

# Exit Experience, Social Norms and Entrepreneurial Growth Aspirations: A Multi-Level Panel Study

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## Summarising

### Definition:

- **Entrepreneurship:** opportunity-seeking behaviour that operates at multiple levels of analysis and a contextualized and consequential process
- **Predictors:**
  - Level-1:** Individual's traits, behaviours
  - Level-2:** Contextual factors/influences
- **Outcome: (Level of operation still remains the individual)**  
Individual's entrepreneurial growth aspirations

## Research Questions

- **Level 1 (Individual Level) Research Question**
  - How do an individual's traits influence that individual's entrepreneurial growth aspirations?
- **Level 2 (Social Group) Research Question**
  - How do norms and attitudes in an individual's social reference group influence that individuals' entrepreneurial growth aspirations?
- **Cross-Level (i.e. Interaction between Individual with her Social Group)**
  - How do social norms and attitudes *moderate* the effect of an individual's exit experience on his or her growth aspirations?

## Operationalisation of Social Reference Group (1)

### Methodological challenges:

- (i) measure of reference groups must be theoretically salient across national boundaries and cultural settings
- (ii) since reference groups are known to be moulded in adolescence but then slowly change over the life course, measure must include different factors because the relative weight of those factors (such as education versus wealth) might change over time (Cohen, 1983)
- (iii) Definition of groups has to be encompassing enough so that group-level influences are not endogenous to individual's own actions, as would be in very small groups (Manski, 1993)
  - the "reflection problem"

## Operationalisation of Social Reference Group (2)

### Economic Sociology:

- People similar in sociodemographics more likely to socialize with each other (McPherson 1983)
- Even if not in direct contact, attitudes and behavior of similar others can influence career choices simply through exposure (Dobrev, 2005)

### Economics

- Social norms inferred from occupational groups rather than from wealth (Fershtman et al. 1996)

### Social Psychology

- People evaluate their choices and behavior by comparison with similar 'peers'
- Often based on educational attainment (Goodman & Haisley 2007; Cohen, 1977)

