Firm Survival Differences between Immigrant vs. Local Entrepreneurs in the Basque Country

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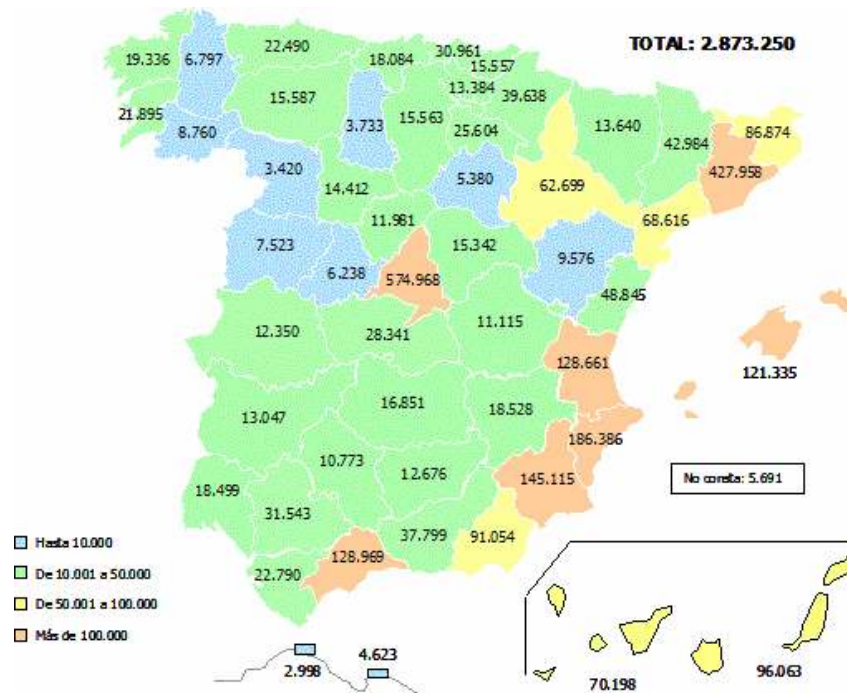University of Deusto (Spain)

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Presentation Outline

- Introduction
  - Immigration in Spain and the Basque Country
  - Interest of the Study
  - Research Questions
- Literature Review
- Data and Methodology
- Results
- Conclusions

Introduction

Immigration in Spain and the BC
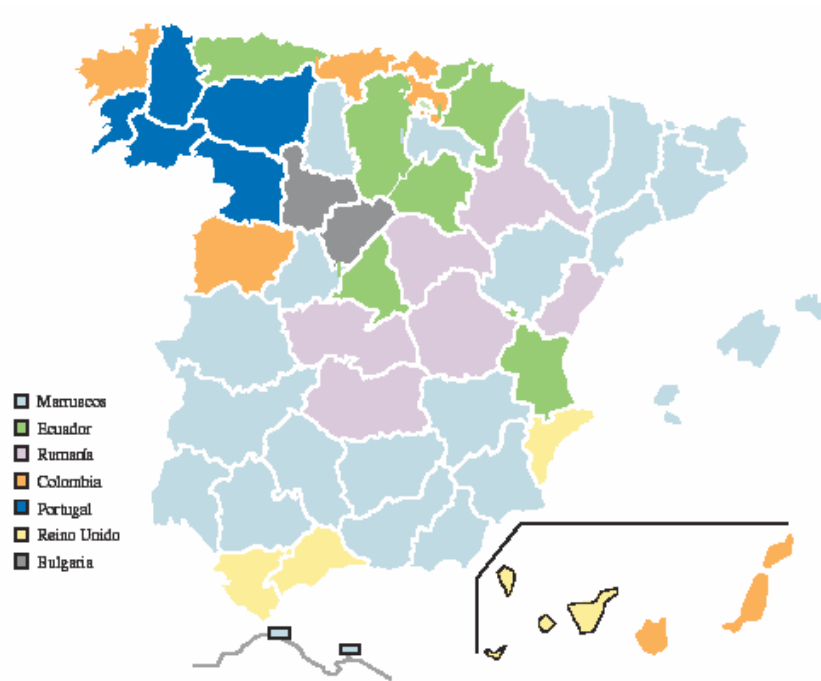

- **Immigration in Spain**:
  - **1998: 1.8% > 2005: 6.2%**
  - Gender: Men (54%)
  - Mean age: 34 years
  - Industry sectors:
    - Construction (27.71%)
    - Hotel and Catering (18.57%)
    - **Retail (13.99%)**

- **Immigration in the BC**:
  - **1998: 0.8% > 2005: 2.7%**
  - Gender: Men (54%)
  - Mean age: 34 years
  - Industry sectors:
    - Construction (29.17%)
    - Hotel and Catering (16.26%)
    - **Manufacturing (14.51%)**

Immigration in Spain and the BC

- Marruecos
- Ecuador
- Rumanía
- Colombia
- Portugal
- Reino Unido
- Bulgaria

- Largest groups in Spain:
  - World region:
    - **Latin America (36.11%)**
    - Africa (23.40%)
    - EU (20.85%)
  - Country:
    - **Morocco (17.75%)**
    - Ecuador (13.04%)
    - Colombia (7.58%)
    - Rumania (7.17%)
    - UK (5.55%)

