A comparative analysis of the dynamics of interlocks among immigrant organizations

Matteo Gagliolo^{1,2}, Tom Lenaerts², and Dirk Jacobs¹

¹Group for research on Ethnic Relations, Migration and Equality, (GERME), Institute of Sociology,

²Machine Learning Group (MLG), Computer Science Department, Université Libre de Bruxelles (ULB), Brussels, Belgium

Social capital is naturally embedded in social networks. In his famous work on the causal relationship between "bridging" social capital (e.g., associational life), trust, and civic behavior, Putnam [1993] did not investigate the structural aspect of such networks. Recently, the relationship between associational life and civicness of ethnic minority groups in Europe has been investigated [Fennema and Tillie, 2001; Jacobs et al., 2004; Vermeulen and Berger, 2008], without reaching uniform conclusions. In this work, simple structural properties of the network of interlocking directorates among ethnic associations are used as a proxy of the social capital of the corresponding minority group. We pursue this line further, arguing that more advanced models may consistently predict differences among the studied communities, and look at the structure of such networks, but also at the dynamics that produced it. Here we present results with a stochastic actor-based model, SIENA [Snijders et al., 2010], which estimates the effect of actor covariates and local structure on network evolution. We model the dynamics of the full twomode network among directors and boards of voluntary associations, including the structural effects proposed by [Koskinen and Edling, 2012], and considering the political orientation of associations as a covariate. Using data from [Vermeulen and Berger, 2008], we compare the evolution of interlocks among Turkish associations in two European capitals, and explain the noticeable difference in structure by looking at statistically significant differences among the estimated effects. In the longer term we intend to relate the dynamics of these networks to the civic behavior of the corresponding communities.

Keywords: Social Capital, Interlocking Directorates, 2-Mode Networks, Siena, Dynamic Network Analysis.

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References

- Meindert Fennema and Jean Tillie. Civic community, political participation and political trust of ethnic groups. *Connections*, 24(1):26–41, 2001. URL http://www.insna.org/PDF/Connections/v24/2001_I-1_26-41.pdf.
- D. Jacobs, K. Phalet, and M. Swyngedouw. Associational membership and political involvement among ethnic minority groups in brussels. *Journal of Ethnic and Migration Studies*, 30(3):543–559, 2004. URL http://dx.doi.org/10.1080/13691830410001682089.
- Johan Koskinen and Christofer Edling. Modelling the evolution of a bipartite network peer referral in interlocking directorates. *Social Networks*, 34: 309–322, July 2012. URL http://dx.doi.org/10.1016/j.socnet. 2010.03.001.
- Robert Putnam. *Making democracy work : civic traditions in modern Italy*. Princeton University Press, Princeton, N.J, 1993. ISBN 0691078890.
- Tom A. B. Snijders, Gerhard G. van de Bunt, and Christian E. G. Steglich. Introduction to stochastic actor-based models for network dynamics. *Social Networks*, 32(1):44–60, January 2010. URL http://dx.doi.org/10.1016/j.socnet.2009.02.004.
- F. Vermeulen and M. Berger. Civic networks and political behavior: Turks in amsterdam and berlin. In S. Karthick Ramakrishnan and Irene Bloemraad, editors, *Civic Hopes and Political Realities: Immigrants, Community Organizations and Political Engagement*, pages 160–192. Russell Sage Foundation Press, New York, 2008.