INSTITUTIONAL MODERATION AND DIVERGENT CLUSTER SCALING: A COMPARATIVE ANALYSIS OF THE UNITED STATES AND EUROPE

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Abstract

Purpose – Industry clusters are globally recognized as sources of regional competitive advantage and also engines of innovation. This paper explores why industry clusters that benefit from analogous agglomeration advantages exhibit different scaling behaviors in advanced countries.
Methodology/Design/Approach – An institutional theoretical approach is applied to develop an understanding of how national institutional systems impact cluster development after the initial stage of formation. In this regard, the Institutional Moderation Model of Cluster Development (IMMCD) is introduced as a conceptual tool through the integration of existing research from economic geography, comparative capitalism, and cluster development theory. Using a comparison of the US and Europe, it is demonstrated how the financial system, labour markets, and place-based policies operate as institutional moderators in the process.
Findings – The results suggest that although agglomeration facilitates growth opportunities, the institutional structure determines the degree and course of scaling. The market systems lead to faster cluster scaling because of the fluid nature of finance and labour force, while the coordinated systems encourage stability and incremental growth. Differences between the two systems can explain regional concentration, productivity, and volatility.
Originality of the research – This paper adds to cluster theory by highlighting that cluster development should be examined after the initial stage of formation. The work presented here outlines an organized framework where institutions are seen as active tools that facilitate the conversion of agglomeration to firm-level growth, thus serving as a foundation for empirical analysis in the future.
Keywords agglomeration economies, cluster scaling, institutional moderation, labour mobility, regional tourism development, tourism clusters.

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INTRODUCTION

Innovation and competitive advantage are spread uneven across regions. There are areas generating high-growth firms with lasting productivity benefits, while others have difficulty achieving an equivalent dynamism (Delgado et al., 2010; Porter, 2000). Technology and finance are always considered first. Take, for instance, the Silicon Valley's dominance in global technology markets. How about the Boston's biotechnology ecosystem that lures a disproportionate share of venture capital, or New York's financial sector that is a testament to spatial concentration over time. Europe is full of manufacturing clusters that are relatively competitive globally and appear to evolve more slowly but exhibit enduring resilience over time.

With tourism contributing about 9.8% to the global Gross Domestic Product (GDP) and about 10.9% of the jobs globally (1 in 3 new jobs created globally are in the tourism and hospitality sector) (WTTC, 2026), this paper examines the agglomeration in the tourism and hospitality sector. Tourism and hospitality clusters such as Las Vegas and Orlando in the United States, and Barcelona, Paris, and the French Riviera in Europe also provide compelling example and context about how agglomeration and institutional dynamics shape regional competitiveness.

In this study, cluster research correlates the spatial concentration in clusters to agglomeration economies and the impact of knowledge spillovers (Marshall, 1890; Ciccone & Hall, 1996; Krugman, 2011; Jaffe et al., 2000). Distance allows organizations to access specialized pools of labour and share ideas faster. These mechanisms provide a way to explain the nature of clusters, but provide few explanations of why clusters differ so wildly in their growth outcomes. Firm formation and development of clusters is influenced by the institutional setting of institutions that support financial systems and policy structures through which firms operate, which in turn influence how capital and talent is drawn. Firms rely on financial systems, labour market structures, regional economies/norms, and policies ("FLREP") (Hall & Soskice, 2001; Masera, 2010). Therefore, a region with similar knowledge density may grow differently over time.

In this paper, we contend that agglomeration creates opportunities, while institutional conditions define how those opportunities will be realized. The FLREP model serves as a cluster-level moderator to magnify or delimit the scaling of clusters. For this mechanization, we provide a comparative analysis of the US model and its corresponding European version. Rather than bringing forth novel econometric evidence, the paper presents a theoretical framework, the Institutional Moderation Model of Cluster Development ("IMMCD"), and illustrates its application via comparative cluster examples, serving to rationalise the role of institutions in shaping cluster behavior. We build on cluster theory and argue why such levels of agglomeration may lead to systematically different scaling pathways in advanced economies in this paper. Unlike the institutional models that treat institutions

as background conditions, the Institutional Moderation Model takes a view of financial architecture, labour mobility, and place-based policy as active elements that impact how agglomeration leads to firm growth, productivity, and regional divergence.

This model also changes the attention from cluster formation to cluster development and helps to elucidate the dynamics through which the amplification and the moderation differ within institutional systems and between stages of the cluster lifecycle. Using the blend of an economic geography and comparative institutional analysis, the model uncovers why clusters embedded in market systems scale rapidly and unevenly, whereas clusters in coordinated systems grow in a relatively steady manner, even when spatial concentration is comparable.

1. THEORETICAL BACKGROUND

In this paper, a conceptual design is used to explore how the institutional environment affects the scaling of industry clusters among developed nations. This study does not use any econometric testing and primary data collection, the paper seeks to formulate a theory, the Institutional Moderation Model of Cluster Development (IMMCD), which will shed light on how the process of scaling is affected by institutional characteristics of the setting. The goal of the current study is thus to enhance the existing cluster theory by moving beyond the formation phase to cluster development.

As far as the methodology is concerned, the current work involves a systematic literature review. Economic geography, comparative political economy, cluster lifecycle theory, and institutional theories are used to formulate a framework that would facilitate the comparative analysis of the processes of cluster scaling in two types of advanced capitalism: liberal market economies (e.g., the USA) and coordinated market economies (e.g., Europe). Comparative study helps analyze structural differences between the settings in terms of financial systems, labour mobility, and policy orientation that serve as institutional moderators.

