Supply vs. Demand Constraints for Adoption of E-Commerce in Georgia

Enhancing Cohesion Policy Impact for Jobs, Skills, and Competitiveness

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WORLD BANK GROUP

Motivation

- Digital commerce is growing worldwide. It is seen as a promising way to increase MSMEs' access to markets.

- However, the majority of the MSMEs don't have an online presence.

Context

- Georgia upper middle-income country (source: data.worldbank.org).
- Georgia has experienced a steady expansion of broadband infrastructure since 2007, but mostly concentrated in the capital Tbilisi;
- 91% of MSMEs had access to internet at home or business, however less than 5% had online presence (Apedo-Amah et al., 2020)
- Scope to expand businesses' access to markets through the adoption of e-commerce.

How to expand firms' online presence?

- In 2017 we worked with a WB operational team to evaluate the impacts of a training program aimed to increase online presence (sales) of small firms in Georgia.

- The WB operational team hypothesized that small firms did not have the skills to sell online. They would then need some training.

- A training program was envisaged to overcome this supply-side constraint (lack of skills/know-how).

The training intervention

- The training intervention (avg. cost USD 130/firm)

  3-day face-to-face training on e-commerce basics

  - **Day 1**: how to use Google, Facebook, Instragram and Trip Advisor to increase visibility.
  - **Day 2**: how to understand customers' profiles, and how to register in e-commerce platforms (e.g., Bookings.com, Airbnb, hotels.com etc.).
  - **Day 3**: how to develop a business model, access financial opportunities, and participate in public procurement opportunities.

Impact of the training on adoption of e-commerce

Baseline characteristics of the firms:

- Average firm size: 5-6 employees
- 50% had a computer
- Less than 3% had a website
- Less than 10% received online orders

- July 2021: follow up survey with the 858 businesses – 72% response rate (no difference in attrition rate across groups)
  - We focused on outcomes related to online presence.

Variable	(1) Control N	(1) Control Mean/SE	(2) Treatment N	(2) Treatment Mean/SE	Difference (2)-(1)
Panel A: take up					
Attended training	220	0.000 (0.000)	638	0.536 (0.020)	0.536***
Panel B: treatment effects					
Can sell online	157	0.287 (0.036)	468	0.239 (0.020)	-0.047
Computers are used in the firm	160	0.669 (0.037)	476	0.597 (0.023)	-0.072*
At least one person uses internet	159	0.698 (0.037)	474	0.622 (0.022)	-0.076*
Has adequate internet conection	159	0.893 (0.025)	467	0.934 (0.012)	0.041
Has a facebook page	157	0.287 (0.036)	472	0.324 (0.022)	0.038
Has used e-platforms for business	142	0.134 (0.029)	410	0.149 (0.018)	0.015
Has a website	158	0.101 (0.024)	468	0.100 (0.014)	-0.001
Has a business email	157	0.490 (0.040)	473	0.495 (0.023)	0.004
Used online banking in the past 12m	154	0.318 (0.038)	461	0.356 (0.022)	0.038
Does digital marketing	156	0.051 (0.018)	470	0.072 (0.012)	-0.021
Firm delivers product by mail	140	0.143 (0.030)	419	0.136 (0.017)	-0.007

Notes: The value displayed for t-tests are the differences in the means across the groups. The value displayed for F-tests are p-values. Standard errors are robust. Fixed effects using variable municipality are included in all estimation regressions. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

