

**Pritha Dev**  
**Doctoral Candidate**

New York University  
Department of Economics  
19 west 4<sup>th</sup>, Room 819  
New York, New York 10012

<http://homepages.nyu.edu/~pd453>  
[pd453@nyu.edu](mailto:pd453@nyu.edu)  
1-646-662-3747 (mobile)  
1-212- 998-3843 (office)

**Placement Director:** Efe Ok [efe.ok@nyu.edu](mailto:efe.ok@nyu.edu) 1-212-998-8920  
**Graduate Student Coordinator:** Marjorie Lesser [ml6@nyu.edu](mailto:ml6@nyu.edu) 1-212-998-8923

**Education**

BA, University of Rajasthan, Economics, 2000  
MS, Indian Statistical Institute, New Delhi, Quantitative Economics, 2002  
PhD, New York University, Economics, expected May 2008

**Job Market Paper:** Identity and Fragmentation in Networks

**Thesis Committee and References**

Alberto Bisin (Chair)	Joerg Stoye	Nicola Persico
<a href="mailto:alberto.bisin@nyu.edu">alberto.bisin@nyu.edu</a>	<a href="mailto:j.stoye@nyu.edu">j.stoye@nyu.edu</a>	<a href="mailto:nicola@nicolapersico.com">nicola@nicolapersico.com</a>
1-212-998-8916	1-212-992-8682	1-212-998-3889

**Fields of Interest**

Microeconomics, Applied Microeconomics, Network Economics

**Teaching Interests**

Microeconomics, Applied Microeconomics, Network Economics

**Research Papers**

- ▲ “Identity and Fragmentation in Networks”
- ▲ “Does the Network Matter?”
- ▲ “Sale of Information by an Informed Trader”

**Teaching Experience**

- ▲ Instructor, New York University: Money and Banking, Summer 2005-06
- ▲ Teaching Assistant, New York University: Intermediate Microeconomics, Intermediate Macroeconomics, Statistics, Principles of Economics, Money and Banking, History of Economic Thought

**Honours and Fellowships**

- ▲ MacCracken Fellowship, New York University, 2002-2006
- ▲ Graduate Stipend for M.S.(Q.E.), Indian Statistical Institute, 2000-2002

**Citizenship and Languages**

Indian; English, Hindi and Bengali.

**“Identity and Fragmentation in Networks”  
Job Market Paper (Abstract)**

This paper looks at the role of identity in the fragmentation of networks. Identity here is defined as the set of all exogenously given characteristics of an individual. I model how identity causes fragmentation by incorporating identity into a non-cooperative network formation game. Players are allowed to choose how much weight/commitment they attach to different aspects of their identity as well as with whom to form links. The more similar in identity two players, the lower are the costs of a link between them. The Nash network will not only divide society into groups based on identity, it will have layers of such divisions. Using the refinement of strictness, I get structures where highly committed players form center-sponsored stars and these stars are linked together by less committed players.

Next, using results from the theoretical analysis, I estimate which dimensions of identity are actually important in fragmentation given data on links, identities and commitment levels. For this, I construct an empirical strategy to see the effect of identity dimensions in sorting people into groups. The strategy involves a maximum likelihood approach to deduce which dimensions of identity lead to the formation of groups as well as which groups are actually formed. I propose a practical algorithm for the estimation and apply this to data on link formations and on identity characteristics collected from four villages in Eastern Region of Ghana.

**“Does the Network Matter”  
(Abstract)**

Network formation theory is based on the assumption that the benefits of belonging to a network depend on the number of people a person is linked to which includes direct links, links of links, links of links of links, etc. Most empirical work on the other hand assumes that person a's decision to link to person b is not affected by the other links of person b. This paper seeks to bridge the gap between theory and empirical work by allowing links of the proposed link to enter each person's link formation decision.

The identification problem is one of identifying the impact of the variable measuring the total number of person b's links on person a's decision to form a link with b. The identification strategy is to solve the endogeneity problem by modeling a person's total links as a function of this person's attributes and the attributes of the average individual of the population. I use a rich dataset from the Eastern Region of Ghana to test the hypothesis and I find that links of links does indeed have an effect on the individuals link formation decision.