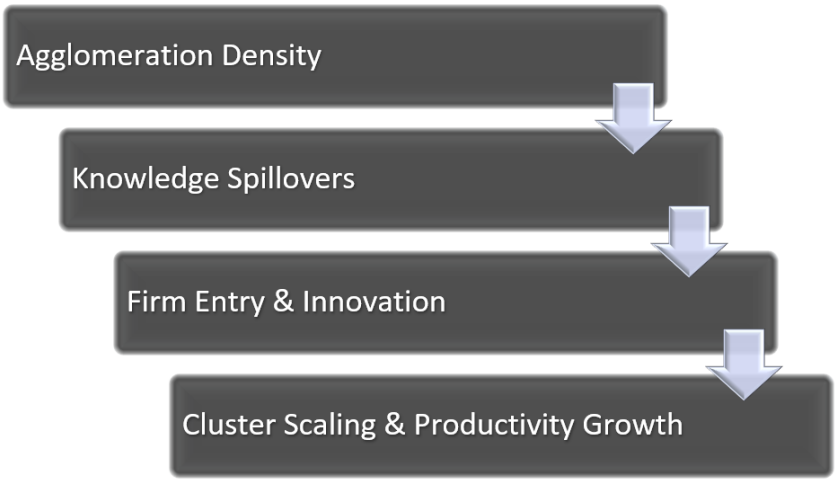
Further development of the framework is done using an example analysis. Cases related to tourism and hospitality clusters are used to illustrate how institutional context affects their behavior and scalability while also discussing growth trajectory. Based on the analysis, theoretical propositions are formulated, specifying relationships between the processes of cluster scaling and firm scaling in the presence of institutional moderators.

At this point, no empirical data is provided; however, the model is formulated in a way that allows its empirical verification. It can be tested using multi-level analysis, including panel data analysis at various spatial scales (i.e., regional, national), where the independent variables include venture capital intensity, labour mobility, funding (private vs public), cultural characteristics, and level of policy involvement.

1.1 Institutional Moderation Model of Cluster Evolution

This section presents the Institutional Moderation Model of Cluster Development ("IMMCD") and examines how institutional configurations shape cluster scaling outcomes across advanced economies. The model developed here begins with a core causal sequence, which is well supported in the literature.

Figure 1: **Core Agglomeration-to-Scaling Mechanism**



Source: Author's conceptual synthesis

The causal sequence of agglomeration theory is shown above in Figure 1. Increased agglomeration density promotes knowledge spillovers, which in turn drives new firm entry and innovation. These processes lead to cluster scaling and productivity growth. The figure illustrates a foundational mechanism that operates across institutional contexts and serves as the starting point for introducing key driving forces such as labour mobility, financial systems, and place-based policy, regional economics and norms.

1.2 Agglomeration and Knowledge Spillovers

The theoretical basis for cluster theory can be traced back to Marshall's (1890) depiction of industrial districts and external economies of scale. Co-located firms that operate specifically within regions benefit from a pool of workers, specialization among suppliers and sharing of informal business knowledge. Modern Economic Geography formalises these thoughts by focusing more on increasing returns and cumulative causation than ever before (Krugman, 2011), the way in which modern work stresses path dependence and lifecycle stages (Cantner et al., 2020). Data demonstrate that innovation is geographically localized. Knowledge spillovers decrease with distance as indicated by patent citation studies (Jaffe et al., 2000). There is a positive correlation between industry density and entrepreneurial entry (Gabe, 2003; Delgado et al., 2010). Crucially, however, proximity doesn't guarantee benefits but it can create increased visitor flows. Over time, this leads to strong place-based branding, generating cumulative advantages that foster cluster growth (Porter, 2000; OECD, 2024). In this context, agglomeration not only reduces costs but also amplifies the overall consumer experience, making proximity a core component of value creation.

Knowledge spillovers in tourism and hospitality clusters are different in their transmission mechanisms. Rather than being supported by patents or formal R&D outputs, tourism and hospitality clusters grow through service innovation and workforce mobility. Improvements in service quality, customer experience, and operational efficiency, with knowledge spreads through employee movement (Hjalager, 2010; World Tourism Organization, 2020). The creation and rapid evolution of digital platforms like Airbnb and Booking.com, among many others, have introduced new ways to exchange knowledge and attempt market coordination, enabling the rapid global dissemination of pricing strategies and customer feedback (Gössling & Michael Hall, 2019). As a result, the tourism and hospitality agglomeration offers a compelling empirical context of how clustering extends beyond the traditional production-based industries, and highlights the importance of experience-based spillovers in shaping agglomeration evolution.

As Feldman and Kogler (2010) highlight, clusters act as institutionally embedded systems in which the local rules and norms and financial arrangements affect how knowledge is translated into entrepreneurial activity and firm growth. Thus, clusters allow for experimentation and startup formation. Yet agglomeration is not static. Under clustering, the theory of cluster lifecycle states that clusters start, grow, mature and sometimes decline (Cantner et al., 2020). Its development depends on those interactions between businesses, universities, investors and decision-makers. The density alone does not ensure continuous dynamism. Key to this is the fact that cluster success does not remain a self-reinforcing phenomenon. The institutional rigidity can give a rise of stagnation and suppress renewal over time (Cantner et al., 2020). These results lead to the provocative question: if agglomeration and spillovers are so fundamental mechanisms across advanced economies, why do cluster outcomes vary so radically?