No effects on firms' online presence

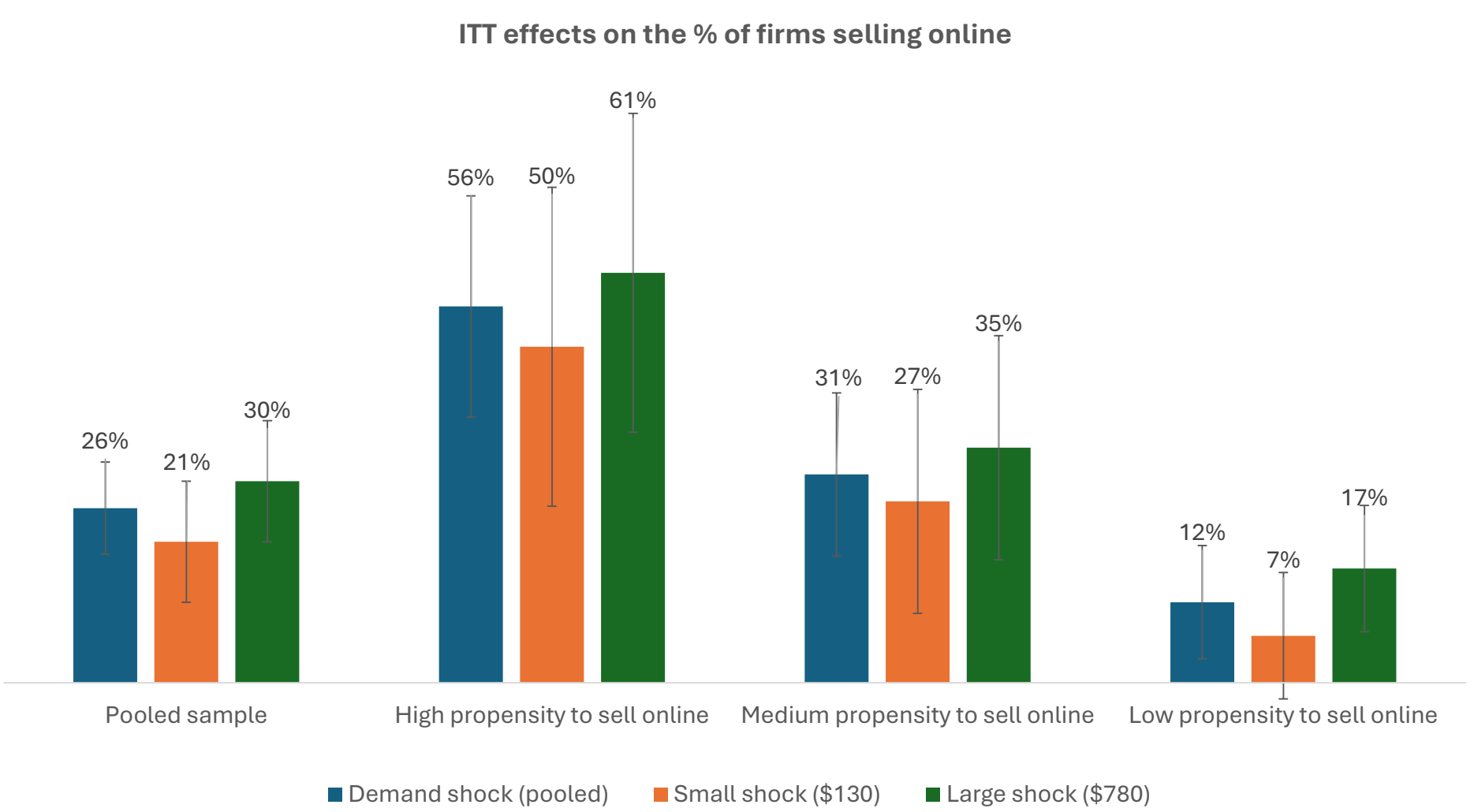
What now?!

- What if firms hesitate in selling online simply because they don't think it's worth it, i.e., they don't think there'll be demand (uncertain returns)?

The demand shock intervention

- Among the 858 firms in the original training randomization sample, we considered firms that:
  1. Completed the midline survey in 2021;
  2. Still active;
  3. Had products or services available during the planned period of the intervention; and
  4. Had indicated in the midline survey in 2021 that they were not currently selling online but were willing to.
- Total sample for the demand shock = 288 firms.
- We stratified firms by their propensity to sell online (low, medium and high) and randomly assigned them to 3 groups:
  - 136 to control
  - 76 to low demand shock (USD 130 = training cost per firm)
  - 76 to high demand shock (USD 780)

Impact of the demand shock on small firms' online presence



Main takeaways

- Lack of skills wasn't a key constraint behind firms' decision to stay online absent.

- Lack of demand might be the key factor hindering investments in profitable decision-making (including tech adoption)

- **Better targeting can maximize program's impacts**: The high propensity group needed just a small help to switch to online. Even a big push would not change behavior of most firms in the low propensity group.

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