Paramètres de collusion dans l'industrie de la construction au Québec

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Le problème

- Scandale: Collusion, corruption et impunité dans l'industrie de la construction
- Un système complexe de lois et de lignes directrices régissant l'industrie
- Un manque de surveillance
- *Commission d'enquête sur l'octroi et la gestion des contrats publics dans l'industrie de la construction* (CEIC), 2011-2015
  - Crime organisé; scandale politique; crime économique?
  - Spécifique –> Général / Général –> Spécifique

Le programme

- Équipe de recherche sur la collusion (ERC)
- CRSH Savoir (2013-2017): *Tracking Collusion in Quebec's Construction Industry*
- 2018… Développement de partenariat du CRSH (Transfert des connaissances)

Le programme (suite)

- Industrie de la construction, Québec, 2002-2013

- Objectifs:

  - *Court terme:* Examiner comment certains concurrents coopèrent plutôt que de compétitionner (via la collusion ou la corruption)

  - *Long terme:* Création d'un système de vérification des contrats ou soumissions afin d'identifier des indicateurs de collusion

La thèse et l’approche

- *Too close for comfort…* qui se ressemble s'assemble

- Comment les entreprises soumissionnent de manières similaires?

Les sources

- Industrie de la construction, Québec, 2002-2013
  - 6017 appels d’offres
  - 1124 entreprise
  - 39 villes > 20 000 personnes
  - pavages, trottoirs, égouts et aqueducs

  - NB: Des villes majeures sont manquantes: Baie-Comeau, Chateauguay et Montréal

La méthodologie

- Mesures économiques
  - Parts de marché
  - Taux de réussite aux soumissions
  - Coefficient de variation

* Mesures de réseau (Équivalence structurale)
  - *Block analysis*
  - *Clustering*
  - *Core positioning*
  - *Jaccard coefficient*