1.3 Institutions and Varieties of Capitalism

The lens of a comparative political economy is a useful one. The variety of capitalism framework can be used to differentiate between liberal market economies (LMEs), such as the United States, and coordinated market economies (CMEs), such as Germany and other parts of Europe (Hall & Soskice, 2001). LMEs depend heavily on market-based finance and flexible labour markets. CMEs, however, depend more on relational banking and the labour relations are negotiated. In addition, there is a stronger institutional coordination. These differences shape the firm behavior, the investment horizons, the risk tolerance, and the FLREP. When incorporated into cluster settings, they may impact how agglomeration advantages translate into scaling.

1.4 Financial Architecture

It can be said that financial systems operate as transmission mechanisms that determine the way entrepreneurs' ideas become scalable ventures. In particular, in a market-based system, venture capital and equity financing, along with active exits, ease the problem of capital scarcity and help the firms grow due to financial, governance, and strategic mechanisms (Hail & Leuz, 2006; Wright et al., 2006; Samila & Sorenson, 2011; Gompers & Lerner, 2001). These features imply lower costs of capital, risk-taking, and capital recycling that, consequently, lead to quicker scaling of clusters. On the other hand, a bank-based system implies relational lending that allows sustaining stability and implementing innovation in a gradual manner (Hall & Soskice, 2001).

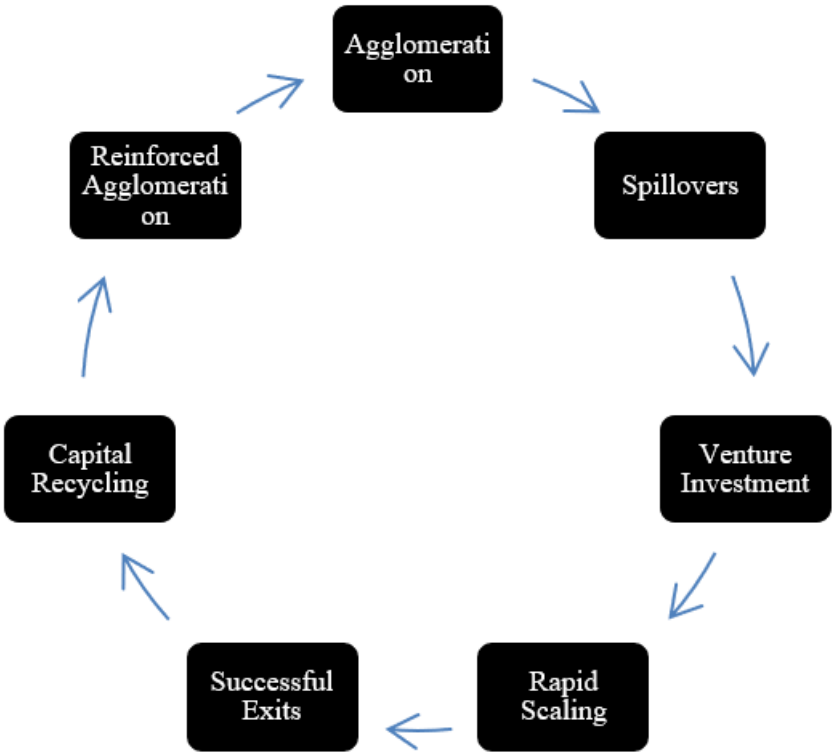
It should be emphasized that although infrastructure is an essential factor of clustering, alone, it cannot contribute to agglomeration effects since productivity gains depend much more on human capital and specialization and on the deployment of institutional resources (Witte et al., 2013). The varieties of capitalism perspective provides an insight into the way different institutions form separate paths of development and innovation (Hall & Soskice, 2001). For instance, in the market economy represented by the U.S., there are deep capital markets and investor protections that stimulate innovations and scaling up quickly (Aghion et al., 2007; Hail & Leuz, 2006). Europe with its bank-focused approach facilitates coordinated and sustained growth. These differences are particularly important when set within cluster settings. Thus:

Proposition 1: The relationship between agglomeration density and firm scaling intensity is stronger in market-based financial systems than in bank-centered systems.

An excellent example of a market-oriented financial system in which capital mobility facilitates agglomeration effects can be found in the United States, whereby firms rely heavily on equity markets, venture capital, and informal investors. The presence of strict regulations and transparency regarding disclosures helps in minimizing information asymmetries and making it cheaper for the companies to raise funds (Hail & Leuz, 2006). Such an environment is conducive to risk-taking, since venture capital is based on high-variance investment, which leads to a small group of firms earning exceptionally high rates of return (Wright et al., 2006; Gompers & Lerner, 2001).

In such contexts like Silicon Valley, capital not only remains clustered in one location, but also has its organization in place with a network that connects all the stakeholders in the venture capital business – investors, firms, and universities (Samila & Sorenson, 2011). An important feature of this kind of financial system is the availability of strong exit markets including initial public offerings, mergers, and acquisitions. Through them, investors are able to re-invest in other opportunities, which encourages firm scaling.

