Common Legacies: Lessons from the "Mature" ONRIS Industries

Peter Warrian & Celine Mulhern University of Toronto

The ONRIS "Mature" Industries:

Aerospace

Automotive parts

Mining

Steel

Gertler's Five "L"s Learning Leadership Labour Location Lessons for Law/Policy Makers

Prefaced by a sixth "L"...

"Legacies"

Common Legacies

"Internal" or Industry-Based Legacies

Vertical Production Systems

 Simple "Supplier" Mentality among Tier 1-2-3 (as opposed to a more complex and innovative approach toward production)

"External" or Public Policy Legacies
University, college, programmatic gaps between firms and the public sector

"L" #1: Learning and Shifting Production Processes

From vertical to horizontal production:

OEMs download manufacturing responsibilities Suppliers must be highly absorptive of new codified knowledge

Suppliers require greater in-house KNOW-HOW innovation capabilities

Tiers 1-2-3 suppliers required to have more interaction with each other and OEMs than before

"L" #2: Leadership

Variance from industry to industry

 Variance between different tiers within a single industry

"L" #3: Labour

Greatest common problem: serious shortage of skilled workers Main "external" factor impairing transition: disconnect between mature industries and post-sec education system and government research institutions

"L" #4: The Location of Production

QUESTION: Clusters? Innovation systems? All of the above? ANSWER: It depends on the level of knowledge in question R&D: Global innovation systems Tacit Know-How: Very significant clustering patterns in Windsor, Golden Horseshoe/GTA, Sudbury, Montreal

"L" #5: Lessons for law/policy makers Summary of Common Challenges Facing "Innovative" Mature Industries Business structures ill-adapted to learning and innovation demands Labour shortages Inadequate interaction between mature industries and post-secondary institutions, government research institutions

Lessons...

 Use public education system to improve labour supply:
 Greater emphasis on traditional industrial studies in universities, community colleges
 Emphasize traditional industrial trades in secondary school career counselling programs

Lessons...

- Develop networking forums to facilitate smoother and more consistent knowhow transfers
 - Ie. Materials and Manufacturing Ontario, one of four provincial Centres of Excellence.
 - Ie. McMaster Steel Research Centre creates collaboration between technical staff and scientists

Lessons...

 Facilitate opportunities for inter-industry learning

 Ie. Expose companies to mature industry success story strategies, such as The Dofasco Way

Conclusion

Legacies underlie every "L" Distinction: Clusters in Formation v. Industries Adapting to the New **Economy Paradigm** Policy responses should address the added hurdle of "legacies" facing mature industries

THANK YOU!

For questions/comments please contact us at:

peterwarrian@sympatico.ca

c.mulhern@utoronto.ca