Regional Institutions and FDI Resilience:

Evidence from the Brexit Uncertainty Period

Juan Alvarez-Vilanova

Department of Geography & Environment, London School of Economics

j.alvarez-vilanova@lse.ac.uk — linkedin.com/in/juanvi — juanavilanova.github.io

Motivation

Economic uncertainty sparked by systemic shocks negatively affects inward Foreign Direct Investment (FDI), and the 2016-2019 Brexit negotiation period provides a salient example of how transition-era disruptions reshape international capital flows (Dixit and Pindyck, 1994; Bloom et al., 2019). While the UK experienced lower FDI inflows following the referendum (Serwicka and Tamberi, 2018), these effects proved highly heterogeneous by sector, investment type, and crucially, by region. This spatial variation raises a fundamental question for regional science: can place-based institutions moderate the impact of global uncertainty shocks on regional economies?

Investment Promotion Agencies (IPAs) represent particularly relevant regional actors in this context. These public bodies aim to attract inward FDI through two mechanisms: reducing information asymmetries (clarifying regulations and administrative processes) and building regional ecosystems (fostering specialised labour pools, supplier networks, and research capabilities) (Harding and Javorcik, 2011; World Bank, 2023). While the information channel is well documented in stable periods, we lack clear empirical evidence on whether and how IPAs protect FDI during fundamental uncertainty - when indeterminacy cannot be resolved through information alone (Yeung, 2021). This paper exploits heterogeneous pre-Brexit IPA sector-targeting strategies across UK regions to examine which mechanism proves decisive during uncertainty, and how effects vary across space and institutional capacity.

Methodology

I combine data on IPA sector-targeting strategies from the EU-funded MASSIVE survey (Crescenzi et al., 2021) with detailed project-level FDI data from Bureau van Dijk's Orbis-Crossborder database covering July 2010 through June 2019. The treatment group consists of 218 region-sectors targeted by their IPA before 2015 - predating Brexit-related considerations. The control group comprises 622 non-targeted region-sectors. This pre-treatment timing mitigates endogeneity concerns, as targeting decisions reflect regional strengths rather than anticipation of Brexit.

Using a Difference-in-Differences design with region-sector, region-time, and sector-time fixed effects, I estimate the impact of pre-2015 IPA targeting on FDI during the post-Brexit period (July 2016-June 2019). The richness of the data allows two key distinctions that provide direct tests of the underlying mechanism. First, I distinguish between new FDI by first-time investors and repeat FDI by established MNEs. If ecosystem-building dominates, effects should concentrate among established investors already embedded in regional networks. Second, I distinguish between Knowledge Intensive Services (KIS) sectors - relatively less exposed to Brexit trade uncertainty - and manufacturing sectors facing acute supply chain disruption (Bailey and De Propris, 2017; Fuller, 2021). If ecosystem access is decisive, effects should concentrate in KIS sectors where operational benefits can offset broader uncertainty.

To strengthen causal interpretation, I implement several robustness checks: pre-Brexit event studies isolating IPA effectiveness during stable periods (2010-2016) using methods that account for staggered adoption biases (Sun and Abraham, 2021); controls for flight-to-safety dynamics where investors concentrate in historically strong region-sectors; and placebo tests assigning false treatment dates to verify parallel trends. I also examine heterogeneous effects by FDI motivation (ecosystem-related vs. other factors), geographic location (South East England vs. rest of England), and institutional capacity (Combined Authorities vs. Local Enterprise Partnerships) (Pike et al., 2016).

Key Findings

IPA effectiveness concentrates in repeat KIS FDI. Pre-2015 IPA sector-targeting strategies increased inward FDI specifically in repeat investments within Knowledge Intensive Services sectors. Targeted region-sectors were 4.4 percentage points more likely to receive repeat KIS FDI, with 27.9% higher capital value and 29.3% higher job creation. By contrast, new FDI and manufacturing sector investments saw no significant impact. This pattern indicates that ecosystem-building, rather than information provision, drives IPA effectiveness during fundamental uncertainty: established investors embedded in regional ecosystems respond, while new investors and trade-exposed manufacturing sectors do not.

Spatial heterogeneity reveals where institutions matter most. IPA effectiveness concentrates outside South East England, with a 21.6% increase in capital value in less agglomerated regions compared to null effects in the economically prosperous Southeast. This geographic pattern provides direct evidence for the ecosystem-building mechanism: IPAs protect FDI by embedding firms within regional networks and support structures - functions that add greatest value where such infrastructure must be actively constructed rather than where it already exists through dense agglomeration (Beugelsdijk et al., 2010).