- Largest groups in the BC:
  - World region:
    - **Latin America (47.89%)**
    - Africa (18.68%)
    - EU (17.67%)
  - Country:
    - **Colombia (16.74%)**
    - Ecuador (11.56%)
    - Morocco (10.62%)
    - Portugal (8.65%)
    - Rumania (4.92%)

Source: Observatorio Permanente de la Inmigracion (January   and March 2006)

Immigration in Spain and the BC

	Spain (%)	The Basque Country (%)
Immigration rate (Dec 2005)	6.2	2.7
Unemployment rate (I - 2006)	9.07	5.1
SS affiliations – Immigrants (April 2006)	9.71	4.04
SS self-employed (July 2006)	16.24	19.31
SS self-employed Immigrants (April 2006)	**8.56**	**10.07**

Interest of the Study

- Lack of studies in…
    - Spain: recent phenomenon > lack of research on immigration and entrepreneurship
    - Europe: only a few authors has looked at firm survival of immigrants

- Immigration and labour market opportunities in Europe and Spain:
    - High unemployment > difficult to find a paid job
    - Immigration policies: a lack of selection procedures > immigrants lower human capital attributes than local > higher difficulties to find a job

Interest of the Study

- **Aim** of the study:

    Fill this gap in the immigrant entrepreneurship and management literature by analyzing the effect of origin (immigrant vs. local) on firm survival differences between these two groups in the Basque Country

Research Questions

(1) Are ventures created by immigrant entrepreneurs in the Basque Country less likely to survive than those started-up by local entrepreneurs?

(2) If so, WHY?

(3) Are the determinants of venture survival of local entrepreneurs similar to the firm survival factors of immigrant entrepreneurs?

Literature Review

- *Immigrant/Ethnic Entrepreneurship:* a topic widely studied in Europe and North America (Light, 1984; Aldrich and Waldinger, 1990; Mata and Pendakur, 1999)
  - Migrant/Ethnic Networks: support provided by co-ethnics (e.g. information, mutual assistance, low cost co-ethnic labour) = Social Capital
  - Ethnic strategies: firm adaptation strategies (e.g. working long hours, offering low price products) applied in order to tackle the main obstacles they find in the opportunity structure

- Economic studies has focus on the probability of immigrants to become self-employed:
  - Zimmerman and Constant (2004):Immigrants are additionally pushed into self-employment when they feel discriminated
  - Schuetze (2005) and Hammarstedt (2001): Being immigrant positively associated with the probability of being self-employed

- A few studies on venture survival of immigrants:
  - Fertala (2004):
    - HC and SC of immigrant vs. local entrepreneurs in Germany
    - Being immigrant negatively associated with venture survival

Data and Methodology

- **Theil's U index of inequality**

- **Cox regression analysis**

- **Simulations**

Theil's U index of inequality

- Theil's U inequality index is a measure of the degree to which one time series differs from another. It performs a point-by-point matching of the two time series and varies from 0 to 1. (A value of 1 implies a maximum gap and 0 implies no gap between the two series)

- Aim: to measure and standardize the gaps in venture survival across different years, legal forms and industries

COX regression analysis

- The Cox regression uses the hazard function to estimate the relative risk or failure and is defined as the potential for death at a particular instant, given that the case has survived until that instant
- The hazard ratio indicates the increase or decrease in risk incurred by the effect of a particular explanatory variable
  - **Y = *f* [HC, firm resources and strategies, industry sector, location, socio-demographic variables]**
- Aim: To identify the determinants of firm survival for both immigrant and local entrepreneurs
- Applicable to other spheres, not only in economics (e.g. social integration: school attendance, inter-marriages)

Simulations

- "Counter factual experiment" in which we make firms created by local entrepreneurs act like firms created by immigrant entrepreneurs and vice-versa

- Aim: to explain the causes of the observed gap of survival differences between local and immigrant entrepreneurs by exploring the role of reaction to key variables (i.e. performance) versus endowments

Simulations

- Steps:
  - (1) substitute the estimated beta coefficients of locals for the estimated coefficients of immigrants obtained in the Cox regression analysis
  - (2) multiply these transformed coefficients by the respective mean values of the appropriate variables for the local
  - (3) maintain the original Cox regression coefficients and mean values for the relevant variables to predict the local and immigrant survival rate
  - (4) compare the latter predictions to the counterfactual ones to see if the survival gaps are reduced or increased

Data and Variables

- Description of the Data:
  - Firm census data (1993-2003)
  - Source: Basque Statistical Institute
  - Annual Survey
  - Observations: 217,734 observations, out of which 2,685 were created by immigrant entrepreneurs
  - Unit of analysis: A firm

- Dependent Variable:
 - SURVIVAL: a single dependent variable which measures the number of years from firm inception to closure

Data and Variables

| CONCEPT	INDEPENDENT VARIABLES
FIRM INTERNAL VARIABLES: **HUMAN CAPITAL**	ORIGIN
	AGE
	GENDER
FIRM INTERNAL VARIABLES: **RESOURCES & STRATEGY**	INITIAL SIZE
	TEAM
	GEOGRAPHICAL MOBILITY
	INDUSTRY DIVERSIFICATION
FIRM EXTERNAL VARIABLES	MANUFACTURY
	CONSTRUCTION
	RETAIL, HOTEL AND CATERING, AND TRANSPORT
	BANKING AND BUSINESS SERVICES
	URBAN
	ECONOMIC GROWTH
	REGIONAL UNEMPLOYMENT
	REGIONAL IMMIGRATION

