

# HIGH GROWTH ENTREPRENEURS

*NOVEL EVIDENCE FROM MEXICO*

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## 1. Motivation

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# Interest in studying high-growth firms and their characteristics has been growing recently.

- The topic has been addressed by academics, firms, think tanks and the media.

*“High-growth enterprises, so called “gazelles”, are young companies that transform markets with radically innovative products, services and processes.”*

*-- Policy options*

*"During tough times, the tough get growing."*

*-- Forbes*

*"Should the Government Support Only High-Growth Businesses?"*

*-- The Wall Street Journal*

# High-growth firms bring the possibility of transforming markets.

- Policymakers recognize that in order for economies to thrive, competition and “dynamism” is required in the business environment.
- Such “dynamism” occasionally gives rise to firms that enter a market, innovate and expand in a very short-time frame.
- These **high-growth firms** are usually more productive, and create a higher value in terms of quality of goods and services, income and employment.
- Thus, they have the potential of making significant and transforming contributions to economies: by spurring growth, expanding employment and improving economic inclusion.

# Identifying and supporting these kind of firms might be desirable from a policy perspective.

- Resources could be more efficiently and effectively used if policymakers support firms whose odds of growing rapidly are high.
- Thus, it is crucial to identify and study **common aspects of high-growth firms.**
- In sum, what are the characteristics of:
  - ✓ entrepreneurs
  - ✓ firms
  - ✓ business environments (institutional frameworks)**that facilitate a fast expansion of a business?**

## However, literature on high-growth firms and their characteristics remains relatively scarce.

- No consensus on the definition of high-growth firms.
  - How to measure growth? in terms of employment levels? of revenue?
  - Focus only on startups/young firms?
- Which firms relate positively with HG entrepreneurship?
  - Smaller, younger and high-technology based firms (Audretsch, 2012).
- What role entrepreneurs' characteristics play?
  - Two types of entrepreneurs: opportunity vs. necessity (Acs, 2006).
  - Opportunity entrepreneurship relates positively with growth (Wong et. al., 2005).

## Moreover, empirical studies are few and most of them focus on developed countries.

- Some studies from the US indicate that most of the net new job creation can be attributed to high-growth firms (Birch et. al., 1995; Acs et. al., 2008).
- Recently in the US, high-growth entrepreneurship in key sectors (high tech) has been in decline (Decker, et al., 2016).
- In Finland during 2003-2006, 90% of net new jobs were created by 5.4% of private businesses with 10 or more employee (Deschryvere, 2008).
- In one of the few studies in developing countries, in Nigeria, potential high-growth firms were randomly funded. Firms that were funded had a higher survival and employment expansion likelihood (Mckenzie, 2015).

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# Currently, the World Bank is studying the behavior of high-growth firms in several developing countries

Some questions that this research stream is interested in studying are:

- 1. How do we define and identify high-growth firms?
- 2. How is high-growth entrepreneurship evolving?
  - through time
  - among industries
- 3. Can we relate high-growth entrepreneurship with:
  - firm characteristics?
  - industry-level characteristics?

# Mexico is one of the countries part of this project

## For the Mexican case we focus in:

- Cohorts of young firms (i.e. firms 3 years old or less at the time of its first data available).
  - Three cohorts available: firms born around 1994, 1999 and 2004.
- Firms must have started activities with at least 10 paid employees.
- Firms belonging to the manufacturing sector.
- High growth definition: Firms whose employment levels grow at 12% annualized during a time period (5 or 10 yrs).

# We use the Economic Census to follow young firms through time.

- Time period of analysis: 1994-2014
- Data sources: INEGI, Economic Censuses 1994, 1999, 2004, 2009, 2014
- We designed a matching algorithm to link firms through censuses.
- Growth of firms is estimated using **total employment**.
- There is also information by firm on value added, capital per worker, wages, blue/white collar employment and sales, among other important variables.

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# The case of Mexico: preliminary results

- High-growth firms are a truly exceptional minority
- Generally, less than 10% of a cohort of firms are high growth firms within its first 5 years.
- The percentage of firms that sustain high growth rates for 10 years is even smaller: less than 3% of firms in a cohort.
- High-growth firms are more concentrated in “advanced” manufacturing sectors (electronics, transportation, machinery, etc.).
- Key characteristics: Higher initial value added per worker, capital endowment per worker relate positively with high-growth in subsequent periods.

