

Business Networks, Foreign Investment, and Enclave Formation

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Foreign Direct Investment: the Road to the Future Canadian Innovation Economy



Prime Minister Justin Trudeau takes part in a virtual reality demonstration as he appears in the opening of the new Google Canada Development headquarters in Kitchener, Ont., on Thursday, January 14, 2016.

(Nathan Denette/THE CANADIAN PRESS)

Well - is it?

Mainstream Economics: FDI is the development dream comes true:

- MNCs are “conduits that let productive ideas flow across national borders” (Romer 1993, 544)
- Access to foreign technologies that is both paid for and operated by advanced multinational corporations (MNCs)
- So yes there is such a thing as a free lunch (and Robert Heinlein “**TANSTAAFL**” was wrong)
- Hence, if no innovation leapfrogging happens the fault lies at the host country
 - Poor institutions
 - Insufficient absorptive capacity

Reality, however, suggests:

- Apart from very few (highly celebrated) cases – very low level of technology transfer or other positive externalities to the host country and industry
- Enclave formation is disturbingly common
- So are most of the world countries just not up to spec?

It is all in the Networks, Stupid!

We contend that *unless* a proactive policy is in place to embed them into the local economy enclave formation should be the rational expectation

Why?

MNCs are NOT conduits, they are reservoirs of knowledge; the conduits are meaningful collaboration with local actors. However rational MNCs will opt to limit investment in developing them:

Need to counter for high risk and high uncertainty

+

Low knowledge of capacity and trustworthiness of local supplier

=

Replication of supply chains with foreign organizations that are already known and trusted; that is the building of *isolated enclave that then reproduce themselves* leaving unformed the potential conduits of ideas and knowledge into the local economy

Assumptions about the Behavior of MNCs

Economic Models

Network Considerations

Information about potential partners	Selection of partners is rational and knowledge of local firms is good	Selection is “boundedly” rational, with knowledge of local firms and informational costs mediated by existing relationships
Market Interactions	Arm’s-length exchange with local partners; interactions are the same each time	Market exchange is embedded in social relationships and affected by risk, uncertainty, and transaction costs; repeated interactions improve knowledge, raise trust, and lower transaction costs
Presence of Risk and Uncertainty	Risk or uncertainty stemming from asymmetrical information not incorporated into models	Risk and uncertainty play critical role; reduced by networks linking firms together

Cases

ITC in Guadalajara, Mexico (1990s-2000s)

ITC in Costa Rica (1990s-2000s)

Automotive in Ontario (1965-1980s)

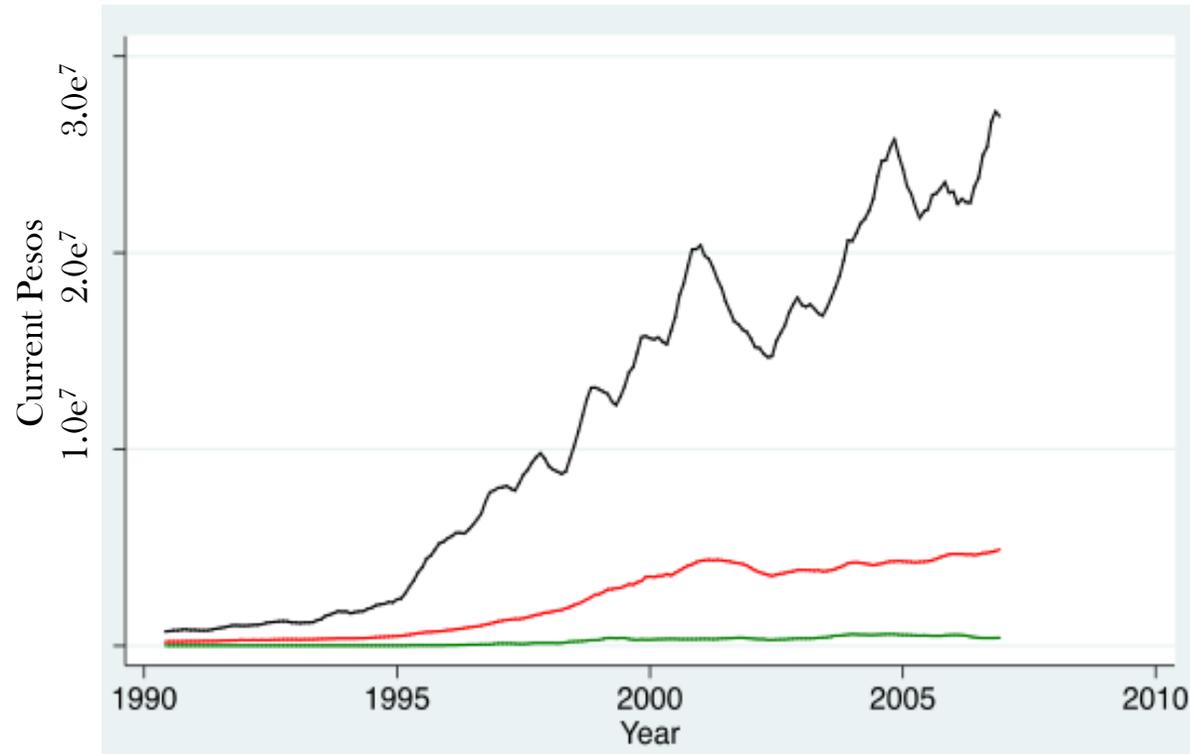
Variation in: developmental level, sector, time of sector in host country, culture, legal institutions...