Results

Theil's U index of inequality
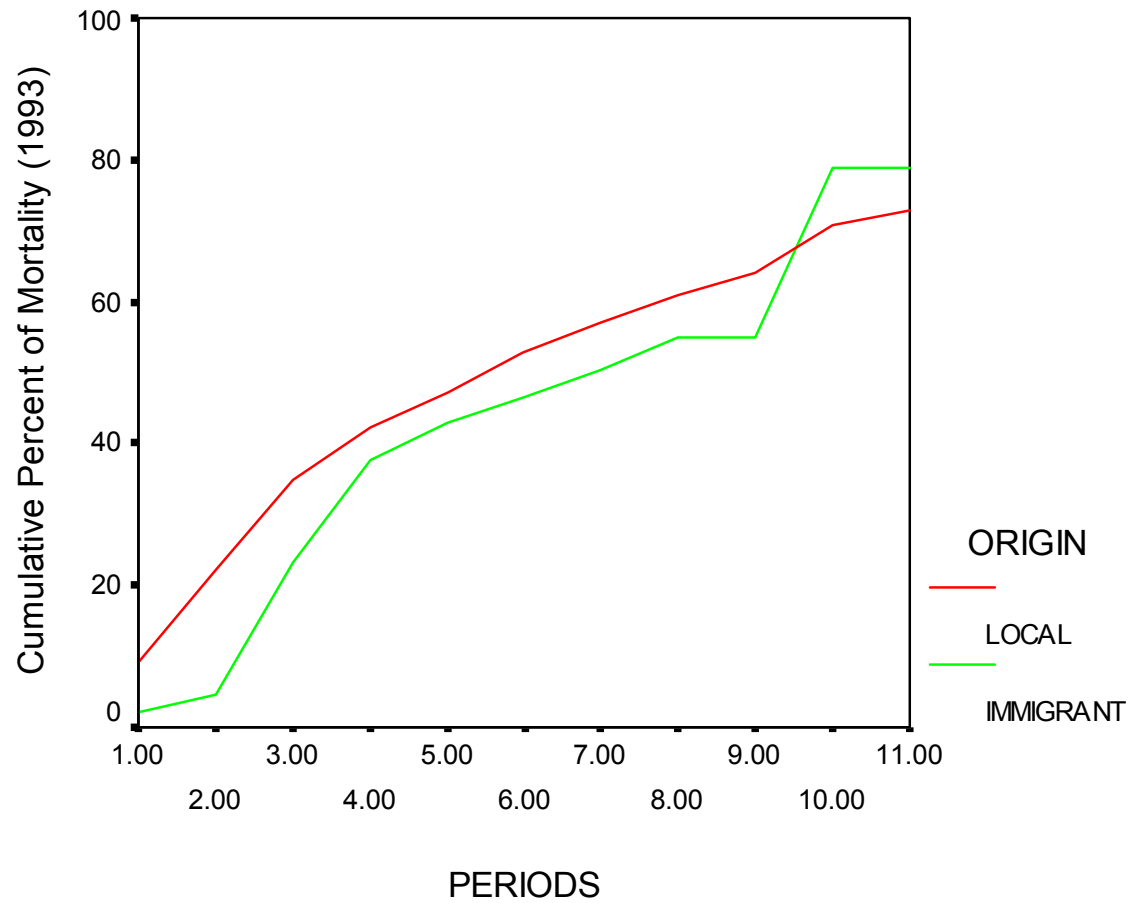## Survival by Origin (1993-2003)
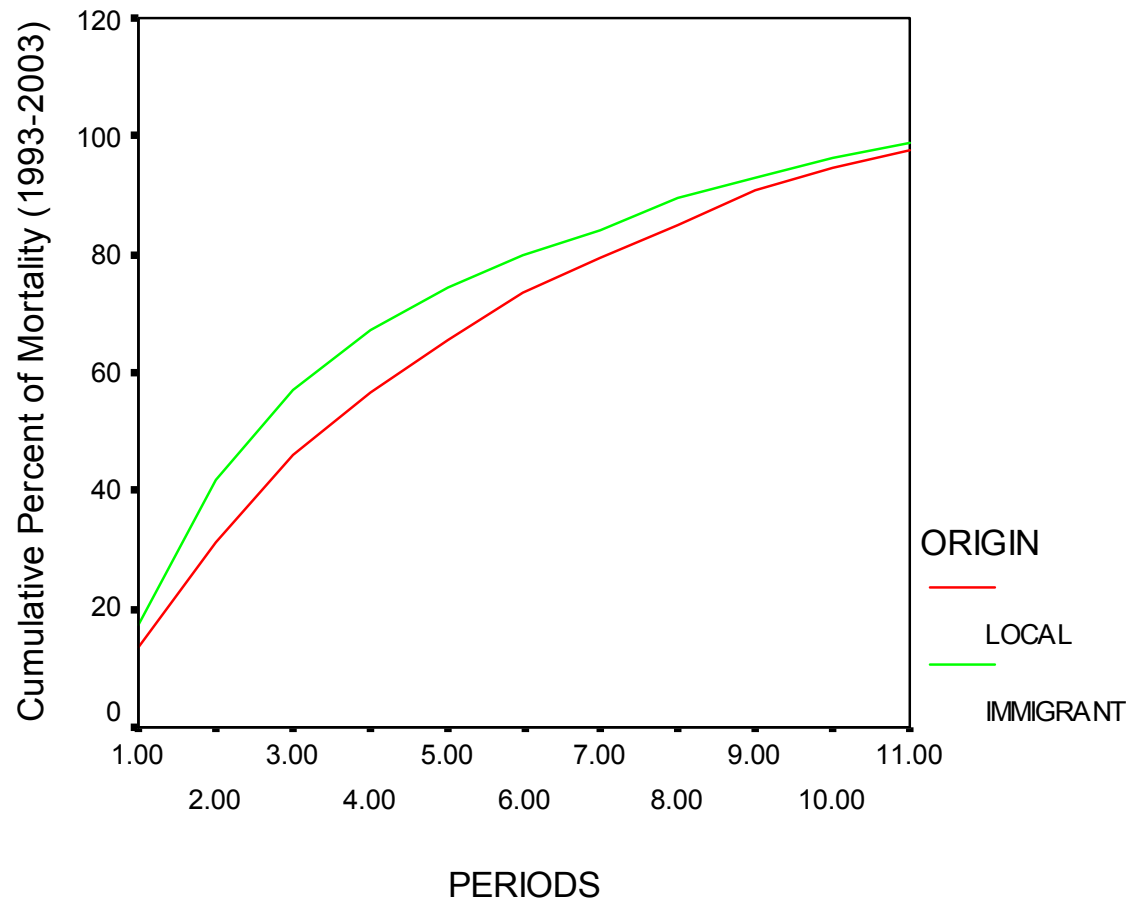
