# Evidencia para el Desarrollo de la Pequeña y Mediana Empresa

Lima, 3 de Noviembre de 2015













#### **Barriers to Growth**

- What determines cross-country income differences?
  - Physical Capital
  - Human Capital
  - Total Factor Productivity
- Firms are the fundamental production units that relate to all
- In developing economies, institutional barriers affect how firm can improve on all these dimensions
  - Credit constraints: slow or no accumulation of physical capital
  - Lack of education or training: low quality labor force
- Both have received considerable attention in the academic and policy community.

### **Total Factor Productivity (TFP)**

- What about firm productivity?
- In developed economies such as U.S and EU, a lot of attention is paid to innovation (R&D and patents) and new products.
- However, the exact definition of TFP is much broader
  - Customer and retail channel
  - Input and output quality
  - Reputation and reliability
- We broadly think of these crucial determinants as "Access to Market".
- Access to market is one of the major challenge of firm growth and success

#### **Access to Market**

#### Output market Frictions

- Acquiring and retaining customers: typically it is costly to search and match with a potential customer. These costs are especially sizable for international markets (i.e. exporting) and for firms with no track records.
- The hazard rate of breakup with customers is particularly high for small sellers
- Takes a substantial amount of time to establish firm visibility in new market

# **Search and Matching: Colombia Footwear Exports**

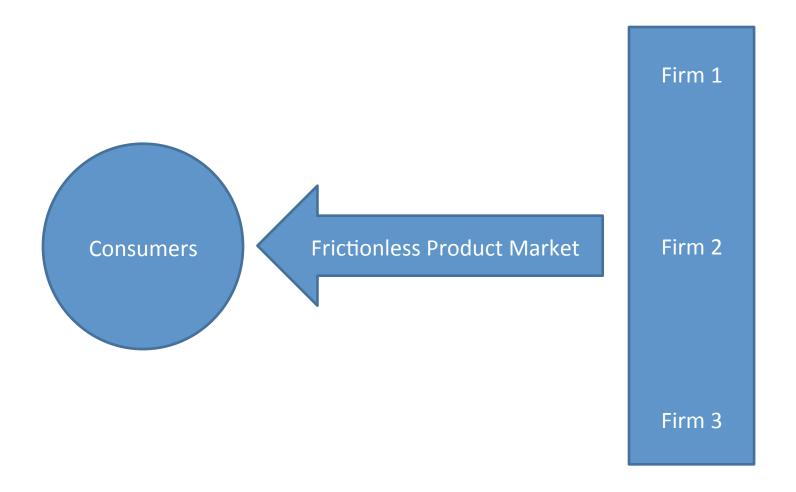
# of customers	Rubber 2009	Leather 2009	Plastic 2009	
1	56.0%	60.8%	60.0%	
2	16.3%	16.1%	15.8%	
3	7.5%	7.2%	7.4%	
4	4.9%	4.6%	4.9%	
5	3.9%	2.7%	2.9%	
6	2.5%	2.1%	2.5%	
7	2.2%	1.6%	2.0%	
8	1.7%	1.4%	1.2%	
9	1.0%	1.1%	0.7%	
10	0.8%	0.5%	0.5%	

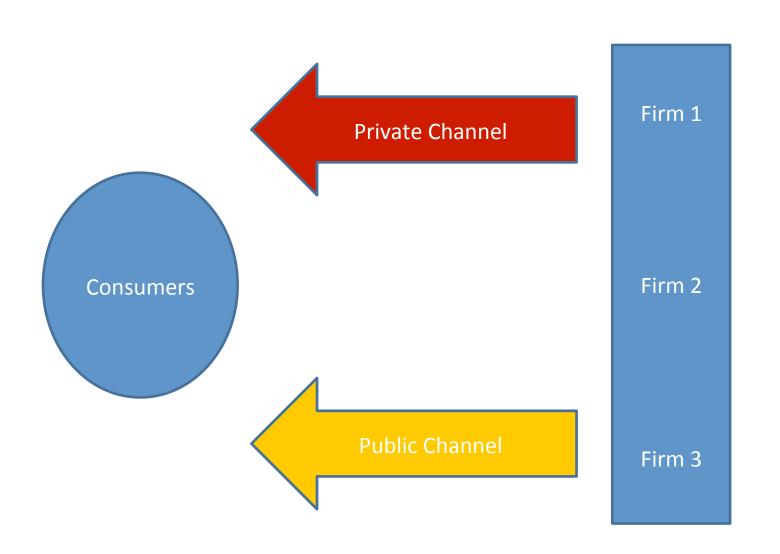
# **High Hazard Rate**

t\t+1	0	1	2	3	4	5
1	69%	21%	5%	2%	1%	1%
2	49%	21%	12%	8%	5%	2%
3	39%	16%	16%	10%	8%	4%
4	25%	16%	12%	10%	13%	9%
5	26%	11%	9%	10%	13%	10%

### **Access to Market**

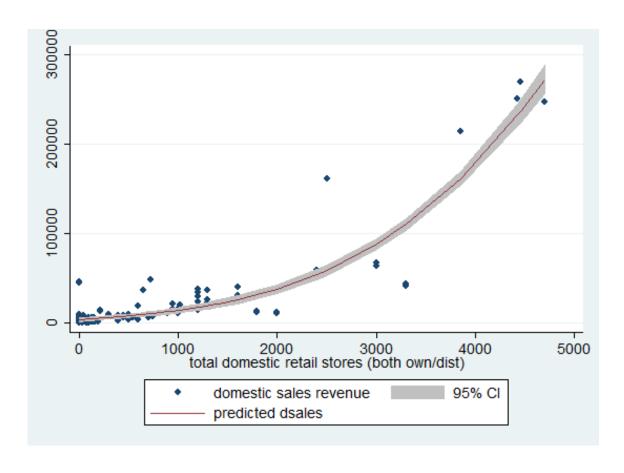
- Retail capital and demand creation
  - Even in domestic market, access to customer demand requires firm's private investment
  - Interacts with credit constraint





