

THE EFFECTS OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH: EMPIRICAL EVIDENCE FROM IRELAND

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1. INTRODUCTION

- **How does foreign direct investment (FDI) affect economic growth?**

The purpose of this study is to disentangle the effects of FDI on the economic output of receiving countries, since the empirical literature has been a bit inconclusive to provide a clear answer for the positive impact of FDI on economic growth.

- **Why Ireland?**

It is the 6th economy in the world by FDI net inflow (in USD and %GDP) and its stock raised a 638% during the period studied.

2. LITERATURE REVIEW

- **Mainstream economic theory:**

FDI is proven to stimulate economic growth through different channels. It also enhances enterprise development and the creation of a more competitive business environment.

- **Alternative stream of economic thought:**

FDI is proven to suffer from lack of adaptation to local contexts. It can bring about external vulnerability and dependence into receiving countries as well as destructive competition.

3. THEORETICAL SETTING

- **What are the roots for the inconclusive findings?**

1. Reverse causality problems.
2. Data heterogeneity problems.
3. No interaction of the economies studied.
4. No region-specific and industry-specific effects.
5. No mobility of factors & space dimension (new trade theory)

- **Solving the problem:**

$$Y_{ir}(t) = \underbrace{K_{ir}(t)^\alpha L_{ir}(t)^\beta \Omega(t)}_{\text{Solow-type equation}} k_{ir}(t)^{\phi_1} h_{ir}(t)^{\phi_2} \underbrace{F_{ir}(t)^{\phi_3}}_{\text{FDI}} \underbrace{\prod_{s \neq r}^n A_{is}^{\gamma_{wrs}}(t)}_{\text{operations Spatial externalities}}$$

4. EMPIRICAL ANALYSIS

- **Original dataset:** Eurostat + Amadeus.
- **Period covered:** 2000 – 2015.
- **FDI operations:** 4,014 operations. 96% in Southern and Eastern regions, and 4% in Border, Midland and Western regions; 94% in the tertiary sector, 38% of whom take place in financial and insurance activities.
- **Methodology:** I run 4 different econometric regression specifications by means of LSDV models, using panel data.

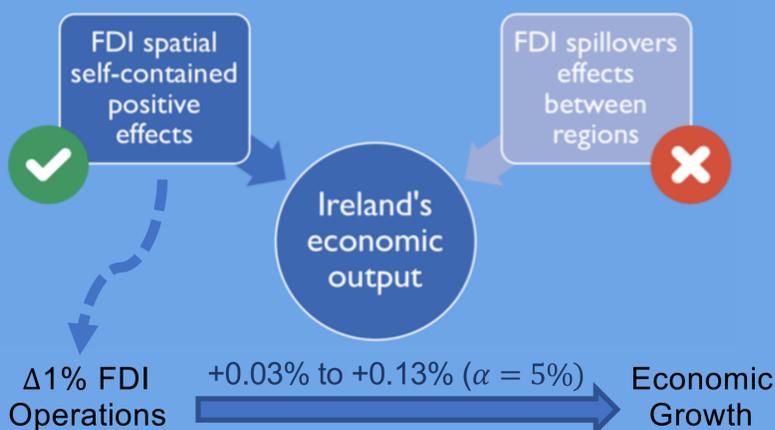
- **LSDV model:**

$$\log y_{irt} = \beta_0 + \beta_1 \log L_{irt} + \beta_2 \log K_{irt} + \beta_3 \log k_{irt} + \beta_4 \log h_{irt} + \beta_5 \log F_{irt} + \beta_6 \log F_{ist} + \zeta_i + \eta_r + \tau_t + \varepsilon_{irt}$$

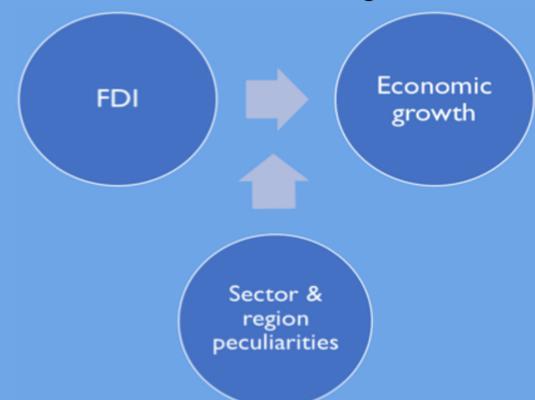
- **Regression I:** identical to previous equation.
- **Regression II:** k is eliminated to avoid multicollinearity.
- **Regression III:** F_{ist} is lagged for one time period. Problem: AR(1) in ε .
- **Regression IV:** Acts as a robustness check for Regression II: a unit-value is added to all zero observation values.

5. RESULTS

All the FDI spillover effects are self-contained in a single spatial unit:



Each sector and region is differentiated by its own peculiarity that is statistically relevant ⇒ Regional and industrial specificities moderate the relationship between FDI and economic growth:



6. CONCLUSIONS

Empirical evidence suggests that FDI has a positive effect on economic growth.

Limitations of the study: (1) The variable measuring human capital is only available at regional level and it is proxied for all the industries. (2) 5% of observations were provided an industry classification under an ad-hoc hypothesis.

Options for future research: working with larger samples and firm-level data, measuring FDI spatial spillovers in a longer term, and studying what are the regional & sectoral specificities causing the presence of clusters of observations.