### Our measures

1 Age category

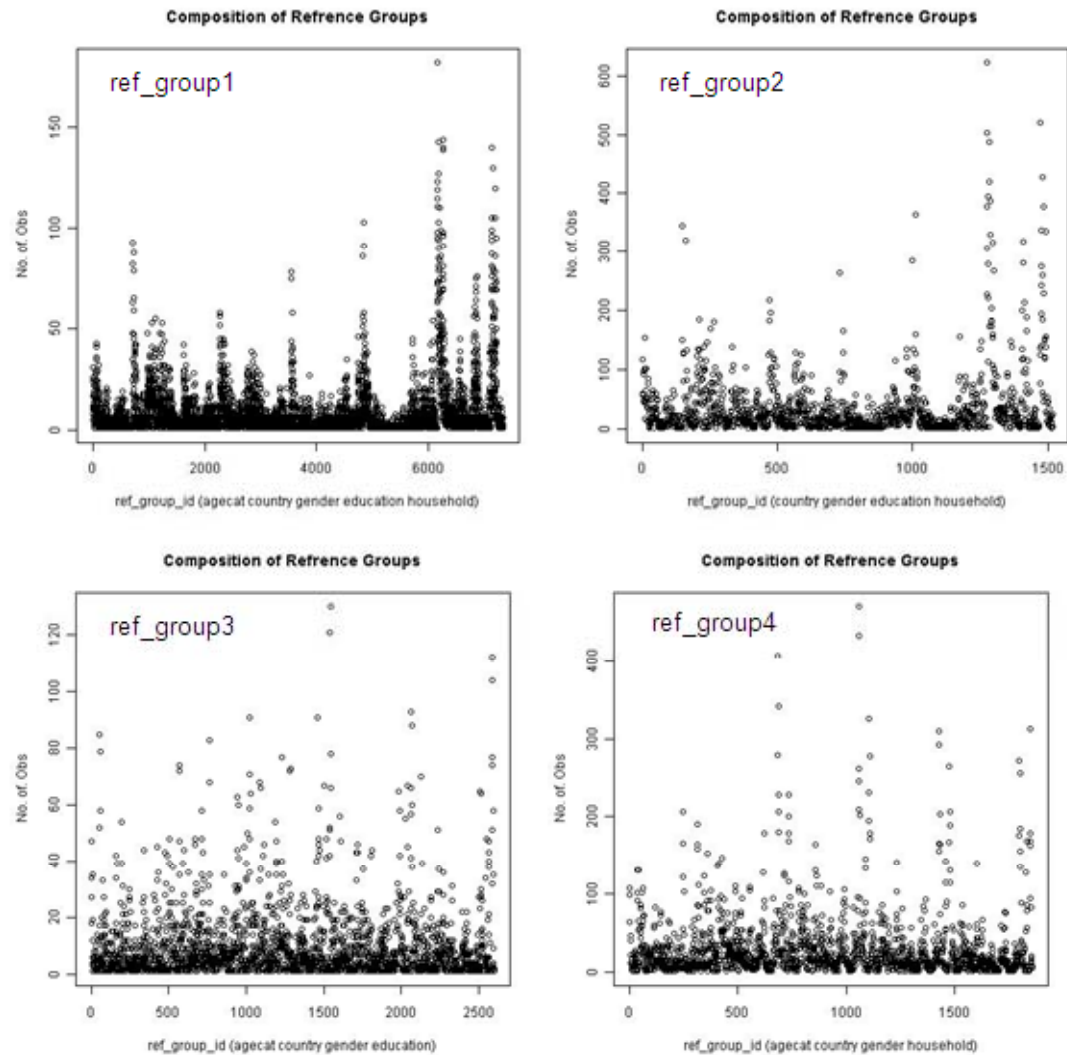
2 Education

3 Nationality

4 Gender

5 Household income

# Composition of the reference groups



## Predictors

- Individual level
  - Exit Experience from previous entrepreneurial activity
  - Self-efficacy beliefs
  - Ties with other entrepreneurs
  - Fear of Failure
- Social Reference Group level
  - Ties with other entrepreneurs (group average)
  - Group Self-efficacy beliefs (group average)
  - Group Fear of Failure (group average)

## Theory- Individual level (Exit Experience)

- Previous exit experience provides a learning platform that entrepreneurs draw upon when starting a new venture (Ucbasaran, et al, 2003; Wennberg et al., 2010)
- Entrepreneurs with previous exit experience are likely to have larger personal and external financing (Westhead & Wright, 1998)
- Exit entrepreneurs create firms with higher growth potential (Colombo & Grilli, 2005)

### **Hypothesis 1a**

*An individual's experience from previous entrepreneurial exits will be positively related to his or her entrepreneurial growth aspirations*

## Theory - Individual Level (Self-Efficacy)

- Self-efficacy: belief in one's ability to attain a certain level of achievement on a given task (Bandura, 1997)
- Entrepreneurial self-efficacy: confidence that will be able to succeed as an entrepreneur (Chen et al., 1998; Krueger and Brazeal, 1994; Davidsson, 1991)
- Previous exit experience is likely to boost self-efficacy beliefs

### **Hypothesis 1b**

*An individual's perception of entrepreneurial self-efficacy will be positively related to his or her entrepreneurial growth aspirations*

## Theory-Individual Level (Ties with other Entrepreneurs)

- Self-efficacy often shaped by observing others and knowing other entrepreneurs (Davidsson, 1991)
- Strengthens social desirability and spread norms regarding entrepreneurial behavior (Sorensen, 2007)

### **Hypothesis 1c**

*An individual's personal awareness ties with other entrepreneurs will be positively related to his or her entrepreneurial growth aspirations.*

## Theory – Individual Level (Fear of Failure)

- Entrepreneurship intimately related to uncertainty and risk-taking
- Growth aspirations inhibited by attitudes toward such risks (Brockhaus, 1980; Hancock & Teevan, 1964; Burnstein, 1963)

### **Hypothesis 1d**

*An individual's perceived fear of failure will be negatively related to his or her entrepreneurial growth aspirations.*

## Theory- Social Group Level (Social Group Ties)

- Career choices strongly influenced by social environment and similar individual's career choices (Granovetter, 2005; Sorensen, 2007)
- Socio-economic action can be influenced by peer behaviors or social referents (Autio & Wennberg, 2009, Nanda & Sorensen, 2010)
- Familiarity with other entrepreneurs enhances the probability to engage in *entrepreneurial* behaviour