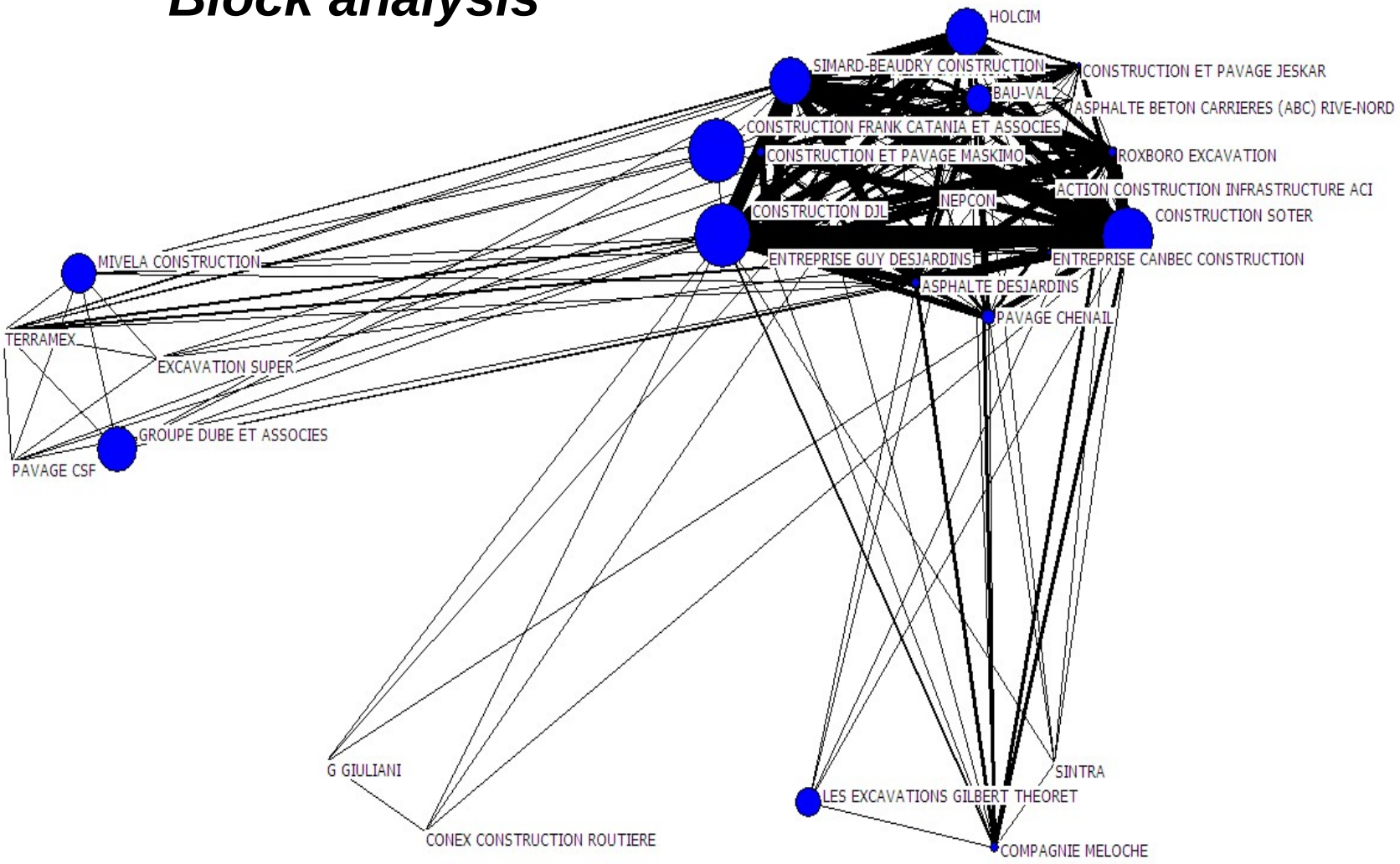
  - Année d’élection
  - UPAC

La structure des soumissions

Compagnies	MTL-10-1625	MTL-10-1626	MTL-10-1710	MTL-10-1711	MTL-10-1714	MTL-11-1733	MTL-11-1762
ALI EXCAVATION							
ASPHALTE BETON CARRIERES (ABC) RIVE-NORD							1
ASPHALTE DESJARDINS						1	
BAU-VAL	1	1			1		
BP ASPHALTE							1
CONSTRUCTION ARCTIC BELUGA							
CONSTRUCTION BRICON					1	1	
CONSTRUCTION DJL	1	1			1	1	
CONSTRUCTION ET PAVAGE JESKAR		1					
CONSTRUCTION ET PAVAGE MASKIMO							
CONSTRUCTION SOTER	1	1			1	1	
ENTREPRENEURS BUCARO							
ENTREPRISE CANBEC CONSTRUCTION	1	1			1	1	
ENTREPRISE CATCAN						1	

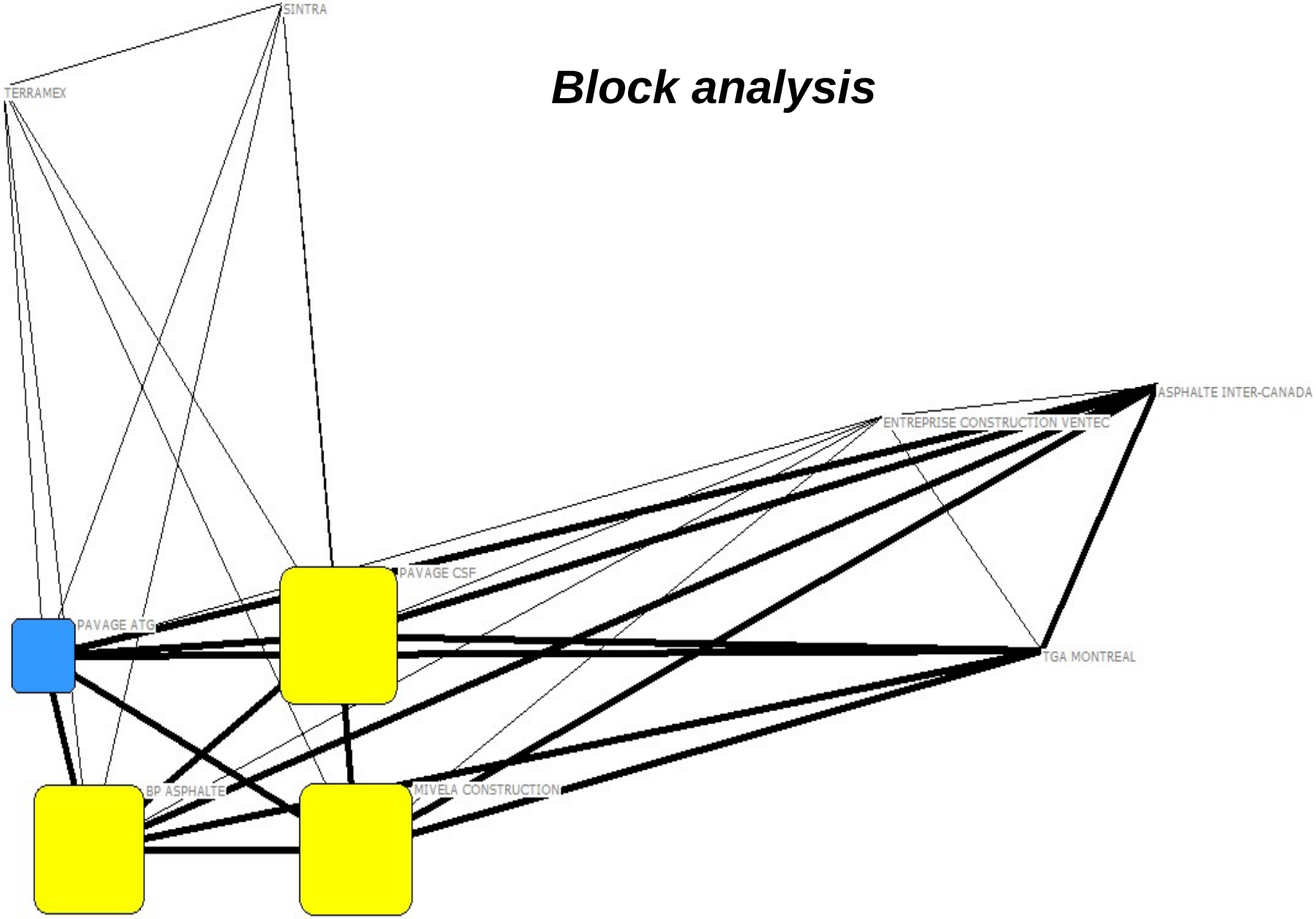
Montréal- Pavage: 2007

Block analysis



Montréal- Trottoirs: 2004

Block analysis



Laval: Core/Periphery

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Bid-rigging networks and state-corporate crime in the construction industry

