

# Building a Customer Base under Liquidity Constraints

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# Motivation

**B2B manufacturing firms invest 8-10% of their sales in their customer base (Gartner 2019)**

## **Critical implications for economic efficiency**

- Life-cycle firm growth
  - Foster, Haltiwanger and Syverson (2016); Pozzi and Schivardi (2016); Eslava and Haltiwanger (2019)
- Competition
  - Syverson (2004); Steinwender (2018)

(This paper) **What is the role of financing frictions in demand formation?**

# This paper

## **Experimental setting:**

- Shock: French law that limited payment terms between French firms
- Outcome: Exports of French firms to EU-based importers

- 1. Relaxing liquidity constraints spurs export growth**
2. Relaxing liquidity constraints allows firms to invest in their customer base
3. Relaxing liquidity constraints allows firms to invest in long-term customer relationships

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1. Relaxing liquidity constraints spurs export growth
  2. Relaxing liquidity constraints allows firms to invest in their customer base
  3. Relaxing liquidity constraints allows firms to fund non-price customer acquisition costs
- **Liquidity frictions restrict the set of customers/suppliers with which firms can trade**

# Data

**Sample period: 2002-2012**

▷ **Firm-to-firm exports data**

- Product-level value and quantity shipped between French exporters and EU importers

▷ **Tax return data: Balance sheet + Profit and Loss statements**

▷ **Breakdown of sales by 5-digits sector**

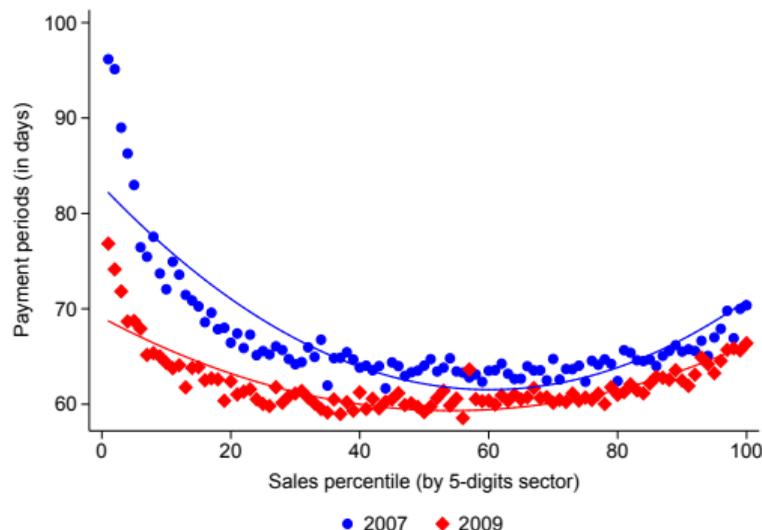
## The reform

### ”Loi de Modernisation de l’Economie” (2009)

- Long payment periods represent a ”financial burden for **SMEs**” (EU Commission, 2000)

**Starting from January 2009**, contractual payment terms should not exceed **60 days**

**Benefits:** unlocks internal liquidity for firms



Payment periods ↘ by **3 days** → **9%** increase in cash holdings for the average firm

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**Costs:** Limits non-price competition

Potential threat to identification

→ Focus on **international transactions**

- The cap only applies to domestic transactions

## Treatment intensity approach

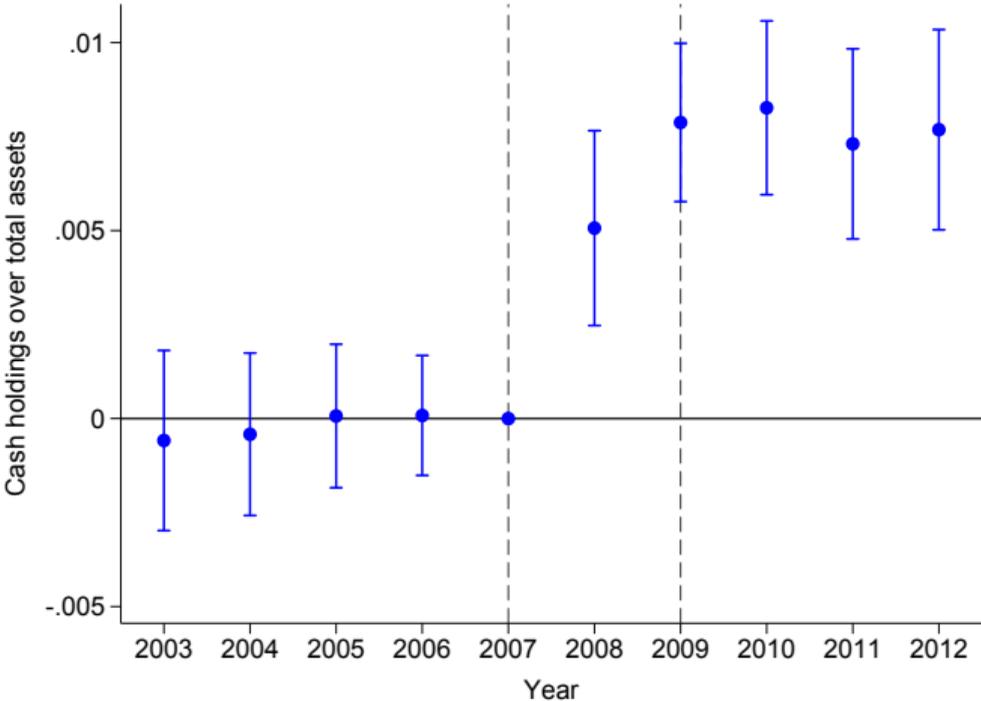
**Treatment intensity:** exposure to the reform varies with the **sectoral composition of sales**