Figure 2: **Market-Based Agglomeration Feedback Loop**



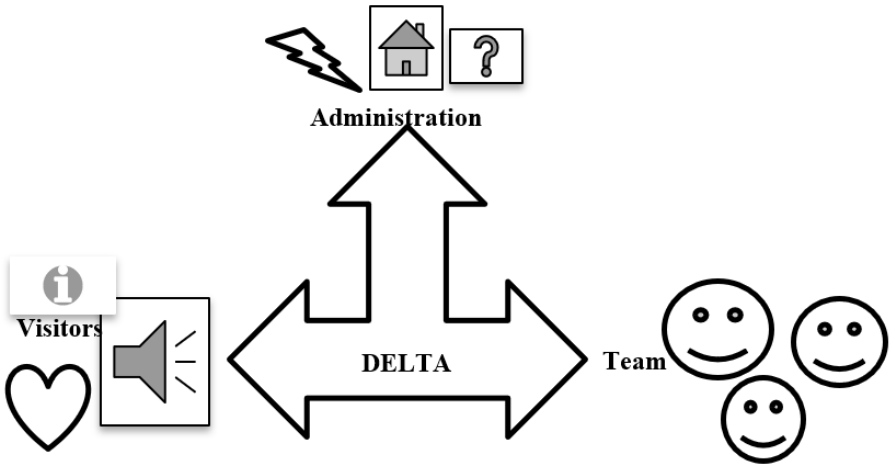
Source: Author's conceptual synthesis

Figure 2 illustrates market-driven financial system feedback loop. This loop is viewed from that of a cluster, turn agglomeration into a self-reinforcing cycle, whereby spillovers, venture investments, and exit recycling magnify scaling trends. That loop accelerates concentration. Successful companies hire new talent and capital, further drawing in talent from the cluster. A widespread failure is institutionally normalized and assimilated by the broader capital market. This model also adds some volatility. Such rapid scaling may lead to overvaluation, financial bubbles, and sharp corrections. The capital fluidity that propels growth can also amplify systemic shocks (Federal Reserve Bank of Chicago, 2020). The result, then, is that dynamism (when we get the U.S. model) buys stability.

The European bank-based model is rooted in moderation through relational stability (Hall & Soskice, 2001; Masera, 2010). Relationship banking and long-term credit agreements are more widely used among firms. Rather than transactional market events dispersed across the market, capital allocation is structured through institutional relations. Systems which are bank-centered stress stability, incremental innovation. Long-term lending relationships enable firms to make investments without the short-term pressure to produce quick returns on short-term investment, without the pressure to put things to immediate use. Within clusters, this institutional configuration influences scaling differently in different ways. Instead of encouraging large-scale growth, long-run firms' relationship and risk-assessment criteria will dictate their credit decisions, since they favor predictability in relation to, rather than rapid scaling, to provide a buffer effect during economic shocks, reduce economic shocks and maintain employment and territorial stability for firms, while protecting employment and territory.

For instance, the European clusters such as the advanced manufacturing centers in Germany and the industrial districts in Northern Italy are an example of where structured finance facilitates specialization and incremental upgrading over breakneck growth. Legal complexities across jurisdictions in Europe may contribute to capital markets' complexity and investor uncertainty (Hail & Leuz, 2006). Despite the ongoing integration efforts and convergence ideas, there are differences in the regulatory systems that cause limited cross-border equity compared to the United States. From a cluster development perspective, the European model creates a distinct feedback loop:

Figure 3: **Bank-Based Agglomeration Loop in European Cluster Systems**



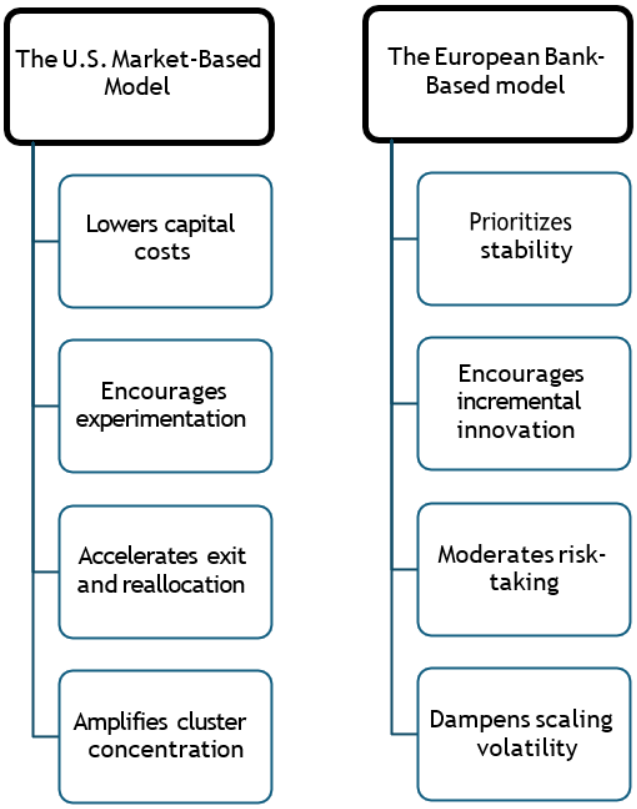
Source: Author's synthesis

Figure 3 demonstrates how the relational finance and institutional stability shapes the speed and intensity of a network's scaling. The clusters in this model retain production and specialization, but scaling energy is reduced in comparison to market-based systems. This should not be seen as a limitation. Instead, it is due to institutional complementarities. Bank-based systems operate in an environment with better labour/wage protection and social welfare (Federal Reserve Bank of Chicago, 2020). Such arrangements can mitigate inequality and volatility, but is slowing down the reallocation of capital. The European model mitigates the translation of agglomeration into scaling and it places emphasis on resilience and cohesion instead of rapid amplification.