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ABSTRACT

This study highlights the symbiotic relationship that may arise between political and business actors in conspiracies organized around public construction bids. Based on a core-periphery social network analysis, the study tracks the emergence of such a conspiracy in the city of Laval (Canada) by illustrating the evolution of bid-rigging networks revolving around suspected and persistent acts of corruption, bid-rigging, and bribery. To assess this process, the study monitors irregular bidding indicators across a data set compiled from more than 7000 public construction tenders that were processed by the city from 1966 to 2013. Findings reveal that firms suspected of bid-rigging activities were perennial core participants largely as a result of a state-corporate crime system that served as the guiding force for agreements between the main construction entrepreneurs.

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As a result of state dependency (Gobert and Punch, 2007), large flows of money (Kenny, 2007), inelastic demand (Abrantes-Metz and Bajari, 2009; Porter and Zona, 1992), and a highly-competitive environment (Goldstock et al., 1989), the public construction market is often considered to be one of the most criminally-inclined industries on the international scene. Various forms of bid-rigging, price-fixing, corruption, and organized crime intrusion have been investigated in Italy (Savona, 2009; Varese, 2011), the Netherlands (Den Heuvel, 2005; Dorée, 2004), China (Ding, 2001; Zou, 2006; Weishaar, 2013), Japan (Hill, 2003; McCormack, 1995; Weishaar, 2013), Australia (Zarkada-Fraser and Skitmore, 2000), and the United States (Goldstock et al., 1989; Gupta, 2001). One of the main criminal problems that emerges in construction industries is bid-rigging, a process by which competing actors cooperate with each other by establishing their own price-fixing mechanisms in order to breach a public procurement system. Private and public entities involved in contracting processes are the primary victims of successful bid-rigging schemes, since cooperating bidders are generally in a position to raise the costs of contracts to above market rates (Brockmann, 2009). When a collusive system becomes successful over an extended period of time and across regular tenders, a small group of construction firms (a cartel) may take turns in winning contracts in a rotational bidding format. Many strategies can be put into place by such collusive actors to prevent both detection by authorities and defection by cartel members. Agreements specifying that losing firms will submit phantom bids can be established between firms, which would instill a false impression of competition in the bidding process. Subsequently, losing firms often receive subcontracts from the winning firm. Portions of winning firms' profits can also be allotted to losing firms in the form of kickbacks (Goldstock et al., 1989).

The current study addresses the network patterns that underlie the making and sustainment of bid-rigging conspiracies. The proposed framework is designed to track bid-rigging patterns as a social-network construct. Data was compiled through archival research in which information on all construction contracts awarded by public procurement in the history (from 1965 to 2013) of what appeared to be one of Canada's most corrupt and rigged municipalities (Laval, the 13th largest city in the country) were collected. Based on a core-periphery social network analysis of how firms compete against one another, the study's main goal is to assess the structural evolution of suspected bid-rigging networks both within three distinct construction sectors (paving, sewer and lighting) and across a large-scale conspiracy that also involved corruption and bribery activities. By placing Laval's bid-rigging activities within its larger criminal ecosystem, the study challenges two dominant assumptions of the bid-rigging phenomenon.

First, if antitrust activities (including bid-rigging) have traditionally been conceived as illegal arrangements between private business competitors at the expense of the contract-giving party

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Expliquer la part du marché dans 39 villes

	Model 1		Model 2	
	Coef.	SE	Coef.	SE
Niveau: entreprise				
N soumissions	0.25***	(0.01)	0.25***	(0.03)
N villes	0.07***	(0.01)	0.07***	(0.01)
Pavage	0.23	(0.10)	0.25	(0.16)
Taux success	11.54***	(4.74)	11.61***	(0.83)
Élection				
2002-2005	0.14	(0.12)	0.18	(0.18)
2006-2009	-0.06	(0.12)	-0.04	(0.17)
Structure des soumission				
Clustering (triad closure)	0.43***	(1.34)	0.47***	(0.86)
Jaccard (Equiv. struc.)	1.33	(0.00)	0.93	(0.08)
Niveau: ville				
Cible (UPAC)	-0.48	(0.31)	-0.54*	(0.31)
Interaction				
Jaccard × Cible (UPAC)			2.80***	(1.27)
Intercept	-10.29***	(0.37)	-10.43***	(0.38)
AIC	74666.47		74663.70	
BIC	74746.90		74750.83	
Log likelihood	-37321.24***		-37318.85***	

Conclusion

- La concurrence est censée générer des différences entre les participants

- Dans les secteurs d’affaires, la déviance apparaît lorsque les tendances entre les concurrents sont trop similaires...