"How Exporters Grow"

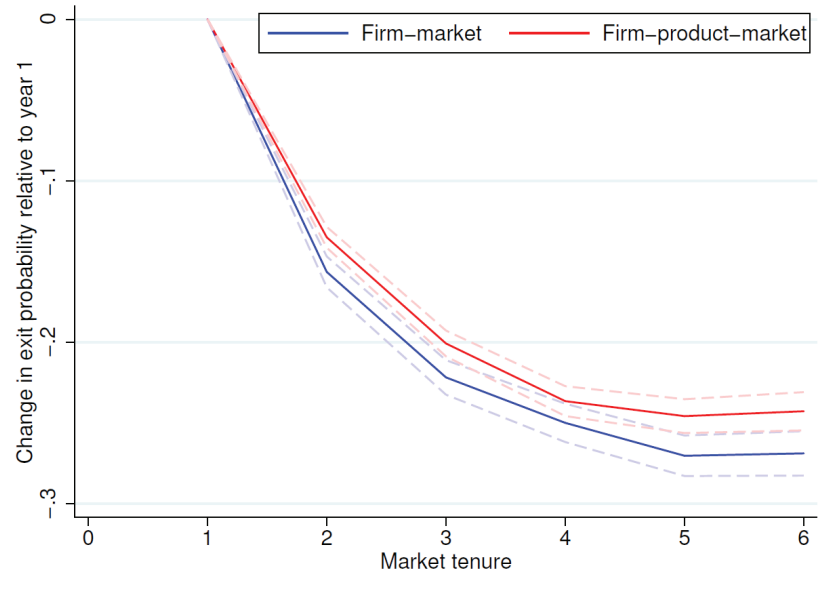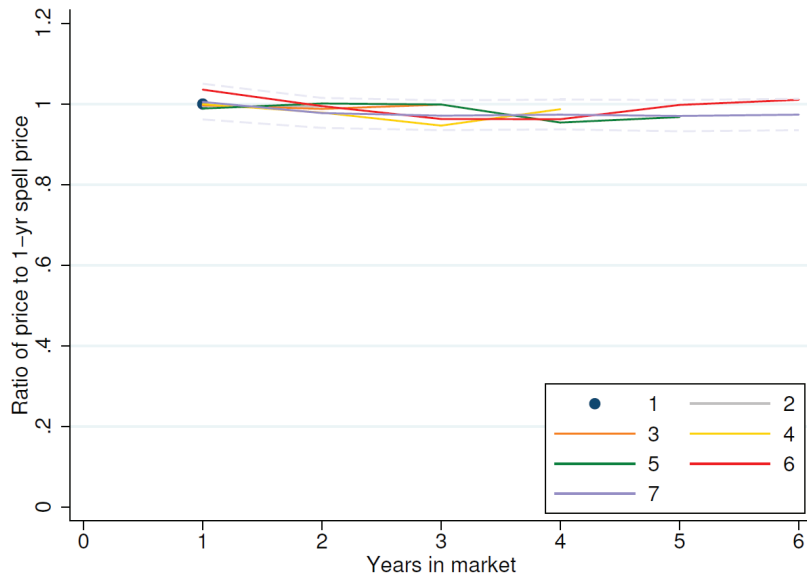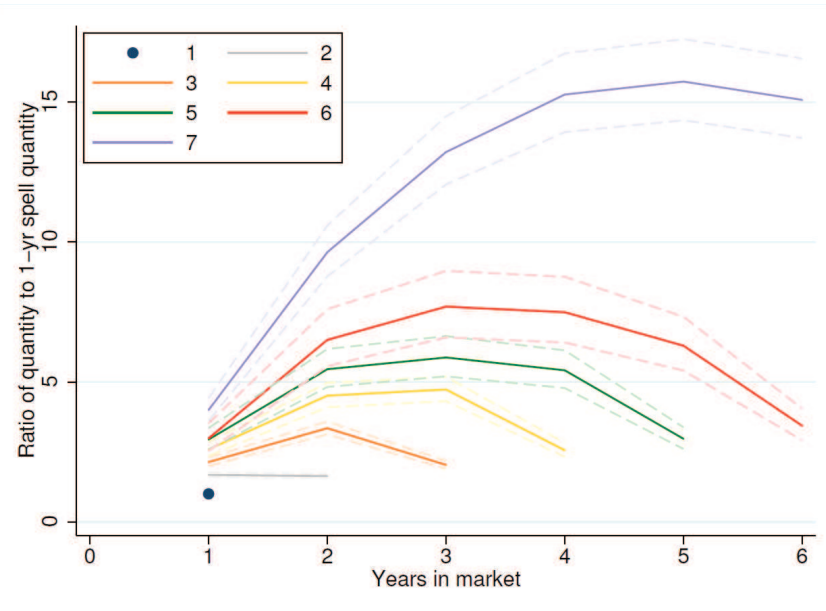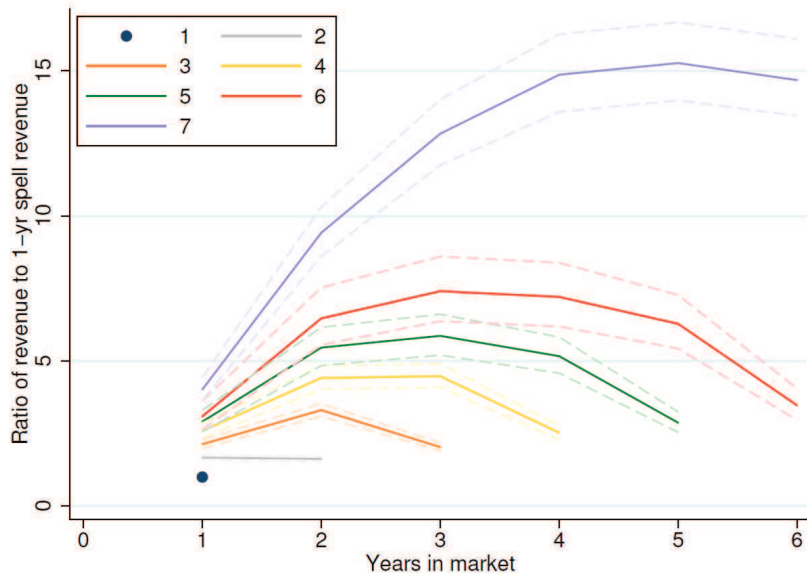## by D. Fitzgerald, S. Haller, and Y. Yedid-Levi

