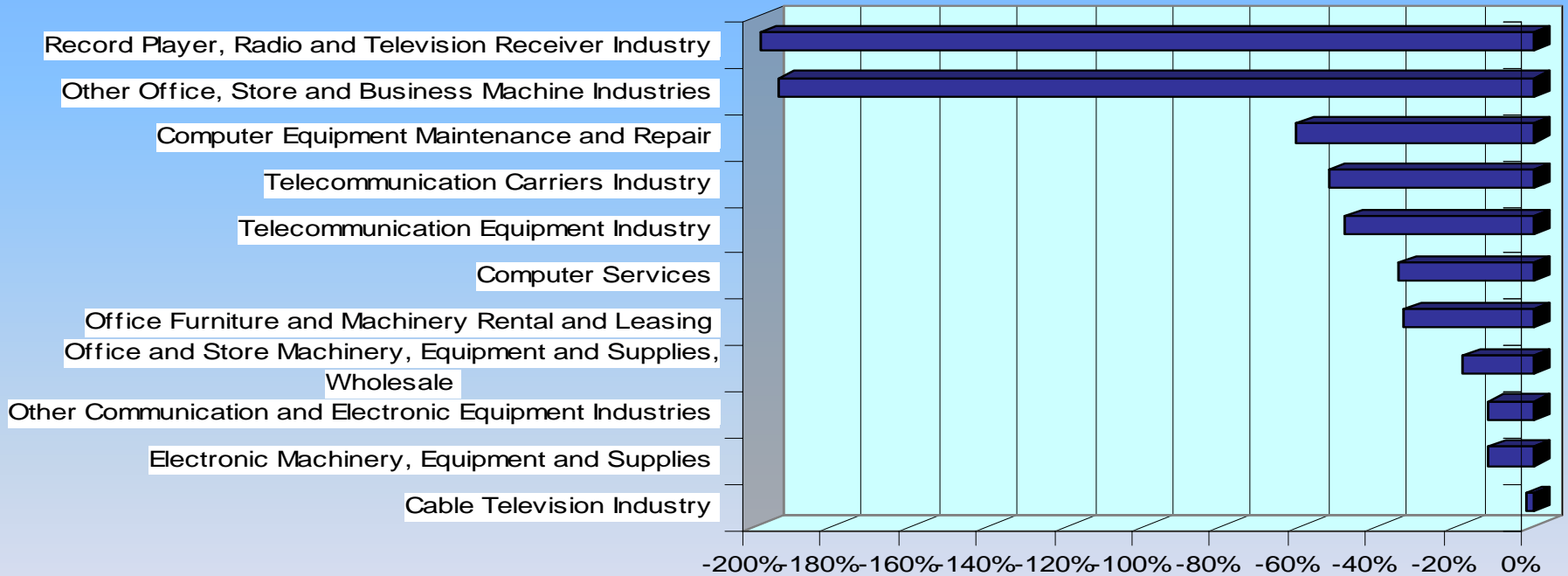
# New Economy Leading and Lagging Provinces