#### **Direct Sales Stores**

• Chinese footwear producers in domestic market



# Efficiency vs. Retail Capital

Dependent Variable: Non-Exporter's  $\ln x_i$  (Sales)

	Cross-Section	Growth	
Retail Capital	0.55*** (0.03)	0.28*** (0.07)	
Efficiency	-0.13 (0.13)	0.20 $(0.15)$	
year dummy	+	+	
Obs.	225	146	
Adj. $R^2$	0.69	0.09	

#### **Access to Market**

- Input Market Frictions
  - Coordination failure among input supplier and downstream producers
  - Lack of access to key inputs compromises product quality and export success

## **Peruvian Apparel Industry**

Paper by Pamela Medina (my collaborator, PhD candidate at Duke)

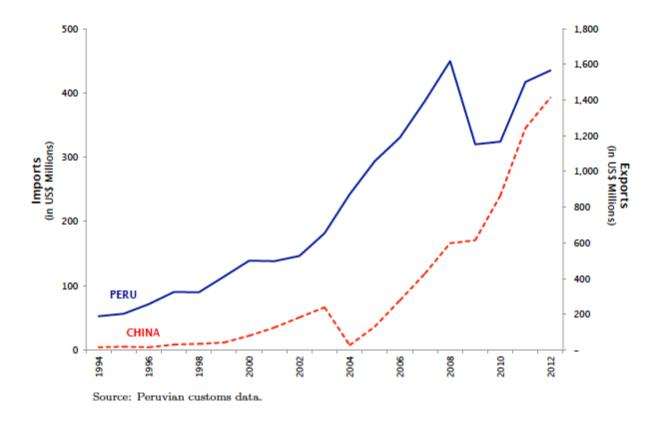
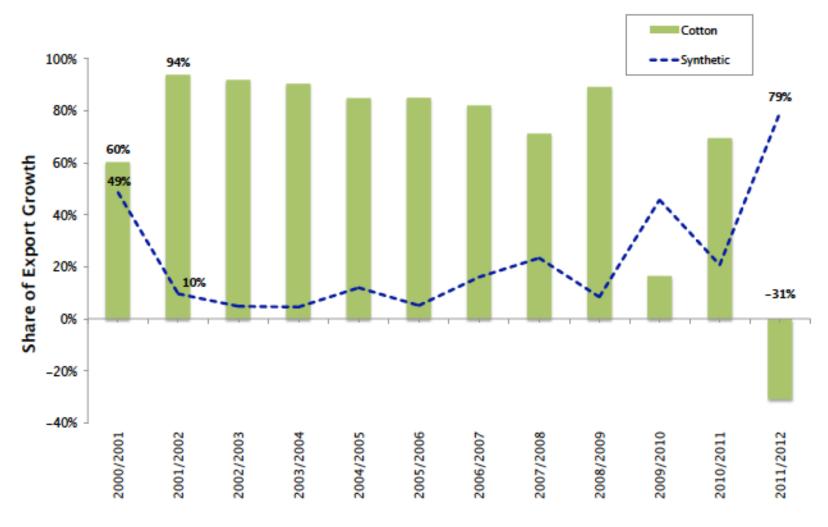


Figure 2: Peruvian Exports of Apparel



Source: Peruvian customs data.

Figure 3: Composition of Export Growth by Product

Intensive Margin						
(1)	(2)	(3)	(4)	(5)	(6)	

	Exports	Cotton Exports	Synthetic Exports	Number of Products	Number of Cotton Products	Number of Synthetic Products
$Comp_{jt-1}$	0.372***	0.494***	0.160	0.456***	0.494***	0.184*
	(0.125)	(0.157)	(0.254)	(0.085)	(0.090)	(0.111)
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F-Stat	904.94	876.40	578.96	904.04	876.40	578.96
Hansen J-Stat	6.94	4.74	3.54	2.72	2.69	3.36
Obs	5,477	5,004	2,899	5,477	5,004	2,899
R-squared	0.055	0.031	0.081	0.020	0.019	0.020
N. Firms	1,178	1,091	731	1,178	1,091	731

Notes: Clustered standard errors at the firm-level in parentheses. F-Stat refers to the Cragg-Donald Wald F-statistic and corresponds to a week identification test. Hansen J-statistics denotes the over-identification test of all instruments. All outcome variables are expressed in logs.

Table 2: Reduced-Form Evidence: Average Effects on Intensive Margin

#### What We Can Do

- Economic theory justifies interventions when there are market failures or externalities
- Several obvious ones in the context of "market access"
  - Information: sellers and buyers might not know about each other and it takes effort to start a new business relationship
  - Reputation: there is asymmetric information between seller and buyers in terms of product quality, reliability in delivery, and payment ability
  - Input specificity: producers might need high quality inputs that sellers find difficult/unprofitable to provide
  - Learning spillovers: producers might learn from pioneers about new customers and new markets

#### What We Can Do

- Programs that could alleviate these constraints examples
  - Information: matchmaking, ecommerce, intermediation
  - Reputation: quality certification, sponsored trade credits
  - Input specificity: business association and coordination
  - Learning spillovers: subsidizing pioneers in new markets and new product categories
- Piece-meal implementation and Randomized Control Trials
  - Cost Effective
  - Real-time updates and modification
  - Rigorous evaluation of potential program outcomes