# High-growth firms are the minority of young firms.

## Share of HG firms in cohort

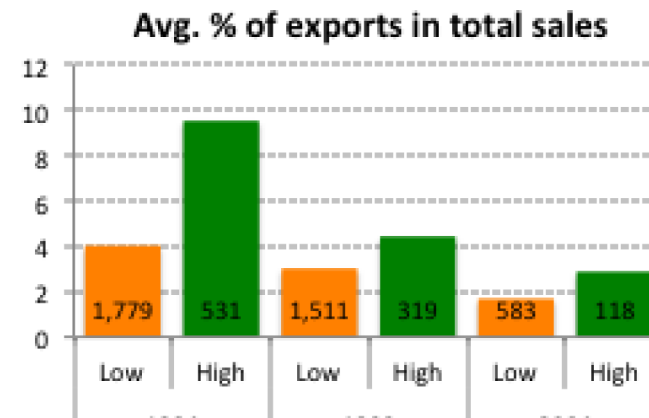
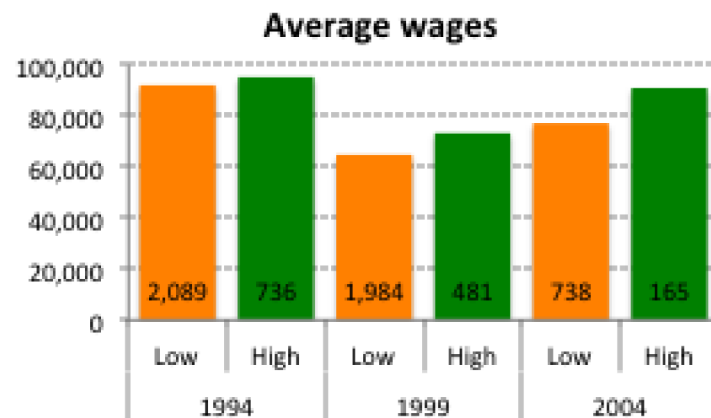
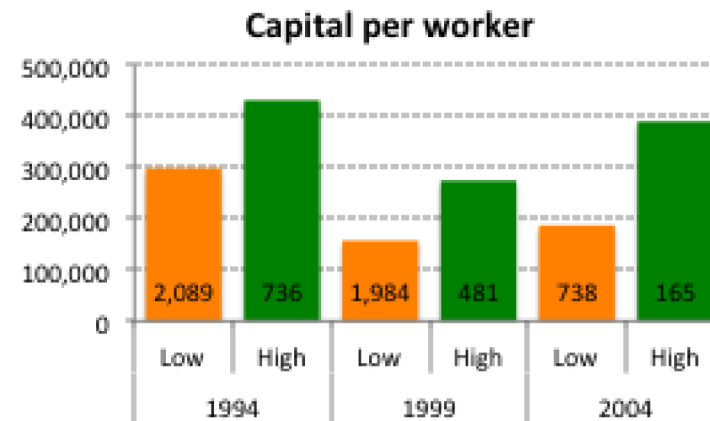
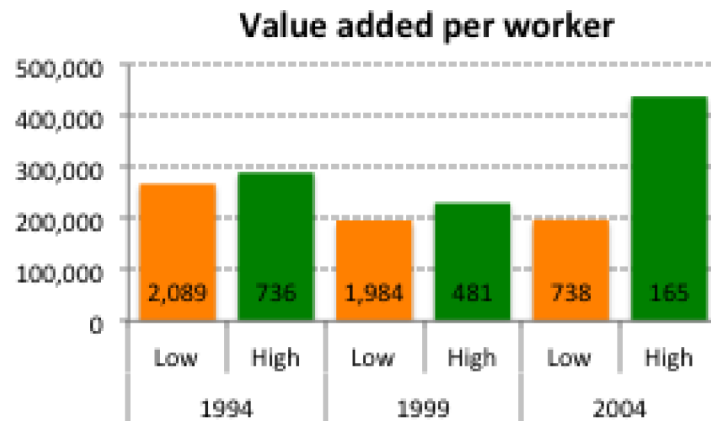
HG definition: Firms with annualized growth rate of employment  $\geq 12\%$