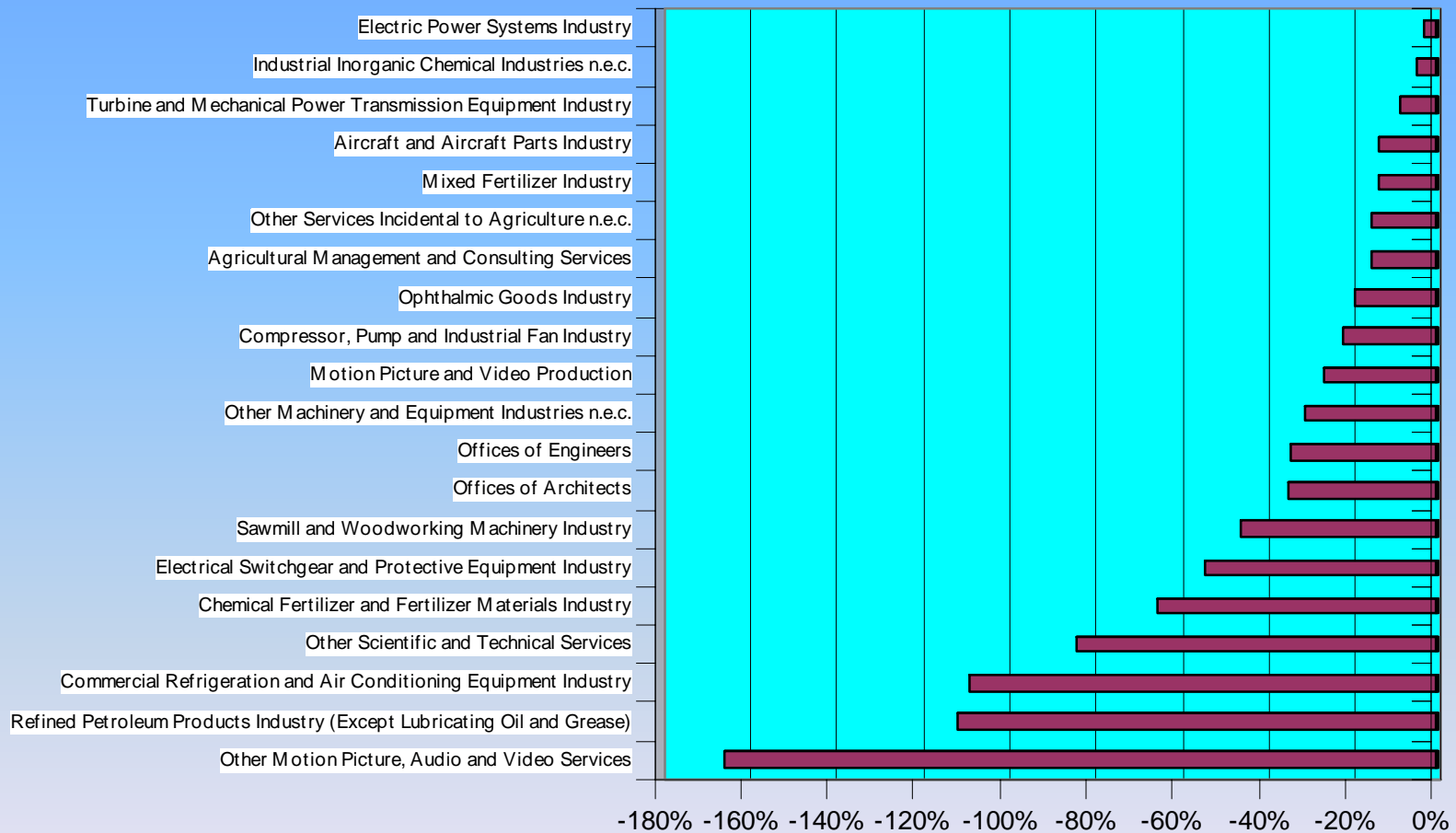
# Disaggregate Industrial Analysis

- The provincial analysis was also undertaken at a more disaggregate industrial level.
- Utilized the same basic methodology
- Results presented in graphical form below