Institutional capacity shapes effectiveness. Combined Authorities - statutory bodies with devolved powers and greater resources - show robust positive effects (24.5% increase in capital value, 8.7 percentage point increase in FDI probability). By contrast, Local Enterprise Partnerships and Upper Tier Local Authorities show no significant effects. This stark contrast suggests that ecosystem-building during uncertainty requires institutional capacity - statutory authority and adequate resources - that fragmented local bodies lack (O'Brien and Pike, 2015).

Direct evidence from investor motivations. Among investments explicitly motivated by ecosystem factors (access to skilled labour, supplier networks, research capabilities), IPA targeting is associated with a 26.9% increase in investment value. For investments citing non-ecosystem motivations, effects are either null or reflect pre-existing differential trends. This provides the most direct evidence that ecosystem access - not information provision - underpins IPAs' protective effect during Brexit uncertainty.

Pre-Brexit event studies confirm crisis-specific activation. IPA targeting strategies show no significant association with increased FDI during the pre-Brexit period (2010-2016) for either manufacturing or KIS sectors. This null result in stable times, contrasted with strong positive effects during Brexit uncertainty, suggests that English IPAs play a distinct protective role during crises through ecosystem-building mechanisms rather than simply continuing baseline effectiveness.

Policy Implications

These findings carry important implications for regional development policy in an era of structural transformation. First, regional institutions are not rendered ineffective by global shocks; rather, their role shifts. During uncertainty, ecosystem-building mechanisms prove more decisive than traditional information-assistance functions. Second, the concentration of effects in less agglomerated regions suggests that targeted institutional support is most valuable where market mechanisms alone fail to create accessible regional assets (Rodríguez-Pose and Garcilazo, 2015). Third, the stark differences in effectiveness between Combined Authorities and fragmented local bodies highlight the importance of institutional capacity - statutory authority, devolved powers, and adequate resources - for complex ecosystem coordination (Bachtler et al., 2019).

More broadly, these results demonstrate how place-based institutions mediate the spatial consequences of global transition shocks, producing uneven but institutionally contingent patterns of regional resilience (Crescenzi and Harman, 2023). For policymakers, this suggests that strengthening ecosystem-oriented institutional capacity may be particularly important in regions lacking dense agglomeration advantages, where resilience to global disruptions depends more heavily on active coordination and asset articulation. IPAs offer one institutional vehicle for this work, but the broader lesson extends to regional development agencies, local authorities, and other place-based institutions charged with supporting economic resilience in an era of increasingly frequent disruptions.

References

Bachtler, J., Martins, J. O., Wostner, P., and Zuber, P. (2019). Governing regional economic development under place-based approaches in europe. *Growth and Change*, 50(1):149–177.

Bailey, D. and De Propris, L. (2017). Brexit and the uk automotive industry. *National Institute Economic Review*, 242(1):R51–R59.

Beugelsdijk, S., McCann, P., and Mudambi, R. (2010). Place, space and organization - economic geography and the multinational enterprise. *Journal of Economic Geography*, 10(4):485–493.

Bloom, N., Bunn, P., Chen, S., Mizen, P., and Smietanka, P. (2019). The impact of brexit on uk firms. Technical report, National Bureau of Economic Research.

Crescenzi, R., Di Cataldo, M., and Giua, M. (2021). Fdi inflows in europe: Does investment promotion work? *Journal of International Economics*, 132:103502.

Crescenzi, R. and Harman, O. (2023). Global value chains from a regional perspective. *Cambridge Journal of Regions, Economy and Society*, 16(1):27–44.

Dixit, A. K. and Pindyck, R. S. (1994). Investment under uncertainty. *Princeton University Press*.

Fuller, C. (2021). Understanding the impact of brexit: The case of foreign software corporations in scotland and south east england. *European Urban and Regional Studies*, 28(2):173–191.

Harding, T. and Javorcik, B. S. (2011). Roll out the red carpet and they will come: Investment promotion and fdi inflows. *The Economic Journal*, 121(557):1445–1476.

O'Brien, P. and Pike, A. (2015). City deals, decentralisation and the governance of local infrastructure funding and financing in the uk. *National Institute Economic Review*, 233:R14–R26.

Pike, A., Kempton, L., Marlow, D., O'Brien, P., and Tomaney, J. (2016). Decentralisation: Issues, principles and practice.

Rodríguez-Pose, A. and Garcilazo, E. (2015). Do institutions matter for regional development? *Regional Studies*, 49(7):1034–1047.

Serwicka, I. and Tamberi, N. (2018). Not backing britain: Fdi decisions post-brexit. *Economics Letters*, 171:214–217.

Sun, L. and Abraham, S. (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of Econometrics*, 225(2):175–199.

World Bank (2023). State of investment promotion agencies: Evidence from waipa-wbg's joint global survey. Technical report.

Yeung, H. W.-c. (2021). Global production networks and the new geographies of development. *Economic Geography*, 97(2):113–138.