- 2007 payment periods:
  - Carpets and rugs: 65 days
  - Industrial textiles: 82 days

**Comparison** of exports of **wall coverings** in **Germany** in **2009** (**product-country-year FE**) between

- **Firm A:** sells 70% of carpets and 30% industrial textiles
- **Firm B:** sells 30% of carpets and 70% industrial textiles

# Cash holdings

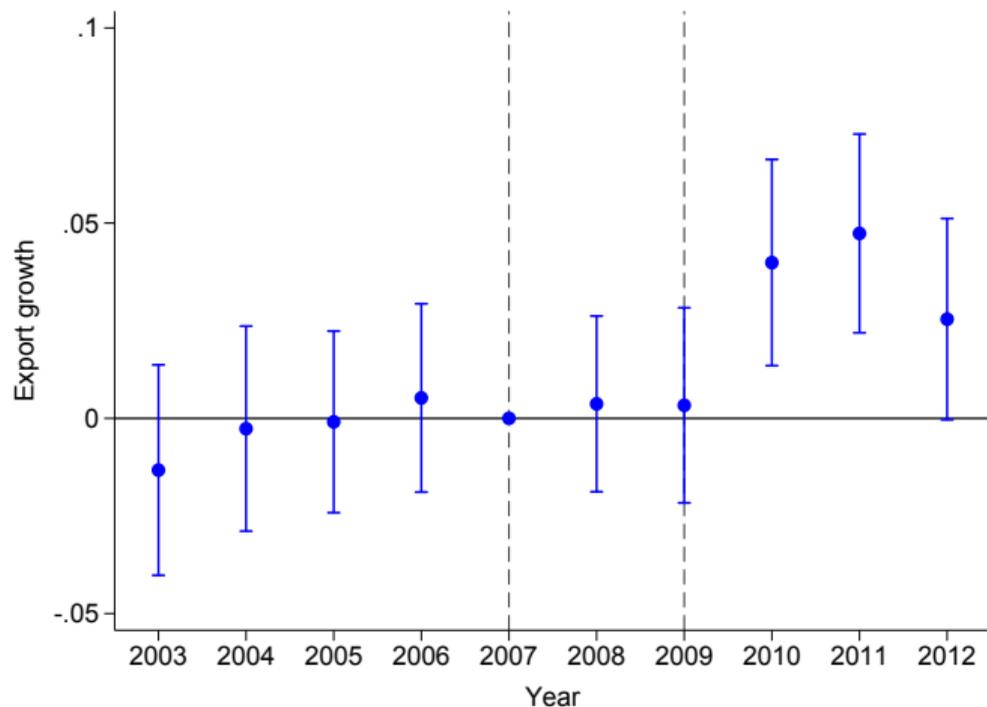


Transfer from accounts receivable to cash holdings

→ Short-term assets of the firm more **liquid**

$$Y_{f,t} = \kappa_f + \lambda_t + \sum_{i=2004}^{2012} \mu_i \cdot 1(\overline{\text{Distance to 60-day rule}_{f,07}} \geq P50) \times 1(t=i) + \rho \cdot W_{f,t} + \nu_{f,t}$$

## Export growth



1 S.D. in exposure to the reform

- ~ 20 days of distance to the threshold

→ **18% increase** in product-level export growth

$$Y_{f,c,p,t} = \kappa_f + \lambda_{c,p,t} + \sum_{i=2004}^{2012} \mu_i \cdot 1(\overline{\text{Distance to 60-day rule}_{f,07}} \geq P50) \times 1(t=i) + \rho \cdot W_{f,t} + \nu_{f,c,p,t}$$

## Customer acquisition or larger sales with existing customers?

	$\Delta Exports$	=
$\overline{Distance\ to\ 60\text{-}day\ rule}_{i,t}$	0.012** (0.006)	
Observations	4,938,990	
Firm FE	Yes	
Country-Product-Year FE	Yes	
Controls	Yes	

## Customer acquisition or larger sales with existing customers?

	$\Delta Exports$	=	$\Delta Stable\ customers$	+	$\Delta Customer\ base$
$\overline{Distance\ to\ 60\text{-}day\ rule}_{i,t}$	0.012** (0.006)		-0.001 (0.001)		0.012** (0.005)
Observations	4,938,990		4,938,990		4,938,990
Firm FE	Yes		Yes		Yes
Country-Product-Year FE	Yes		Yes		Yes
Controls	Yes		Yes		Yes

Not consistent with firm-level decrease in **production cost** or increase in **product quality**

# Customer acquisition costs

**The effects of the reform should be larger for...**

**1. Products more relationship-specific**

- Products with longer average trade relationships

**2. Customers that are more difficult to reach**

- Customers that had never traded with a French exporter before

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→ Liquidity constraints ↗ exposure to risk of losing customers

# Thanks!

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