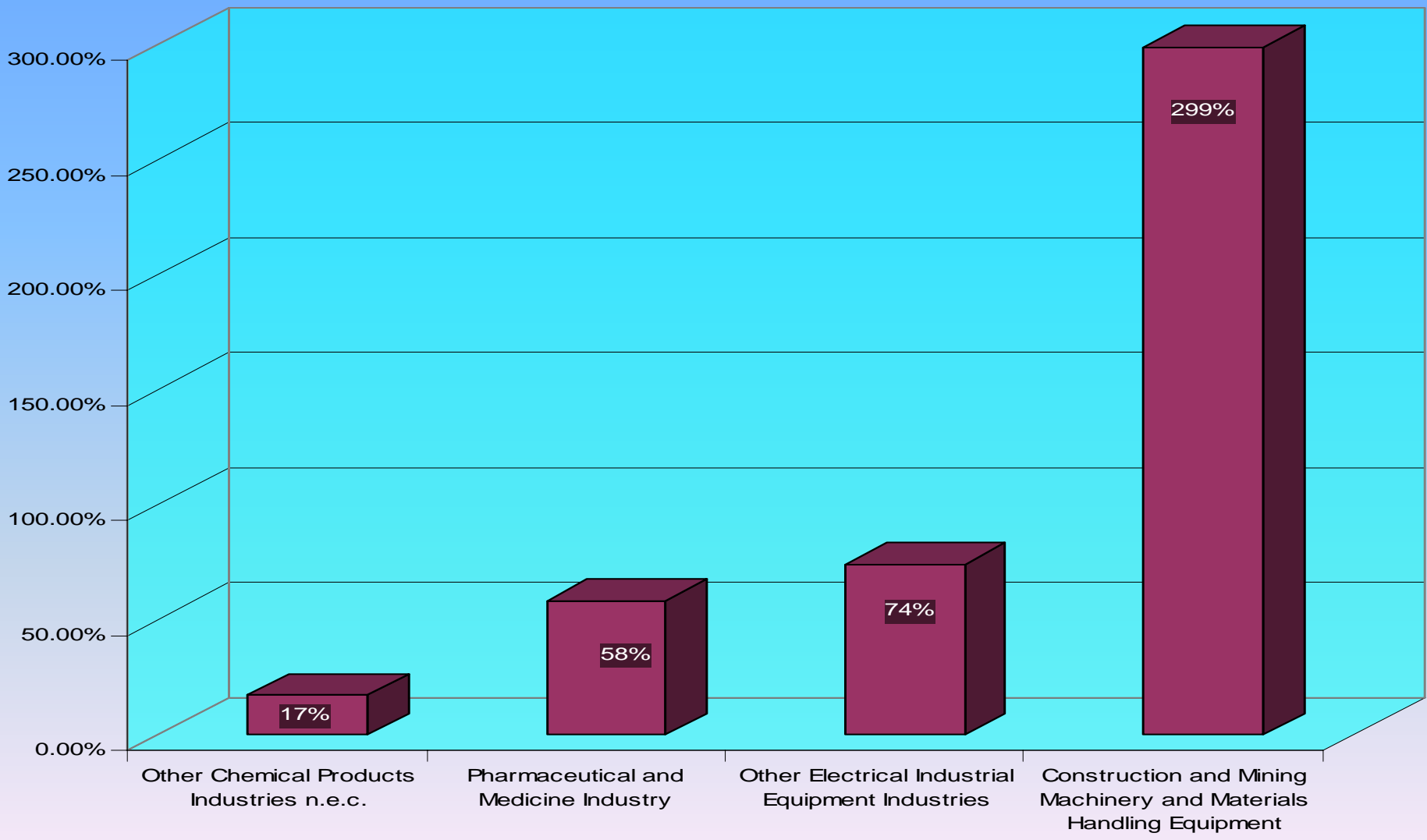
**ICT Sub-Sector Growth Differences**  
**(The Growth Rate in Newfoundland in Sector i Minus the Growth Rate in**  
**Canada in Sector i)**  
**Newfoundland and Labrador: 1997-2001**