Theil's U index of inequality
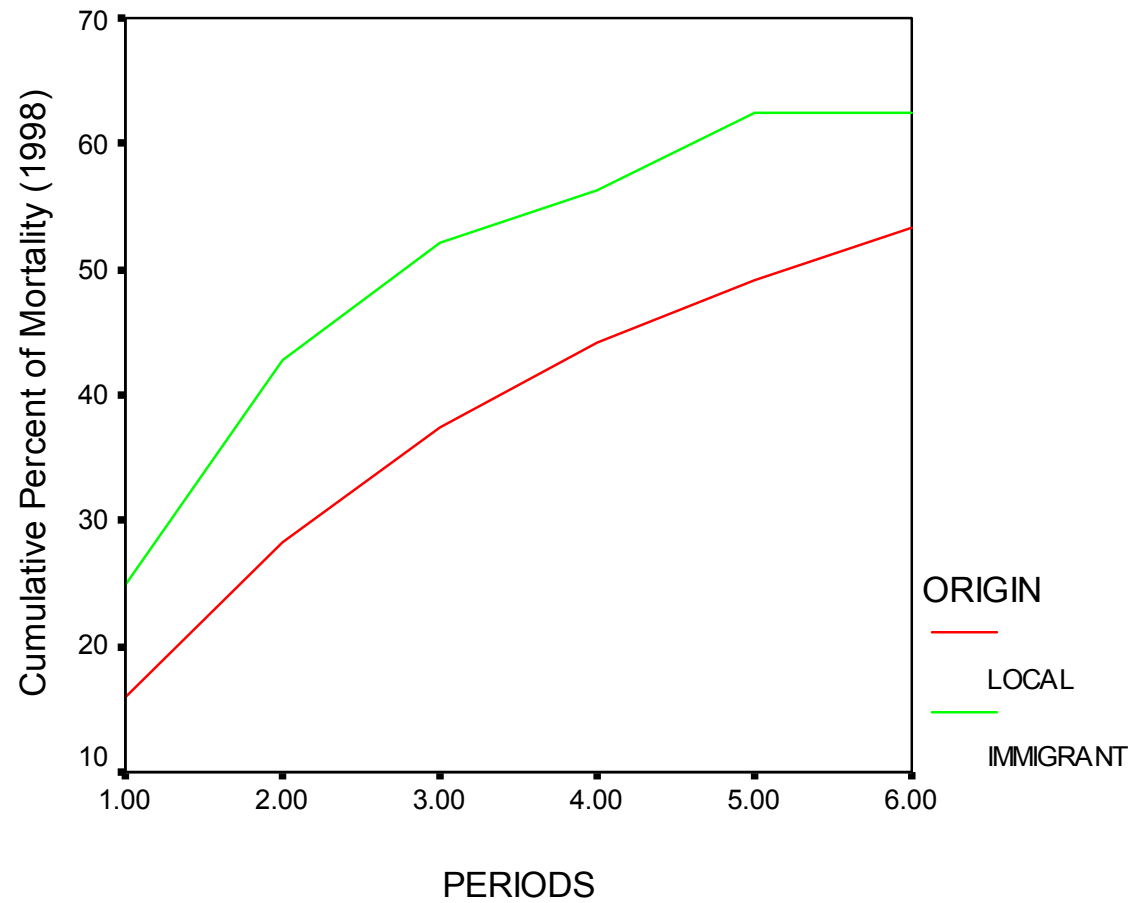## Survival by Origin when Number of Entrepreneurs = 1 (93-03)