% of HG firms in time period

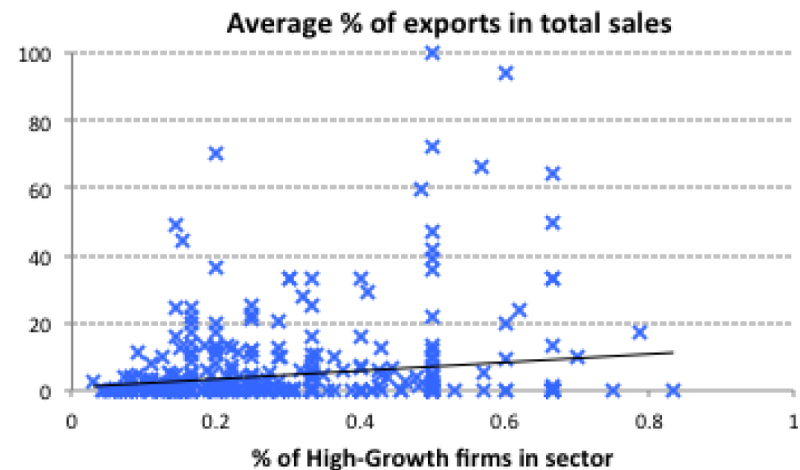
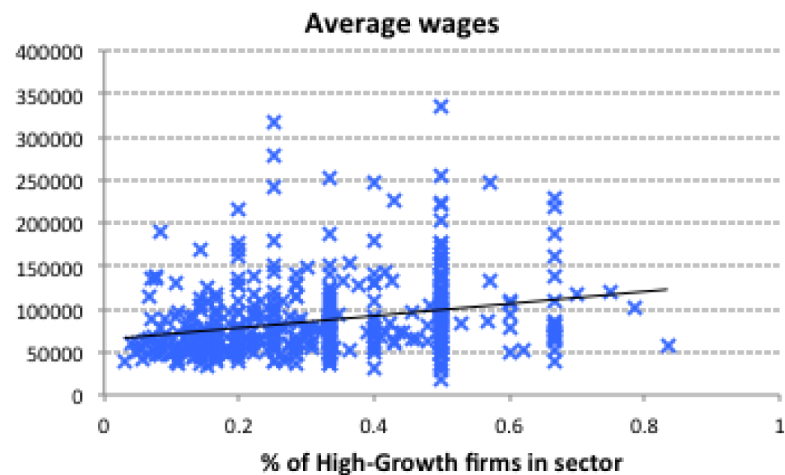
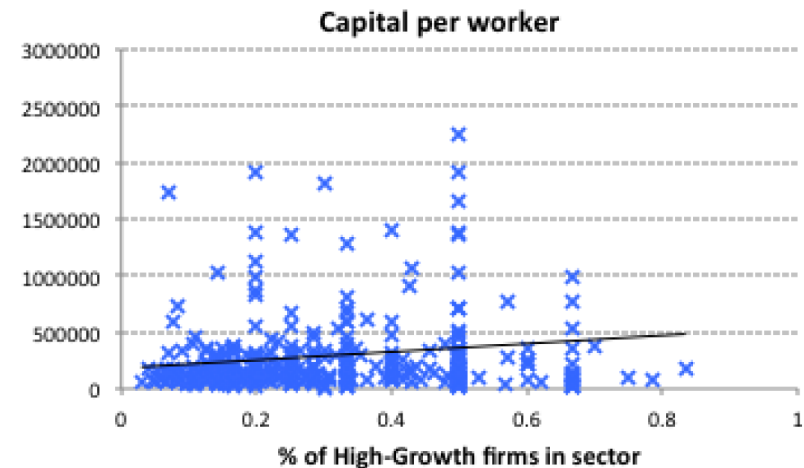
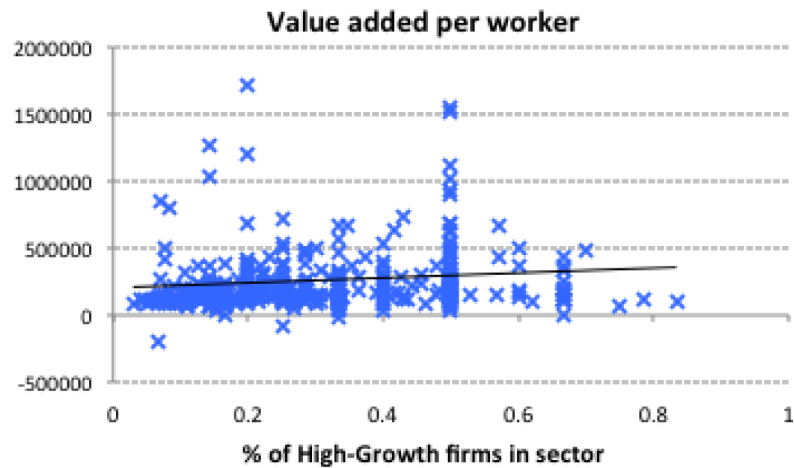
	After 5 years				After 10 years				After 15 years			After 20 years
	1994	1999	2004	Avg.	1994	1999	2004	Avg.	1994	1999	Avg.	1994
	<b>All manufacturing</b>	<b>13.0</b>	<b>6.8</b>	<b>6.0</b>	<b>8.6</b>	<b>4.4</b>	<b>2.3</b>	<b>1.4</b>	<b>2.7</b>	<b>1.9</b>	<b>0.8</b>	<b>1.3</b>
Food, beverages, tobacco, textile, apparel and leather	12.9	5.6	4.2	7.5	3.5	1.3	0.5	1.8	1.2	0.4	0.8	0.7
Wood, paper, print., petrochemical, plastic and non metallic min.	11.4	6.9	6.1	8.1	3.5	2.4	1.3	2.4	1.7	1.0	1.3	0.6
Metal, mach. and eq., electronics, electric, transp., furniture and other	14.6	8.7	8.8	10.7	6.5	3.7	2.7	4.3	3.2	1.4	2.3	1.5

- ✓ “Advanced” manufacturing industries tend to have a higher share of high-growth firms.
- ✓ There were fewer high-growth firms in the 2004 cohort.

On average, high-growth firms start with higher value added, capital and wages. Also, they are more export-oriented.



However, the relationship between initial values of variables relate weakly with the share of HG firms at industry level.





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# Conclusions and next steps

- More empirical analyses are needed to better understand the relation between high-growth firms and its determinants.
  - Establish the link between high-growth firms and economic growth.
  - Identify “opportunity” entrepreneurs’ characteristics.
  - Study which institutional frameworks favor growth of young firms.
- For the case of Mexico:
  - High-growth firms are a minority.
  - They seem to be more concentrated in “advanced” manufacturing industries.
  - Higher initial capital per worker and export sales relate positively with high-growth in subsequent periods.

**Thank you!**