Tourism and hospitality clusters provide a clear sectoral illustration of how financial architecture shapes not only firm growth but also the structure and standardization of the visitor experience. In market-based systems such as the United States, the access to private equity, venture capital, real estate investment trusts (REITs), and large-scale capital markets enables the fast development of resorts, hotel chains, hotel share ownership, and entertainment complexes. Many examples hold this pattern - Las Vegas, Orlando, Miami, and Disney expansion among others. These market-based types of financing mechanisms and access to it support high fixed-cost investments and facilitate accelerated scaling, often leading to standardized, globally recognizable service offerings. In contrast, the tourism clusters in many European economies are more frequently characterized by smaller, family-owned enterprises supported by relational banking systems. This also leads to prioritizing long-term stability over rapid expansion but also fosters authenticity, localized service differentiation, and cultural continuity. The price for it is the slower pace and scale at which firms grow and compete globally (OECD, 2024; UNWTO, 2020; PWC, 2022).

The differences between the U.S. and European financial structures illustrates a broader argument: agglomeration is a structural condition, while scaling relies on institutional mediation.

Figure 4: **Institutional Mediation of Agglomeration: Market-Based versus Bank-Based Financial Models**



Source: Author's synthesis

The contrast between U.S. market-based and European bank-based financial architectures demonstrates a broader institutional principle: agglomeration provides the organizational foundation for clustering, but the pace, volatility, and concentration of scaling are governed by financial institutions.

1.5 Labour Mobility

The speed at which human capital will relocate toward productive clusters depends on the labour. mobility factor. The opportunity to move freely between regions is central to clustering but yet often under-theorized role in the evolution of economic clusters. High mobility accelerates concentration and strengthens knowledge recombination (Dorn & Zweimüller, 2021). Lower mobility encourages stability but may dampen rapid scaling.

Agglomeration is dependent on firm density and talent mobility to get productive opportunities. When it is free in spreading, labour clusters attract labour of high productivity, thereby further solidifying concentration (Dorn & Zweimüller, 2021).

The concept of tourism and hospitality clusters is one of the best examples of labour mobility influencing agglomeration. This is because tourism is seasonal and labour-intensive, and thus depends significantly on labour mobility for adjustments according to need (OECD, 2024; UNWTO, 2020). Labour mobility in US tourism clusters allows for an increase in scalability and responsiveness to the changes in demand (OECD, 2024; UNWTO, 2020). At the same time, EU tourism clusters rely upon regulated labour systems, featuring strong labour protection and low mobility. Therefore, the processes of adaptation and scaling in this case prove to be slower due to workforce stabilization, which helps maintain a better balance between stability and responsiveness (European Commission, 2024; OECD, 2024).

In addition, labour mobility provides an environment conducive to the spread of tacit knowledge, such as customer service practices and experience accumulated throughout many years – forming foundation for scalability, adaptability, and knowledge transfer within these clusters (Hjalager, 2010; UNWTO, 2020).

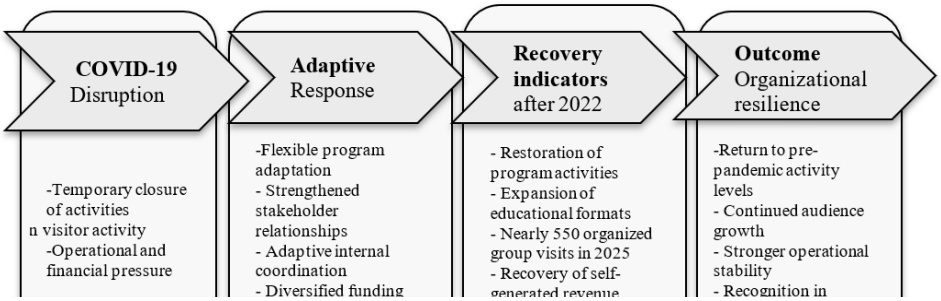
Internally, labour mobility within the United States has historically been higher than those in Europe. Across Europe, linguistic distinctions, rigidities of the housing market, the credential recognition systems, and labour protection help counter the effect of cross-regional migration (Dorn & Zweimüller, 2021). High-mobility systems accelerate talent re-allocation. Tech growth-prone jurisdictions absorb labour quickly, and the systems for labour mobility that promote fewer workers may maintain territorial stability at the expense of moderate concentration.

Proposition 2: Labour mobility positively moderates the relationship between cluster density and regional productivity growth.

In highly mobile systems, in particular the United States, workers are able to move easily between regions and companies in response to opportunities, enabling rapid concentration in productive clusters. This rapid redistribution of resources is generating a deeper feedback loop between firm growth and capital inflows, which leads to an accelerated scaling of clusters and their regional concentration (Dorn & Zweimüller, 2021).

There is lower cross-regional labour mobility in some of Europe as a result of institutional and cultural impediments, for example due to barriers in language, credential recognition systems, housing rigidities, and employment protections. These components may help stabilize the employment and the long-run skill accumulation, but they slow geographic and inter-firm reallocation. Consequently, agglomeration does happen, but more gradually and less sharply, helping to mitigate regional divergence and reduce volatility.

Figure 5: **Labour Mobility as an Institutional Moderator of Agglomeration Outcomes**



Source: Author's synthesis

It can be seen from Figure 5 that labour mobility does not create agglomeration but shapes how agglomeration leads to growth, why divergence is feasible, and the volatilities related to it, reflecting broader institutional trade-offs across economic systems.