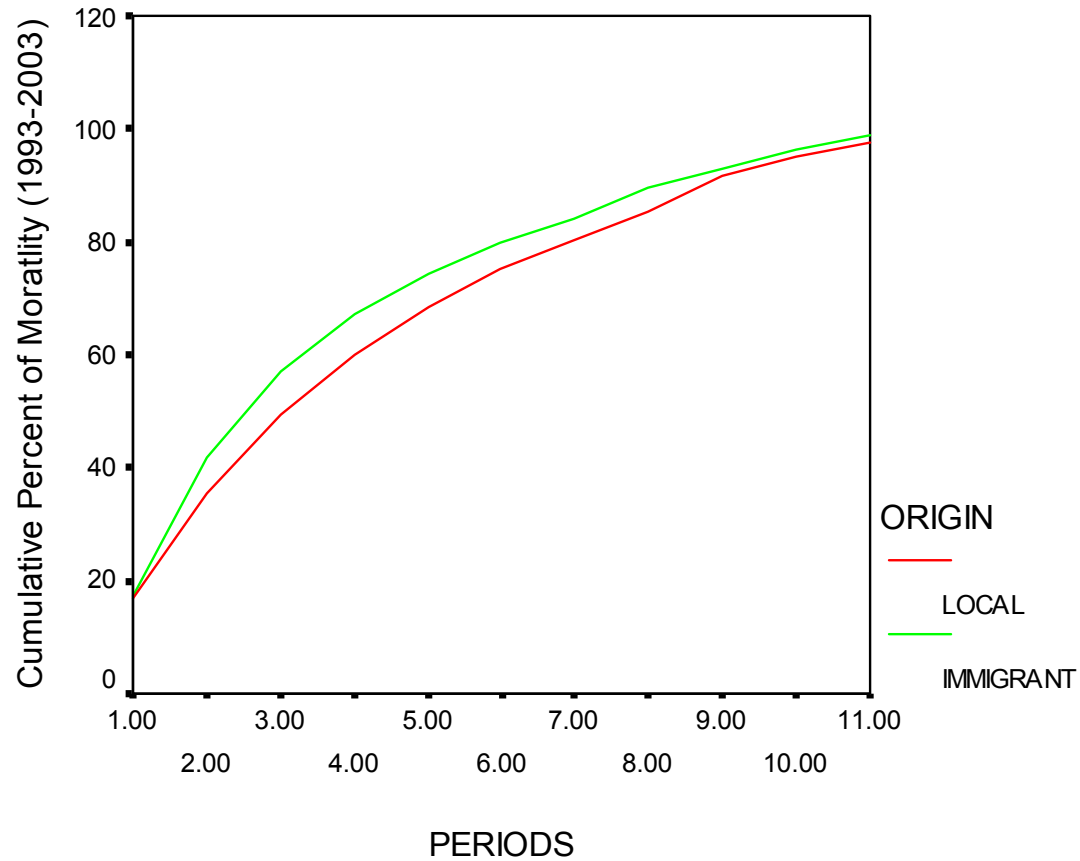
Theil's U index of inequality
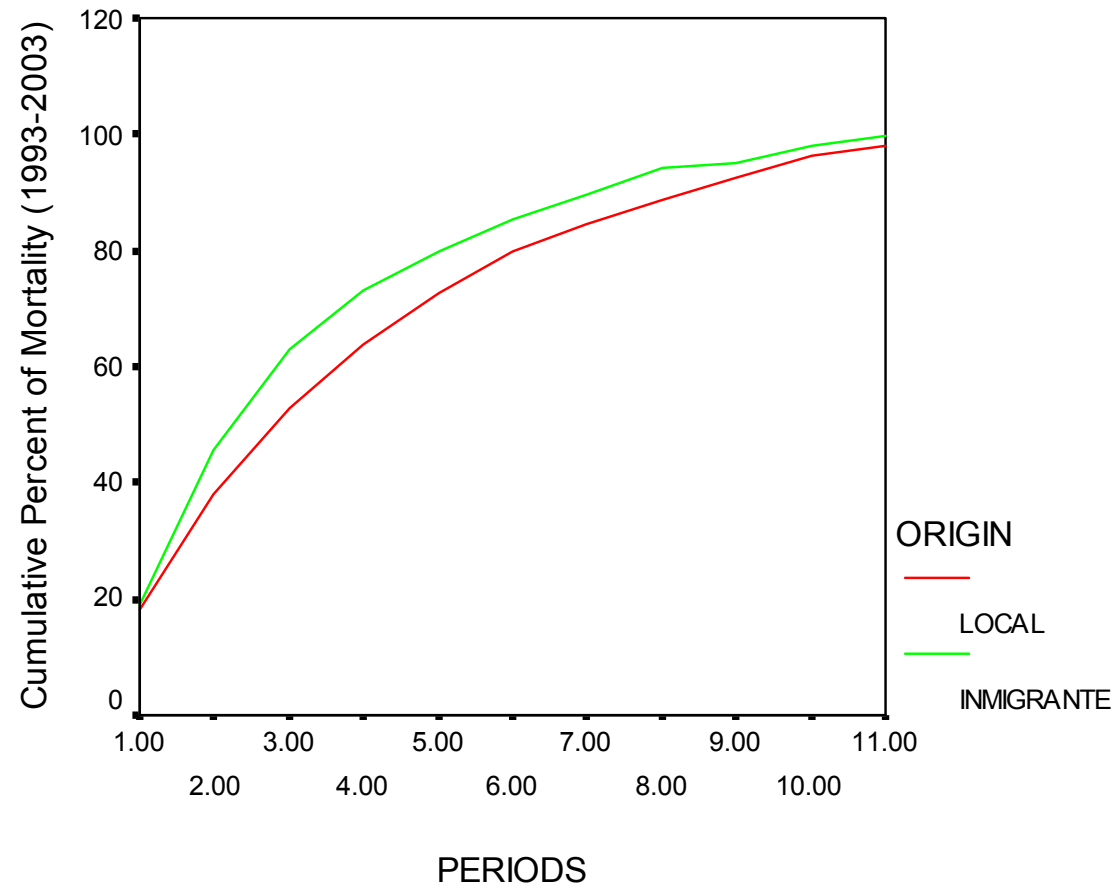## Survival by Origin (1993)