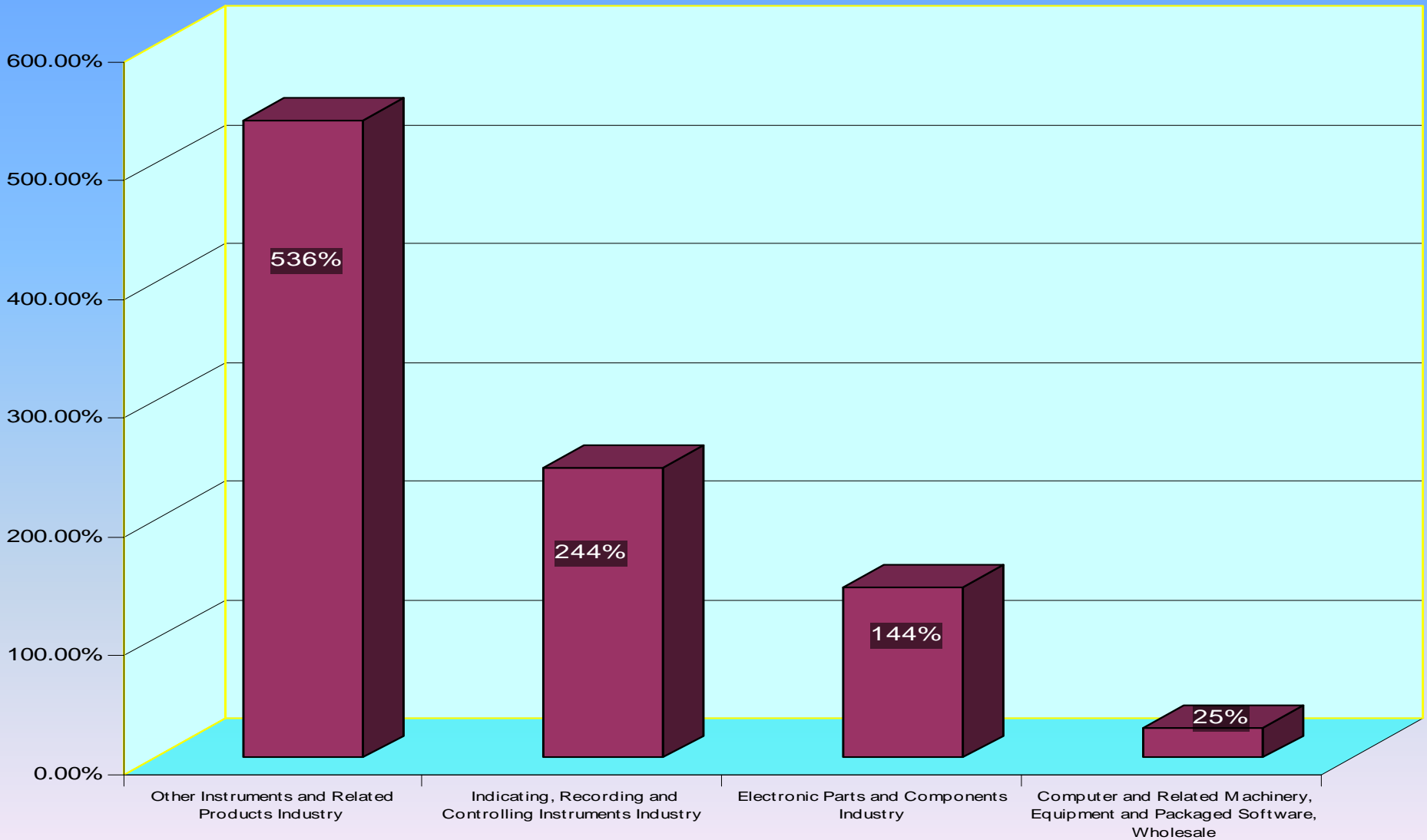
**Non-ICT Sub-Sector Growth Differences**  
**(The Growth Rate in Newfoundland in Sector i Minus the Growth Rate in Canada in Sector i)**  
**Newfoundland and Labrador, 1997 - 2001**



**Non-ICT Subsector Growth Differences**  
**(The Growth Rate in Newfoundland in Sector i Minus the Growth Rate in Canada in Sector i)**  
**Newfoundland and Labrador vs Canada, 1997 - 2000**



# ICT Subsector Growth Differences (The Growth Rate in Newfoundland in Sector i Minus the Growth Rate in Canada in Sector i) Newfoundland and Labrador vs Canada: 1997-2001