Discussion by Stefania Garetto

Boston University

May 18th, 2018

Summary: Empirical Findings

Summary: How to Explain the Empirical Findings

1. Q, R at entry are positively correlated with spell length.

2. Q, R grow (are hump-shaped) with tenure for successful (unsuccessful) spells.

3. P is not correlated with spell length and does not vary with tenure.

4. Exit rates are declining with market tenure.

Summary: How to Explain the Empirical Findings

1. Q, R at entry are positively correlated with spell length.

2. Q, R grow (are hump-shaped) with tenure for successful (unsuccessful) spells.

3. P is not correlated with spell length and does not vary with tenure.

4. Exit rates are declining with market tenure.

"Standard" model of trade dynamics: firm-market specific persistent productivity shock $\Rightarrow$ 1, 4.

Summary: How to Explain the Empirical Findings

1. Q, R at entry are positively correlated with spell length.

2. Q, R grow (are hump-shaped) with tenure for successful (unsuccessful) spells.

3. P is not correlated with spell length and does not vary with tenure.

4. Exit rates are declining with market tenure.

Firm-market specific demand shock + CES preferences $\Rightarrow$ 1, 3, 4.

Summary: How to Explain the Empirical Findings

1. Q, R at entry are positively correlated with spell length.

2. Q, R grow (are hump-shaped) with tenure for successful (unsuccessful) spells.

3. P is not correlated with spell length and does not vary with tenure.

4. Exit rates are declining with market tenure.

FHY: Firm-market specific demand shock + CES preferences + learning + endogenous customer base $\Rightarrow$ 1, 2, 3, 4.

How Do Multinational Exporters Grow

- Ireland has an above-average population of **multinational enterprises** (MNEs):

    ○ 12% of firms in the sample are foreign-owned (about 1% in the U.S.)
    ○ very large export participation (44% versus 18% in the U.S.)
    ○ favorable tax policy to attract foreign firms.

- FHY show robustness of main facts splitting the sample in domestic- versus foreign-owned firms:

    ○ **Foreign-owned exporters grow faster and exit less** compared to domestic-owned exporters.

        ● Reasonable: exit is negatively correlated with size and tenure, and the parent might have already invested in customer base.

Who are the Multinational Exporters in Ireland?

Among the top 100 Irish companies by employment:

- <u>Electronics:</u> Apple Ireland (U.S.), Ericsson (Sweden), Dell (U.S.), Siemens (Germany)

- <u>Transportation Equipment:</u> Bombardier Aerospace (Canada)

- <u>Pharmaceuticals:</u> Merck (U.S.)

- <u>Food:</u> Ferrero (Italy), Kellogg (U.S.)

Who are the Multinational Exporters in Ireland?

Among the top 100 Irish companies by employment:

- Electronics: Apple Ireland (U.S.), Ericsson (Sweden), Dell (U.S.), Siemens (Germany)

- Transportation Equipment: Bombardier Aerospace (Canada)

- Pharmaceuticals: Merck (U.S.)

- Food: Ferrero (Italy), Kellogg (U.S.)

Common in sectors where **global supply chains** are important!

Global Supply Chains and Identifying Assumptions

Are the identification assumptions valid for the treatment of MNEs?

Global Supply Chains and Identifying Assumptions

Are the identification assumptions valid for the treatment of MNEs?

1. **For a given firm-product-year, the marginal cost of production is the same across destination markets.**

   Example: Electronic components produced by Siemens may involve different technologies/costs depending on who/where is the specific customer.

Global Supply Chains and Identifying Assumptions

Are the identification assumptions valid for the treatment of MNEs?