Theil's U index of inequality
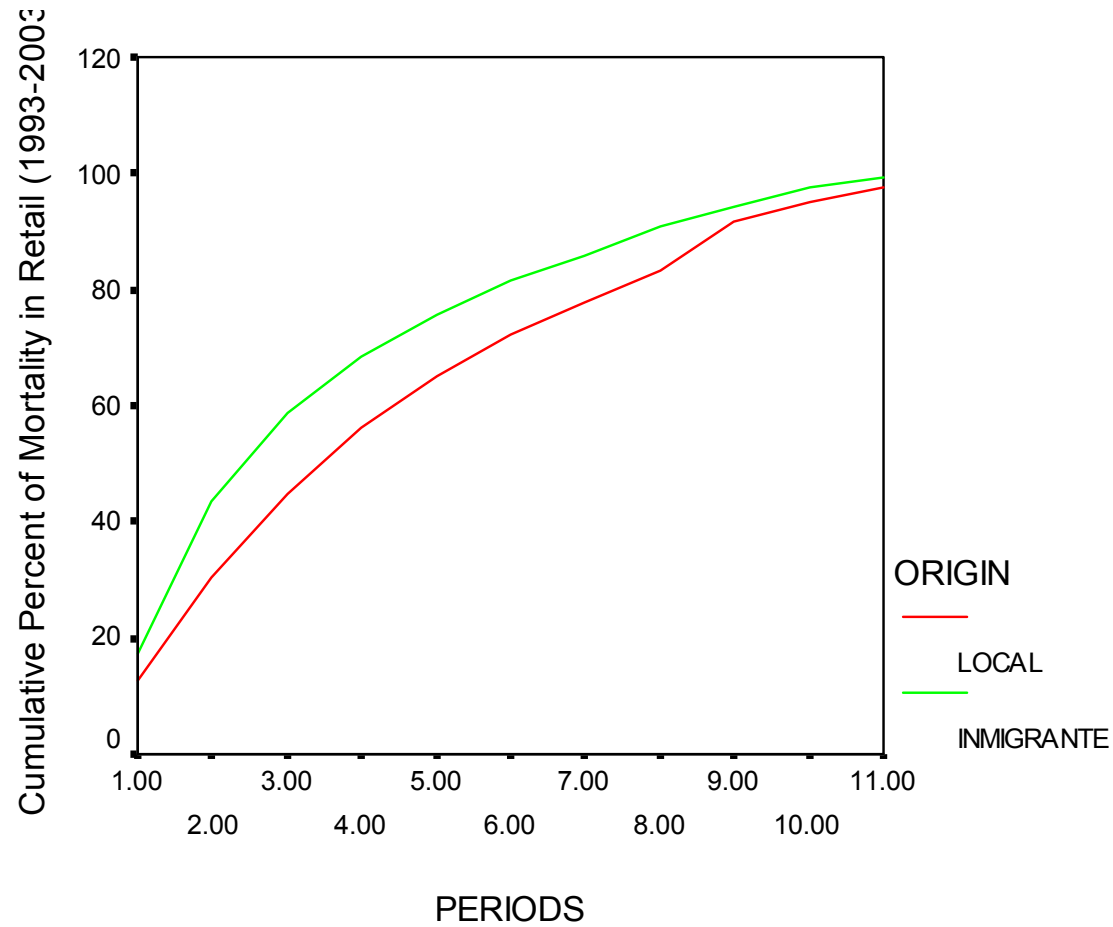## Survival by Origin (1998)