1.6 Region-Based Policy and Institutional Trade-Offs

Place-based policies shift resources to lagging territories and affect the process of scaling from agglomeration. In Europe, such policies are incorporated in regional development policies and are aimed at overcoming disparities. However, they might have an impact on the efficiency of resource allocation and even slow down concentration processes (Fritz & van der List, 2025). The efficacy of cluster policies depends on the phase of cluster life cycle and institutional environment in which such policies are implemented, thus, having a stabilizing effect but hindering scaling (Wilson et al., 2022). Policies limit the amount of resources that might be invested in high-efficiency areas and weaken the agglomeration effect, contributing to resilience and preventing excessive concentration (Fritz & van der List, 2025; Wilson et al., 2022). Thus, it might be argued that the results achieved through cluster creation depend on various institutions as well as on geographical features.

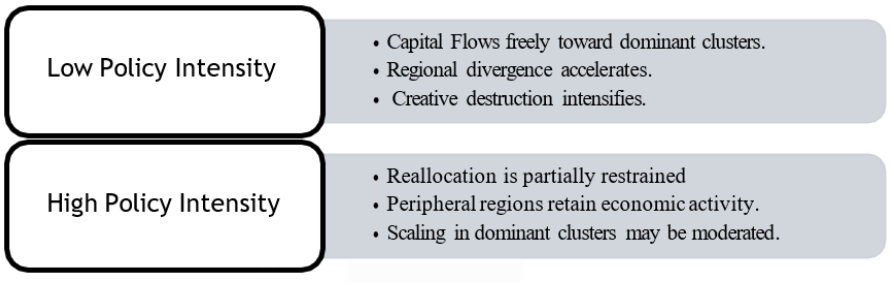
The peculiarities of tourism and hospitality clusters make such a point clear. First of all, since tourism clusters heavily rely on geographic and cultural conditions as well as coordinated policies, such clusters tend to be more vulnerable to intervention (UNWTO, 2020; OECD, 2024). European policies promoting sustainability and cultural preservation along with stability hinder fast growth but facilitate stability and longevity in this case (European Commission, 2024; OECD, 2024). U.S. clusters, on the other hand, are developed on the basis of market mechanisms with policies supporting business activities but not coordinating them. Such policies promote faster commercialization and scaling but lead to excessive spatial concentration and regional disparities (U.S. Travel Association, 2023; OECD, 2024).

Place-based policies work as institutional mediators that affect the process of cluster formation as well as its outcomes. Although increased intensity of intervention tends to slow down the process of cluster scaling, it ensures stability and sustainability.

Proposition 3: High-intensity region-based policy weakens the relationship between agglomeration and scaling in mature clusters.

Region-based policies are planned institutional initiatives to take action on the region's development, reallocating public resources toward certain regions in order to minimize disparities, provide support to lagging areas and to stimulate nascent clusters. In the European Union, cohesion policy is embodied in the structural funds, regional development grants, and innovation subsidies to close these economic divides. And instead of just injecting capital, these policies reshape the incentives for firms, the labour market and investors. From a cluster-evolution point of view, these policies moderate that process - the reallocation of labour and capital slows down and the mechanics of agglomeration slow down. This moderation has a downside, as allocative efficiency and creative destruction may be slower but territorial stability and social cohesion are maintained. But the efficacy also depends on timing and long term goals. While targeted interventions can help the emergence of clusters during growth, if conducted in more mature phases, it risks further entrenching existing declining sectors. As such, such policies do not do away with agglomeration but instead recalibrate the intensity and velocity of agglomeration, which raises consideration of governance issues of how to balance innovation and long-term stability.

Figure 6: **Implications of Low and High Policy Intensity for Cluster Scaling**



Source: Author's synthesis

Figure 6 is a clear illustration that place-based policy operates not as a substitute for agglomeration, but as a governance mechanism that conditions the speed, volatility, and territorial distribution of cluster

2. METHODOLOGY AND RESULTS

To supplement the theory of place-based policy and financial framework, Tables 1 and 2 below are provided with comparative tourism statistics that highlight the way institutional contrasts between the US and Europe translate into distinctive tourism clusters. Although Table 1 concentrates on indicators relating to policy, Table 2 draws attention to the contrasting financial and capital frameworks that affect scaling of the clusters.

Table 1: **Role of Place-Based Policy in Tourism Cluster Development: U.S. vs. Europe**

Metric	Europe (EU Average / Top Nations)	United States	Data Context / Scource
Public Investment (% GDP)	~0.60%	~0.15%	Tourism falls under "economic affairs" or "recreation/culture" in public budgets. Estimated range based on how budgets are structured to account for direct government outlays for tourism services and regional funding.
Protected Cultural Sites	~280	26	UNESCO Cultural Heritage sites (EU Top 5 vs. U.S. Total) and World Population View
Sustainability Index	5.0 / 7.0	4.2 / 7.0	World Economic Forum "T&T Sustainability" pillar score (2024)
Private Investment Share	~65%	~85%	Percentage of total tourism cluster investment originating from the private sector.