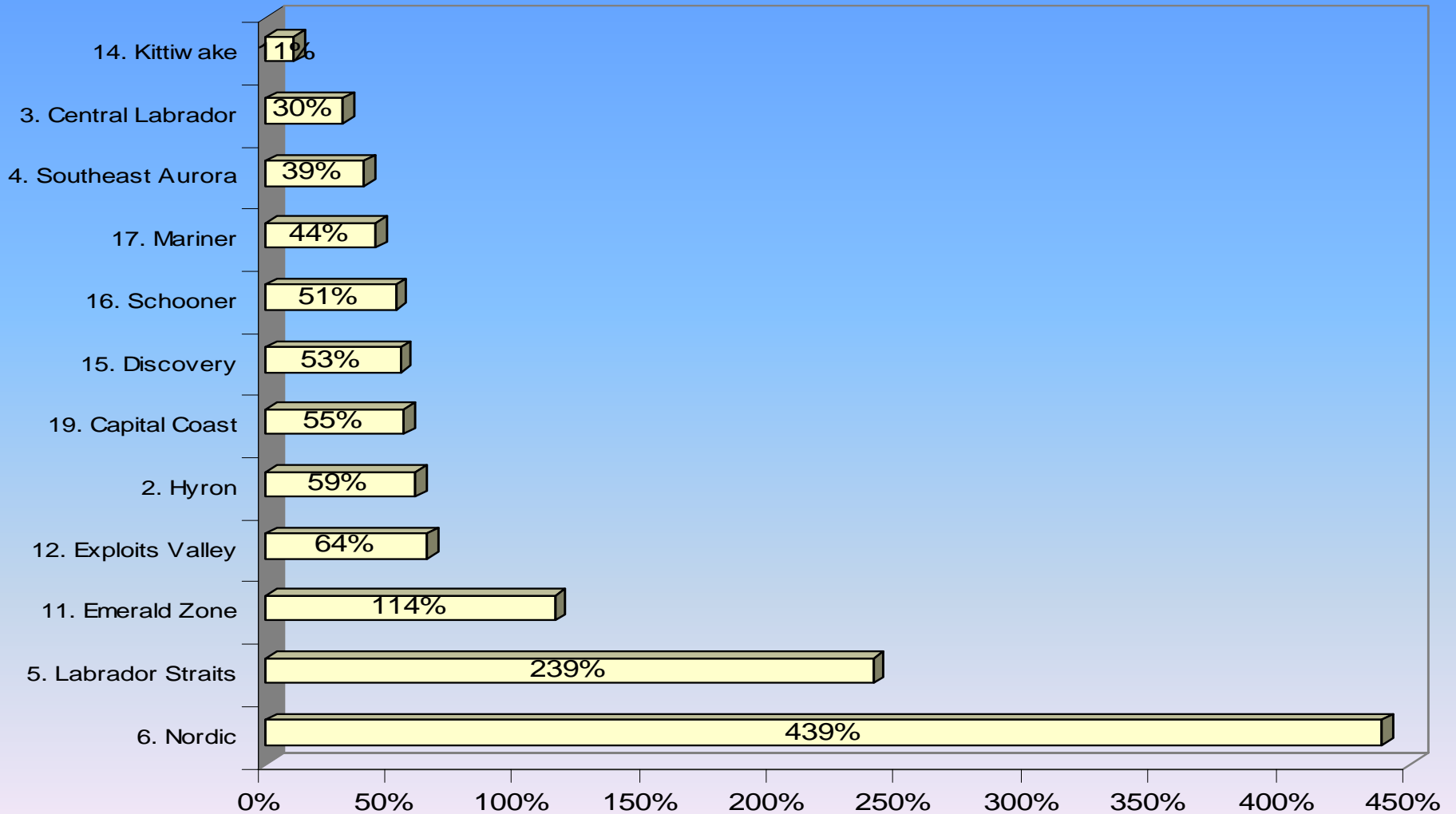
# Zonal Analysis

- The provincial analysis was also undertaken at a zone board level
- Utilized the same basic methodology
- Results presented in graphical form below