### Hypothesis 2a

*The prevalence of personal awareness ties with entrepreneurs within a given individual's social reference group will exercise a positive influence on that individual's entrepreneurial growth aspirations.*

## Theory- Social Group Level (Fear of Failure)

- Social norms that signal punishing attitudes towards entrepreneurial failure may exercise a negative influence on risk taking

### **Hypothesis 2b**

*The prevalence of negative attitudes toward failure within a given individual's social reference group will exercise a negative influence on that individual's entrepreneurial growth aspirations*

## Theory- Social Group Level (Self efficacy in social group)

- Signals of feasibility and skills in social group will boost individuals' entrepreneurial aspirations

### **Hypothesis 2c**

*The prevalence of entrepreneurial self-efficacy beliefs within a given individual's social reference group will exercise a positive influence on that individual's entrepreneurial growth aspirations.*

## Cross-Level Moderation Hypotheses

### Hypothesis 3a

*If the prevalence of negative attitudes toward entrepreneurial failure is high within a given individual's social reference group, the effect of that individual's previous exit experience on his or her entrepreneurial growth aspirations will be stronger.*

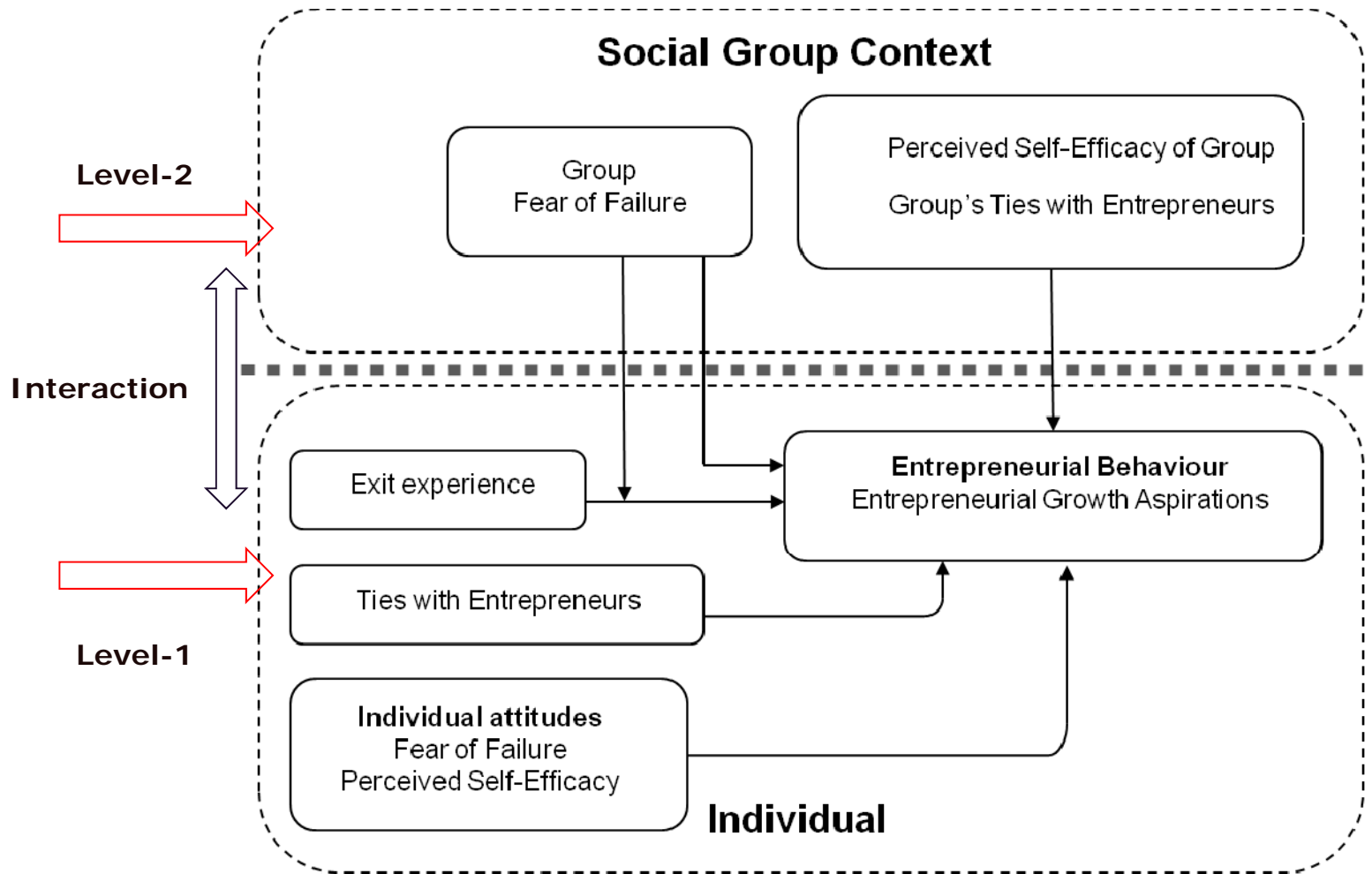
### Hypothesis 3b

*If the prevalence of personal awareness ties with entrepreneurs is high within a given individual's social reference group, the effect of that individual's previous exit experience on his or her entrepreneurial growth aspirations will be stronger.*

### Hypothesis 3c

*If the prevalence of entrepreneurial self-efficacy beliefs is high within a given individual's social reference group, the effect of that individual's previous exit experience on his or her entrepreneurial growth aspirations will be stronger.*

# Conceptual Framework



## Research Design

- Data
  - Global Entrepreneurship Monitor (GEM) dataset, 1 Million Interviews, 63 Countries, Nine Years (2000-2008)
  - EuroStat Data
  
- Levels of Analysis
  - Individual Level (Level-1)
  - Social Reference Group Level (Level-2)
  - Dependent Variable (Growth Aspiration) operates at the level of individual (Level-1)

## Methods – Two Step Analysis

### Step 1

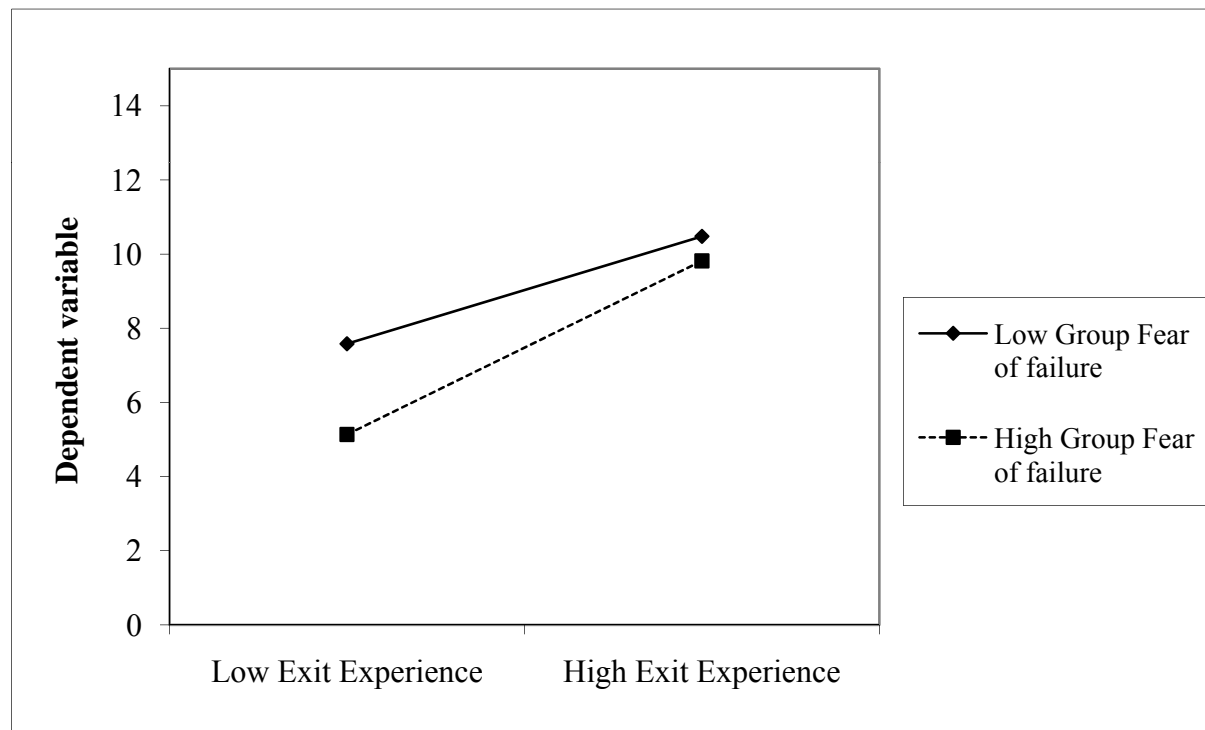
- Multilevel (two levels) Selection equation controlling for self-selection into “entrepreneurship” at using Two Step Heckman Selection Model
  - Individual Level (age, gender, education, household income)
  - Country Level (gdp per capita, rate of established businesses in a country, transition country dummy)