Source: Author's synthesis (OECD, 2024; World Economic Forum, 2024; UNESCO World Heritage Center, 2024; Eurostat, 2023; U.S. Travel Association, 2023; CBRE, 2023; CoStar, 2023; WTTC, 2026)

Table 2: **Comparative Capital Structure and Scaling Metrics in Tourism Clusters**

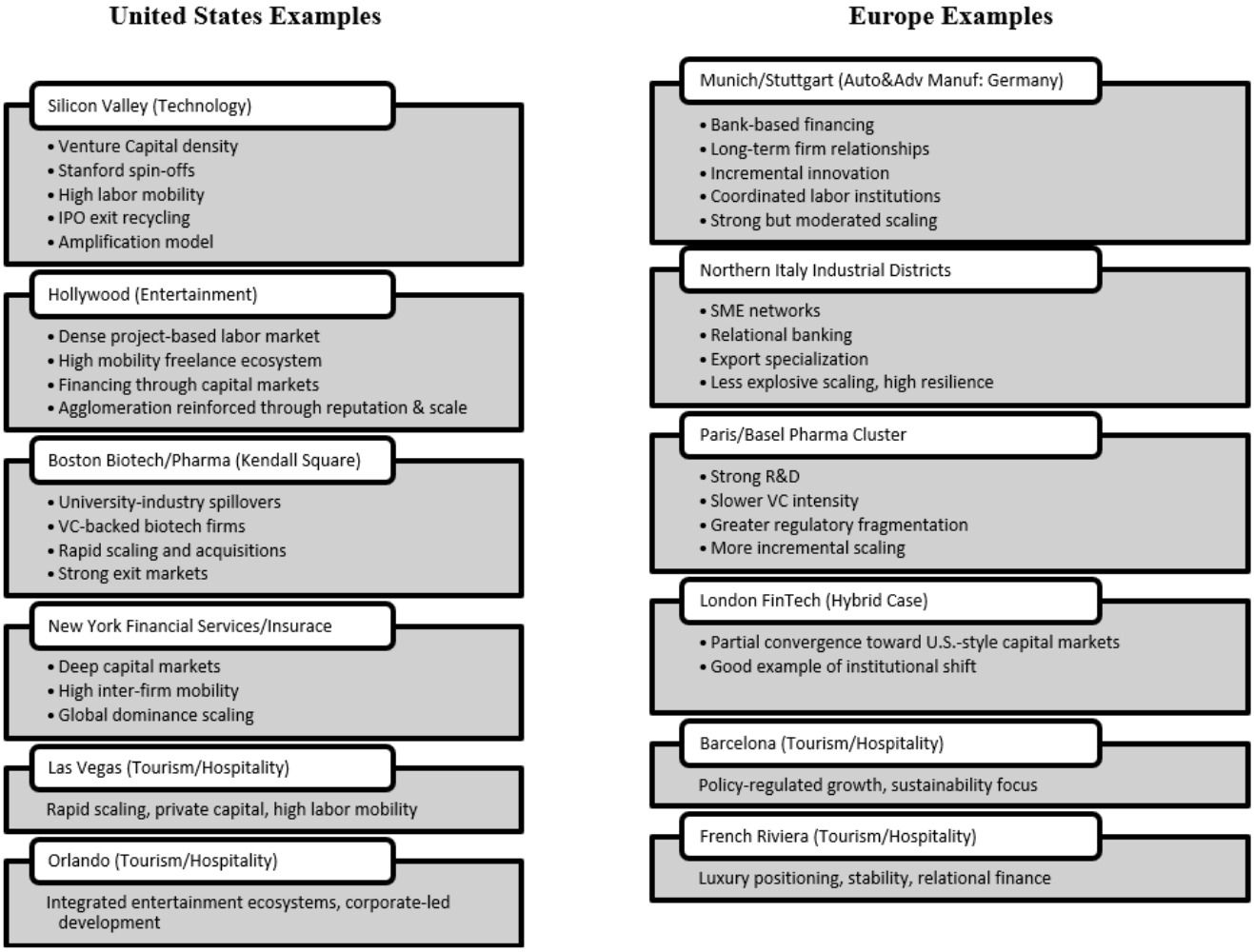
Metric	United States (Market-Based)	Europe (Bank-Based)	Key Institutional Driver
Hotel Chain Penetration	~70%–75% of total inventory	~35%–40% of total inventory	Access to Equity Markets & VC
Independent Hotel Share	~25%–30%	~60%–65%	Relational Banking & SME Support
Avg. Hotel Size (Rooms)	~100–130 rooms (High in clusters like Las Vegas/ Orlando)	~45–60 rooms (High density of boutique/family firms)	Scaling via Standardized Financing
REIT & Private Equity Role	Dominant (Primary driver of resort & mega-cluster development)	Emerging/Secondary (Concentrated in Tier-1 cities only)	Capital Market Depth
Annual Tourism RE Investment	~$30B - $50B (Highly cyclical/liquid)	~$15B - $25B (More stable/ long-term)	Financial Liquidity vs. Stability

Source: Author's synthesis (OECD, 2024; Statista 2024; UNWTO & fDi Intelligence, 2023; CoStar, 2023; CBRE, 2023)

When combined, Tables 1 and 2 illustrate that the financing arrangements in tourism clusters are different not only in their extent but also by the level of involvement of public policy, their sustainability focus, and the amount of private investments involved. Such differences provide a broader context within which the development of the tourism clusters takes place.

This is illustrated by Table 3 below. While Table 1 and Table 2 highlight the contrasts in the institutional dimensions in the tourism and hospitality sector, Table 3 and Table 4 that follow below extend the comparison from the sectoral level to the cluster level, where the analysis includes the examination of the representative industry clusters in the United States and Europe.

Table 3: **Institutional Configurations and Cluster Scaling: Comparative Archetypes from the United States and Europe**



Source: Author's synthesis

The table above summarizes cluster archetypes for the US and Europe in relation to technology, manufacturing, finance, entertainment, and tourism. Instead of offering an exhaustive list of clusters, Table 3 highlights the influence of institutions on various development paths of the clusters depending on the industry. The example of tourism clusters (Las Vegas, Orlando, Barcelona, and French Riviera) shows that Institutional Moderation theory works not only for technology-dependent clusters but also for service-based clusters.