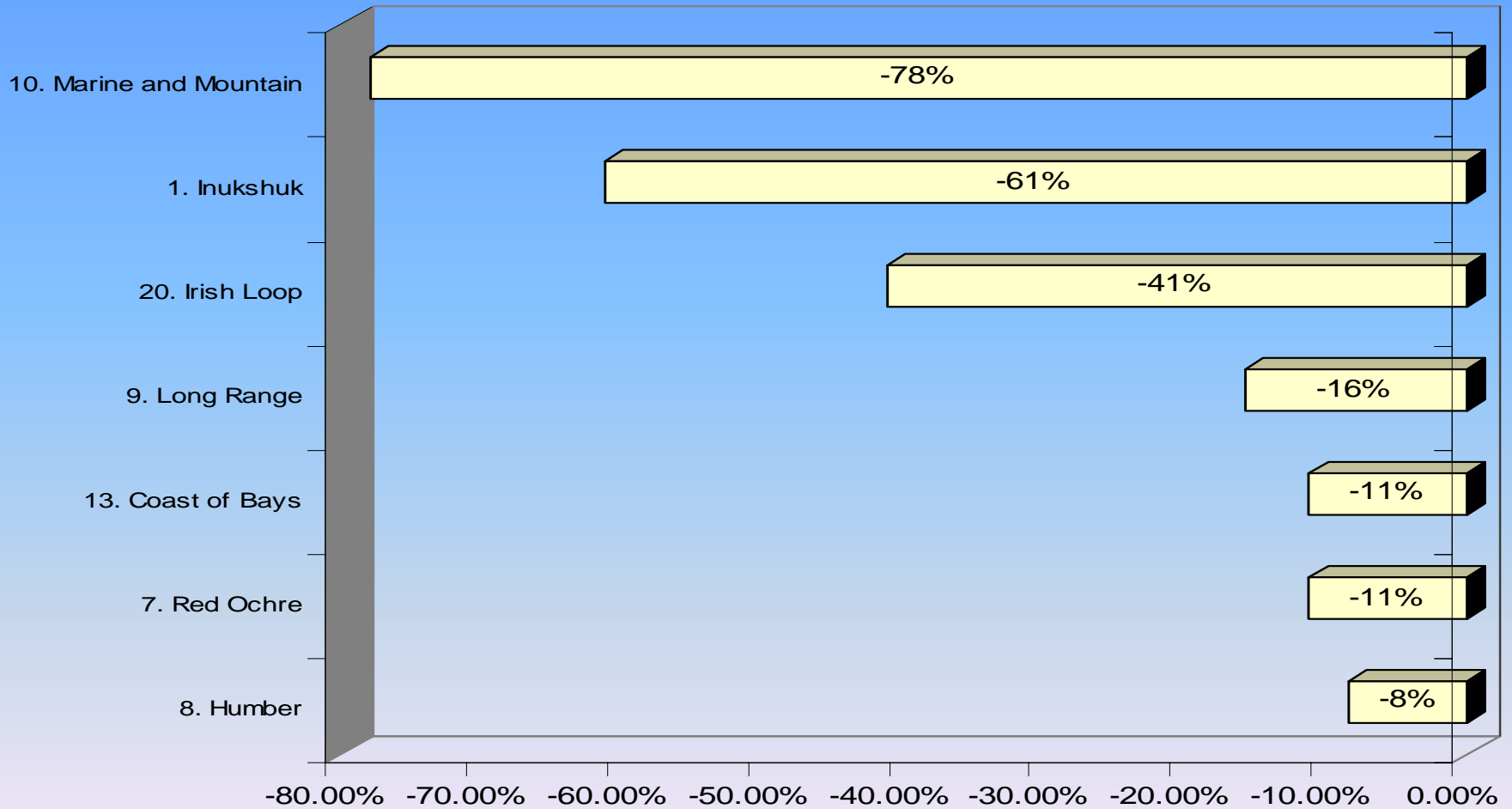
# Leading Zones

## Growth Above Provincial Average (Provincial Average: Growth in the Establishment of New Economy Firms), 1997-2001



# Lagging Zones

## Growth Below Provincial Average (Provincial Average Growth in the Establishment of New Economy Firms), 1997-2001



# **New Economy Firms Established from 1997 to 2001**

## **(Selected Zones)**

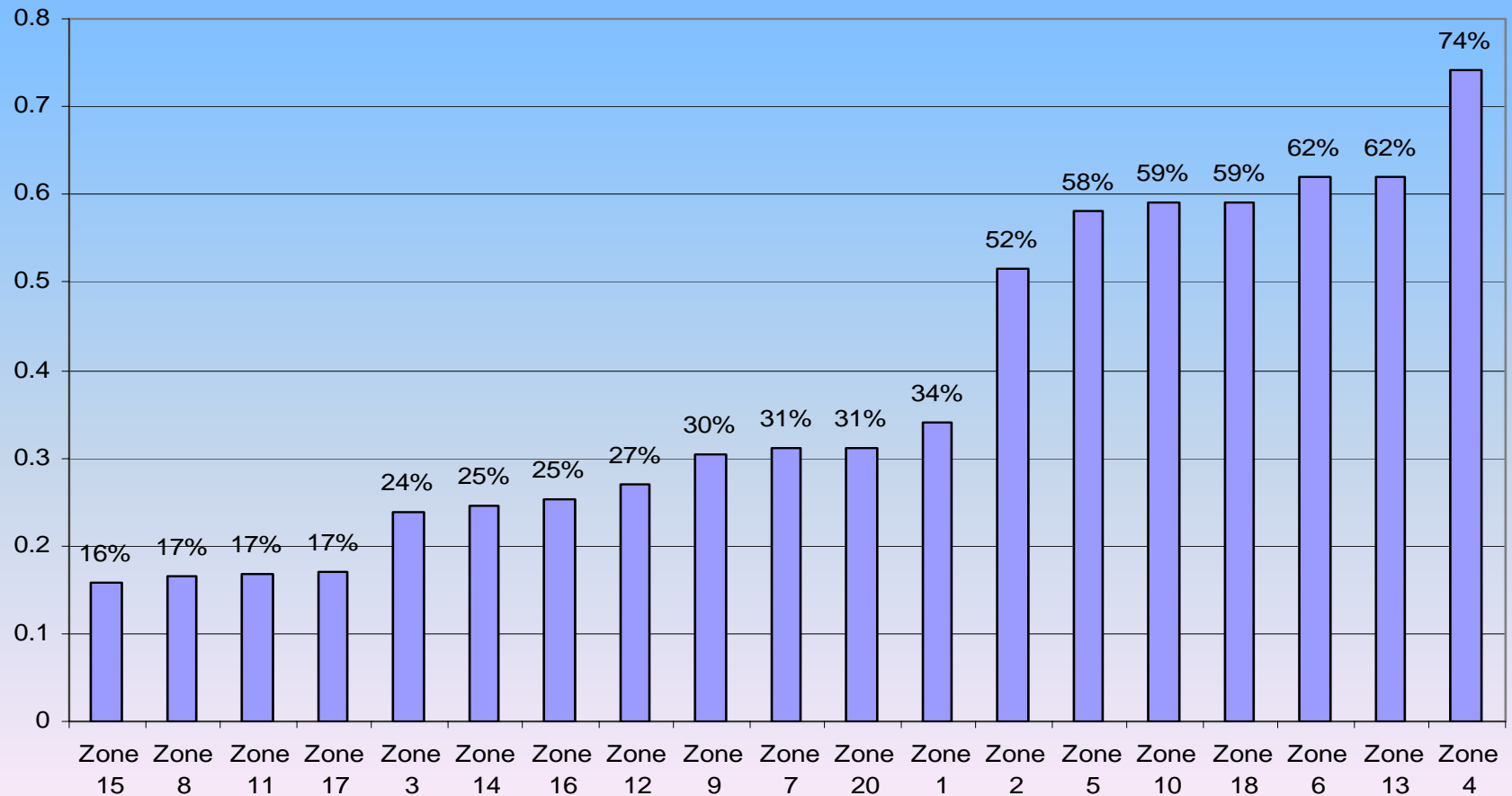
<b>Economic Zone</b>	<b>Total New Entrants</b>
19. Capital Coast Development Alliance	396
17. Mariner Resource Opportunities Network	22
14. Kittiwake Economic Development Corporation	21
8. Humber Economic Development Board	18
15. Discovery Regional Development Board	16
12. Exploits Valley Economic Development Corporation	15
3. Central Labrador Economic Development Board	11
16. Schooner Regional Development Corporation	9
11. Emerald Zone Corporation	7
2. Hyron Regional Economic Development Corporation	6
6. Nordic Economic Development Corporation	5

# Expected Number of New Economy Firms (Assuming Current Trends Continue)

<b>Selected Economic Zones</b>	<b>Expected Number of New Economy Firms</b>
19. Capital Coast Development Alliance	79.2
17. Mariner Resource Opportunities Network	4.4
14. Kittiwake Economic Development Corporation	4.2
8. Humber Economic Development Board	3.6
15. Discovery Regional Development Board	3.2
12. Exploits Valley Economic Development Corporation	3
3. Central Labrador Economic Development Board	2.2
16. Schooner Regional Development Corporation	1.8
11. Emerald Zone Corporation	1.4
2. Hyron Regional Economic Development Corporation	1.2

# Zonal Distribution of New Economy

Duncan's Index of Dissimilarity Applied to the New Economy  
(Gives the Percentage in each Zone Which Would have to be Reallocated to  
Produce the Same Distribution as in Zone 19)



# Conclusion and Policy Implications

- Newfoundland and Labrador not performing well in terms of growth of new economy firms relative to Canadian average
- In some sectors Newfoundland and Labrador is above the national average
- Not all zones are performing equally; Capital Coast dominate in terms of numbers of firms
- While much more analysis required, policies directed at specific zones and specific industries hold the more promise for increasing the contribution of new economy firms to the growth of businesses within Newfoundland and Labrador