Cases highlight: thought processes of executives through interviews (Mexico); documented knowledge flows with social network analysis (Costa Rica); economic consequences for local firms (Canada)

1. Enclave Formation in Mexico's "Silicon Valley"



Value in the Mexican Electronics Sector



Domestic Value Added — Foreign Inputs —
Domestic Inputs —

(5-year running means; source: INEGI)

Existing explanations:

- Cost of labor
- Low levels of human capital / education
- Lack of absorptive capacity

These assume:

- Firms have good information about potential suppliers
- Their decisions are based on this

Multinationals relied on existing, internationally-oriented business ties to develop supply chains

“Since we were the OEMs here, we began attracting the first tier of suppliers chain. We worked *together* with IBM. It was *unthinkable*. You know, how can you have HP working together with IBM? We’re competitors. But we understood that there is a way to compete and cooperate – we called it ‘co-competing.’ Cooperation with competition....”
-Former HP Executive

MNCs have “a lack of understanding of the current offerings of domestic suppliers”
- Executive from large contract manufacturer

Potential domestic suppliers did not understand or know how to penetrate MNC networks

Supply chain relations of the multinationals are “opaque” to outsiders

- Incubator director, ex-employee in MNC

“The smaller businesses have fewer ties are have to wait to be invited into a chain of production”

- IT industry group director

2. ITC Cluster in Costa Rica



International business networks shaped which firms located in the cluster...

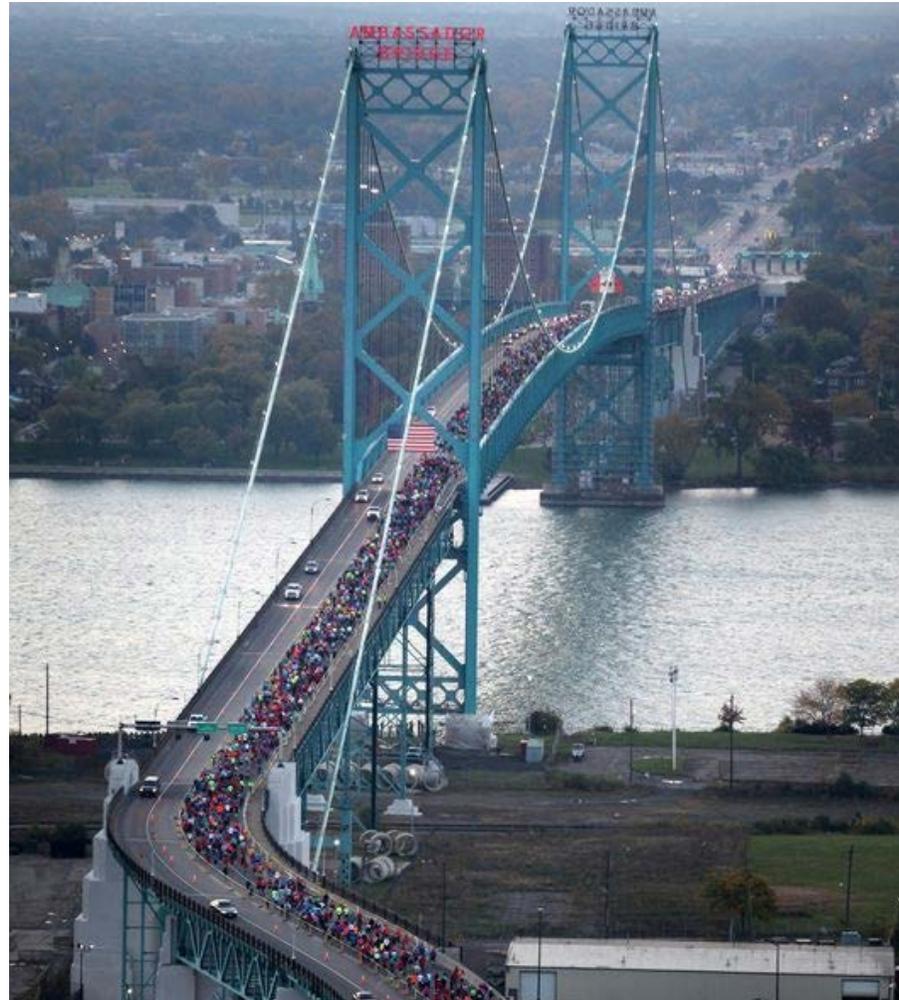
“Informal network of contacts and knowledge” around multinational companies determined the nature of investment and business operations in the country (Paus 2005)

Technology transferring relationships in cluster were between foreign firms...

87 percent of all knowledge transferring relationships held by MNCs in Costa Rica were with *other foreign subsidiaries* operating there

2/3 of these knowledge transferring relations were recognized by the MNCs as being with other foreign firms they identified as their *competitors* (Giuliani 2008)

3. Ontario Automotive post-1965 Auto-Pact



Canadian supplier firms were not integrated into higher value-added operations...

Canadian component suppliers provide relatively low value-added goods to first-tier suppliers, but they were largely excluded from “strong linkages and knowledge flows” with OEMs (Rutherford and Holmes 2008)

Even Magna reported at the time that the company “performed little, if any, R&D in the strict sense” - Magna co-founder

Supply chains were dominated by network inertia...

- “Automotive OEMs were not aware of the presence or capabilities of even globally successful, locally based [Canadian] firms” (Rutherford and Holmes 2008)
- American Assemblers clung to existing supplier relationships, leaving little opening for Canadian firms (Herrigel 2004)

Implications and Conclusions

- Policy toward FDI attraction must consider network dynamics, not simply absorptive capacity
- Canada and other wealthy economies can suffer from enclave formation/perpetuation, in spite of high levels of human capital
- Pattern that is observable across sectors, including ICT investment and non-traditional manufacturing

Future research question:

Is the promise of changing enclave dynamics rely on local/provincial or national/federal levels of government

Current study with our collaborators in China + the Canadian Case suggests that the hope is in the local level, mix of politics, line duties, and... knowledge