### Step 2

- Multi-level (two-levels) random coefficient Outcome equation for DV considering the two levels with “inverse mills ratio” computed from Step 1 as one of the controls

	Model (1)	Model (2)	Model (3)
<b>Fixed Effects</b>			
Inverse Mills Ratio ( $\lambda$ )	28.49***	25.91***	25.59***
Age	-0.14***	-0.11*	-0.10*
Age (squared)	-0.01**	-0.01**	-0.01**
Gender	-7.26***	-6.93***	-6.84***
Education	1.87***	1.80***	1.78***
Household income tier	3.29***	3.03***	3.00***
Current jobs	0.10***	0.10***	0.10***
OECD country dummy	-8.56***	-8.24***	-8.26***
Micro angel dummy	10.81***	10.06***	9.92***
<b>Individual Level (Level-1)</b>			
Exit experience (H1a:+VE)	2.92*	2.91*	1.69
Ties with entrepreneurs (H1b:+VE)	8.83***	7.91***	7.84***
Fear of failure (H1c:-VE)	-6.92***	-6.21***	-6.15***
Self-Efficacy (H1d:+VE)	20.48***	19.10***	18.89***
<b>Social Group-level (Level-2)</b>			
Ties with entrepreneurs (group average) (H2a:+VE)		4.61+	4.18
Fear of failure (group average) (H2b:-VE)		-7.48*	-8.56*
Self efficacy (group average) (H2c:+VE)		6.61*	6.89*
<b>Interaction Terms</b>			
Group Fear of Failure*Exit experience (H3a:+VE)			26.27*
Group Ties with entrepreneurs*Exit experience			10.50
Group Self-efficacy*Exit experience			11.38
<b>Random Effects</b>			
Variance of Intercept	132(19)	128(19)	127(19)
Variance of overall residual	5395(38)	5398(38)	5397(38)
<b>Model Fit Statistics</b>			
Number of Observations	45792	45792	45792
Number of Groups	5718	5718	5718
Number of Predictors in the Model	13	16	19
Chi-Square	1183***	1192***	1198***
Log Likelihood	-262175	-262165	-262152
Deviance	524350	524330	524304
AIC	524381.6	524367.3	524348
LR Test: Chi Square (Significance)	-	20.36(p<0.0001)	25.26(p<0.00001)
Pseudo-R2 (McFadden)	0.14	0.14	0.14

## Interaction Term



## Outcomes

### Individual Level Outcomes

- Exit Experience *positively* influences growth aspirations (H1a)
- Ties with other entrepreneurs *positively* influence growth aspirations (H1b)
- Fear of failure *negatively* influences growth aspirations (H1c)
- Self efficacy *positively* influences growth aspirations (H1d)

### Social Group-Level Outcomes

- Ties with entrepreneurs in social group *positively* influences growth aspirations (H2a)
- Fear of failure in the social group *negatively* influences growth aspirations (H2b)
- Self efficacy in the social group *positively* influences growth aspirations (H2c)

### Cross-Level Interaction Outcome

- Fear of failure in the social group *moderates positively* the exit experience towards an individual's entrepreneurial growth aspirations (H3a)

## Theoretical and Methodological Contributions

- Contextual Influences on Entrepreneurial Behaviours not only recognised but also evidenced
- Social group norms and attitudes matter in shaping an individual's entrepreneurial growth aspirations, however, individual still remains the most significant predictor of entrepreneurial behaviours
- Multi-level empirical Methodology developed and tested for grouped data
- Multi-level Selection model developed and tested to control for self selection into entrepreneurial

Thank You