Theil's U index of inequality
Survival by Origin in Construction (1993-2003)

Theil's U index of inequality
Survival by Origin in Retail, Hotel and Catering, and Transport (93-03)

Theil's U index of inequality

- The gap in venture survival between immigrant vs. local entrepreneurs differs depending on various conditioning factors:

  - The number of entrepreneurs
  - The year of firm inception
 - Across industry sectors

Cox regression analysis

- 2 analysis:
  - (1) Cox analysis applied to the whole population:
    - Aim: To assess the effect of ORIGIN on venture survival (Research Q1)
  - (2) Split the population in two groups (immigrant vs. local) and applied the Cox:
    - Aim: To test the same set of explanatory variables (Research Q2, Q3)
    - 3 models:
      - M1-M2: same set of variables for the two groups (2 different models due to co-linearity problems)
      - M3: Additional variables to each groups:
        - Immigrant population: gender and age
        - Local population: number of entrepreneurs

Cox regression analysis

- The **effect** of the main explanatory variables of venture survival of both groups seem to be **similar**:

  - Positive effect on survival: Initial size, team, age, mobility, diversification, unemployment
  - Negative effect on survival: Urban, immigration, manufacture, construction, banking, insurance and business services

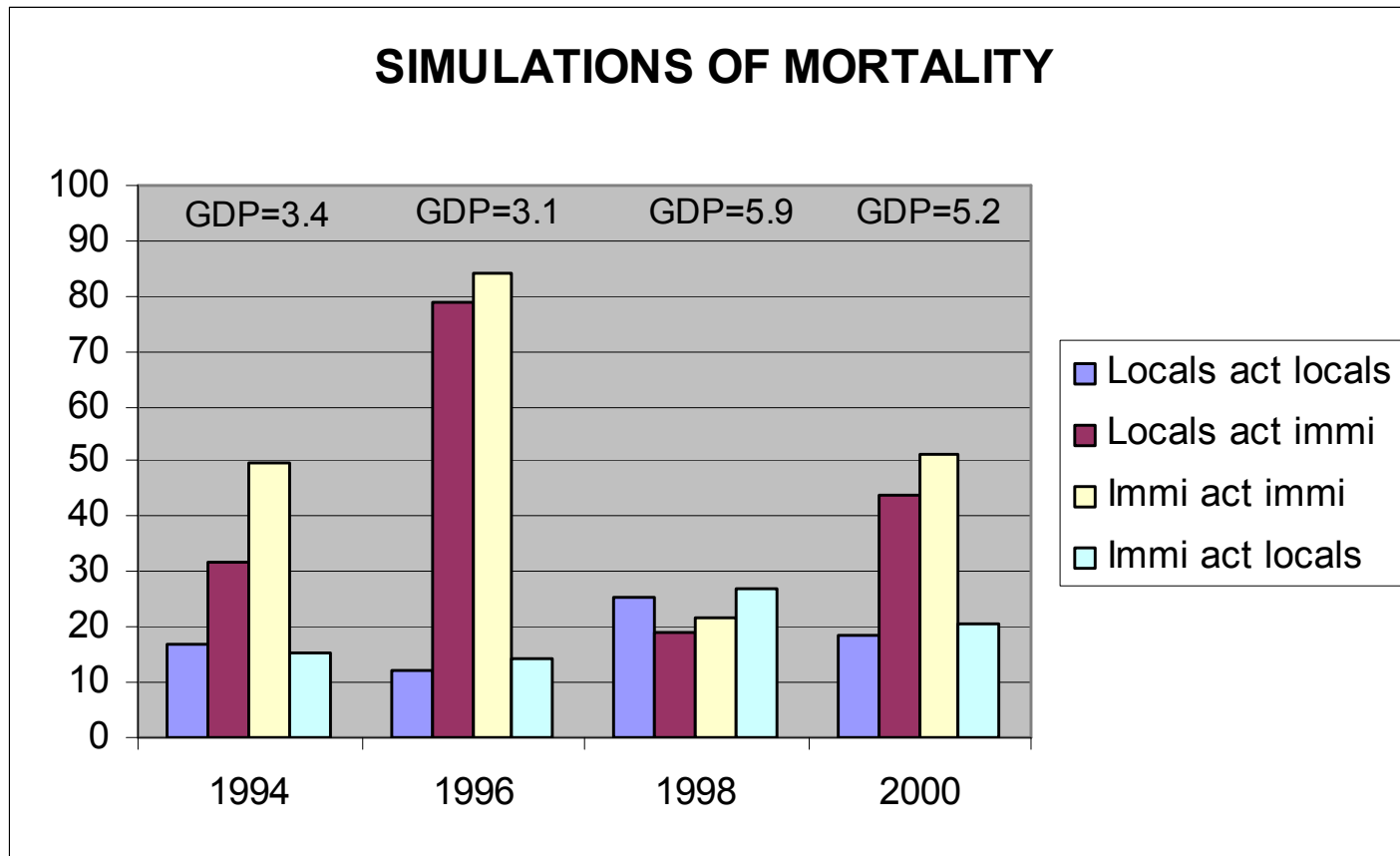 - **Cox does not explain the differences in firm survival between local and immigrant entrepreneurs**