1. **For a given firm-product-year, the marginal cost of production is the same across destination markets.**

    Example: Electronic components produced by Siemens may involve different technologies/costs depending on who/where is the specific customer.

2. **The price elasticity of demand is independent of customer base.**

    Example: From Bombardier Ireland's website: "*Our global customer base includes operators of Airbus, Boeing, Bombardier and Shorts aircraft. [...] We provide aircraft parts sales, component repairs, OEM engineering support, production of technical publications, and technical training for engineers and pilots.*"

    Who invests in customer base? The parent or the affiliates? Seems possible that the price elasticity of demand depends on the "tightness" of the supply chain (exclusive supply agreements versus more open arrangements).

MNE Exporters: Evidence from U.S. Firms

- Garetto, Oldenski, and Ramondo (2018): look at growth paths of foreign affiliates of U.S. multinational firms.

  ○ Overlap with FHY data: Ireland-based affiliates of firms like Apple, Microsoft, Dell, Merck, Kellogg, etc.,

  ○ Most comparable exercise: how do export sales grow, within affiliate and to a given destination country?

    - To control for the destination market, look at export sales to the US.

    - Only "successful" affiliates (export from birth for at least 10 years).

    - Main difference compared to FHY: only sales data; look at export sales as a share of parent sales (á la Ruhl and Willis, 2017).
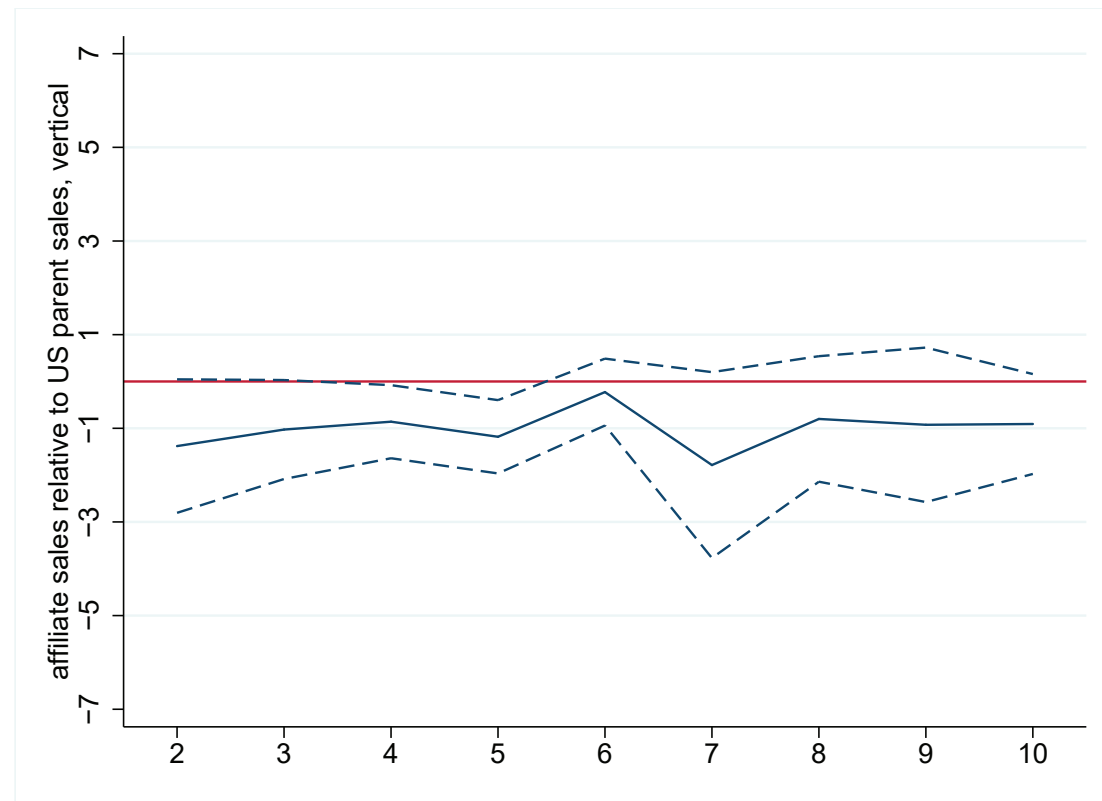
MNE Exporters: Evidence from U.S. Firms

$$sales_a^{us}/parent\ sales = \beta \cdot age + \delta_{ct} + \delta_a + \varepsilon_a$$

Estimated $\hat{\beta} = -0.469$ (std. err. 0.414): **flat growth profile!**

Coefficients from a similar regression with age dummies:

Other Comments

- **Sunk costs:** size at entry similar to size at exit in the figures $\rightarrow$ suggests sunk costs may not be important. And current specification more similar to an exogenous exit rate.

- **Independence of Export Entry Decisions Across Markets:** Morales et al. (2017) show it contradicts the behavior of sequential entry decisions of Chilean firms. How do sequential decisions of Irish exporters look like?

Conclusions

- Important paper! Big step forward on the question:

  What drives firm dynamics?

- Unique data and careful methodology to distinguish selection from dynamics.

- What I tried to add: some perspective on an important subset of the sample, MNEs.