Simulations
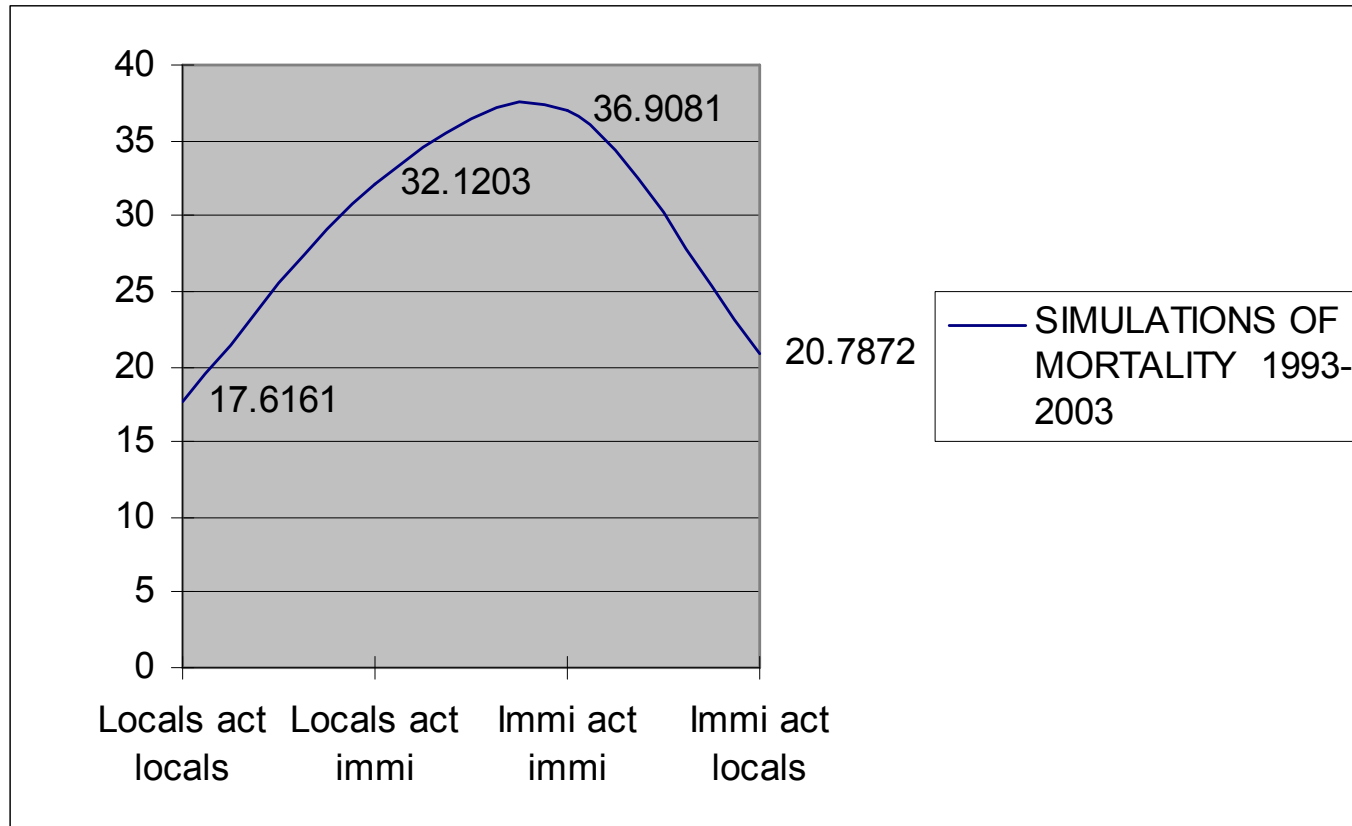
Simulations

□ If immigrants acted like locals the differences in the average likelihood of mortality between the two groups would not be significant

   ➢ The main differences in venture mortality rates between local and immigrant entrepreneurs are due to **differences in the reaction of immigrant entrepreneurs to the conditioners of survival** such as differences in access to financial and human capital, which may be amenable to policy initiatives

Simulations

SIMULATIONS OF MORTALITY

GDP=3.4   GDP=3.1   GDP=5.9   GDP=5.2

Legend:
- Locals act locals
- Locals act immi
- Immi act immi
- Immi act locals

1994   1996   1998   2000

Simulations

- The year of inception seems to have an effect on the likelihood of venture mortality for both local and immigrant entrepreneurs
- <u>The development of the annual economic growth, measured by GDP, corresponds to the changes in the likelihood of venture survival</u>
- Particularly evident in the case of companies begun by immigrant entrepreneurs, whose probability of failure for firms created in 1998 decreases drastically when then the GDP increases from 3.1 in 1996 to 5.9 in 1998

  - **Firm external variables significantly influence venture survival, firms created by immigrant entrepreneurs being more sensitive to environmental changes than those created by local entrepreneurs**

Conclusions and Implications

Findings

- ❑ Are ventures created by immigrant entrepreneurs in the Basque Country less likely to survive than those started-up by local? (1RQ) > YES

- ❑ Are the determinants of venture survival of local entrepreneurs similar to the firm survival factors of immigrant entrepreneurs in the BC? (3RQ) > YES

- ➢ The main differences in firm survival between local and immigrant entrepreneurs are caused by the liability of foreignness problem, i.e., the reaction to less favourable initial financial and human capital conditions immigrant entrepreneurs have to address when they start-up a business in a foreign country (2RQ)

Implications for policy makers

- These differences could be reduced by applying appropriate policy initiatives such as (i) facilitating access to the initial financial capital; (ii) designing appropriate business training programs; (iii) offering language learning courses

- The experience and practices of other countries with a large history of immigration such as Australia and Canada should be taken into account in order to design and carry out an efficient and comprehensive immigration policy

Future research

- The same analysis in different points in time in order to test the effect of environmental factors such as economic growth and socio-demographical changes (e.g. the development of the immigrant population) on firm survival
- A regional level comparative study in Spain would allow an assessment of regional entrepreneurial opportunities and policy initiatives
- An international level analysis which involved the possible effects of immigration policies on business success of immigrants

Thank you very much for your attention.