Table 4: **Institutional Drivers of Cluster Scaling: United States vs. Europe**

Dimension	United States	Europe
Financial System	Market-based system with deep venture capital and equity markets, emphasizing rapid reallocation toward high-growth firms	Bank-centered and relational finance, emphasizing long-term lending relationships and firm stability
Labour Mobility	High internal labour mobility across regions and firms, facilitating rapid talent concentration	Lower cross-regional mobility due to institutional, linguistic, and regulatory frictions
Policy Orientation	Limited place-based cohesion policy; greater reliance on market-driven spatial allocation	Strong regional cohesion and place-based development policies aimed at territorial balance
Scaling Pattern	Rapid cluster scaling with high variance in outcomes	Incremental and more stable scaling trajectories
Economic Volatility	Higher volatility driven by fast reallocation and creative destruction	Lower volatility reflecting institutional moderation and stabilization mechanisms

Source: Author's synthesis

The characteristics of institutions as demonstrated by clusters in Table 3 have been compiled in Table 4 above. The table is not a summary of individual clusters but the main institutional dimensions that separate market-based and coordinated economies, including financial systems, labour mobility, policy approach, scaling practices, and economic instability. Both tables 3 and 4 are linked to the theoretical framework described in this paper.

To further illustrate how the institutional drivers shape the outcomes, Table 5 below presents a comparison of tourism and hospitality cluster characteristics in the United States and Europe.

Table 5: **Scaling and Structural Variables: USA vs. Europe**

Metric	United States (Market-Driven)	Europe (Heritage-Focused)	Institutional Diver
Avg. Hotel Size	~100–120 rooms	~45–60 rooms	**Land Efficiency:** U.S. favors large-scale, new-build efficiency; EU utilizes historic, smaller-footprint conversions.
Chain vs. Independent	~70% Chain	~35% Chain	**Standardization:** U.S. clusters scale via brands (loyalty/trust); EU via unique boutique "sense of place."
Investment per Dest.	High ($/unit)	Moderate ($/unit)	**Capital Intensity:** U.S. investment is concentrated in high-cost, high-return physical assets and technology.
Volume Concentration	High (Seasonal Hubs)	Moderate (Year-round)	**Geography:** U.S. travel is highly concentrated in "Tier 1" hubs (NYC, Orlando, Vegas); EU is more regionally dispersed.
Financing Model	Market-based (REITs/PE)	Bank-based (Local/ Regional)	**Risk:** U.S. uses liquid capital markets; EU relies on relationship banking and government grants.
Growth Speed	Fast / Exponential	Gradual / Incremental	**Regulation:** U.S. "Greenfield" zoning allows rapid expansion; EU "Brownfield" preservation slows new supply.

Source: Author's synthesis

As can be seen from the comparison provided in Table 5 above, the disparities between financial system, labour mobility, and institutional regulations are manifested in different growth patterns of tourist clusters.

Proposition Summary

This paper uses the following propositions:

- Proposition 1: Agglomeration is more likely to translate into rapid firm scaling within regions with market-based financial systems than within regions with primarily bank-centered financing.
- Proposition 2: Labour mobility is a key link between cluster density and regional productivity growth and aids the transfer of talent to productive firms and regions.
- Proposition 3: In the mature clusters, strong region-based policy intervention weakens the relationship between agglomeration and scaling by slowing the reallocation of capital and labour.

These propositions thus collectively constitute the Institutional Moderation Model of Cluster Development, and explain why similar agglomeration can result in very different scaling outcomes across regions. Rather than interpreting the financial systems, labour mobility, regional economic development, and policy as background conditions, the model illustrates how such institutions affect the dynamic translation of agglomeration into firm growth, productivity gains, and regional divergence. In doing so, the framework helps explain why some clusters grow rapidly and unevenly and others grow more slowly and with more stability even when spatial concentration seems comparable.

CONCLUSION

Clusters are not geographically located clusters at which many individuals are concentrated within geographic areas; rather, they are institutionally embedded strategic ecosystems. If agglomeration and knowledge spillovers form the underlying parameters for clusters in advanced economies, it is the institutional arrangements which play a pivotal role in determining how clusters will be able to grow, concentrate, and renew over time. Closeness brings opportunity, but institutions determine the size and range of its effects and if we are to gain an understanding of cluster evolution, we must move beyond spatial 'close' alone and consider the institutional milieus in which clusters have to exist.
In this paper we take the position that cluster evolution is institutionally moderated. Agglomeration creates potential, but financial architecture, labour mobility regimes, regional economies, as well as region-based policies that determine the extent to which that potential is realized. In market-based systems like the United States, capital mobility and a degree of labour mobility tends to amplify agglomeration forces. This is because venture capital helps accelerate firm growth, the exit markets recycle capital, and mobile talents accumulate in high-potential areas. These key factors drive rapid growth among some clusters on one hand but on another, they also increase volatility and regional discrepancy. By contrast, there are European economies that function under coordinated institutional systems which moderate this process. The combination of relational banking, more restricted labour mobility, and cohesion-sensitive policies smooths the forces behind agglomeration, and it is leading to more incremental scaling. These results are indicative of institutional complementarities over structural weaknesses.

Citing the findings of economic geography, institutional theory and comparative political economy, the Institutional Moderation Model refocuses upon different amplification and moderation mechanisms, not differences in entrepreneurial capacity or innovative potential to explain the divergence between clusters. The model promotes cluster theory beyond formation reasoning to address the challenges to cluster formation and to be aware of why clusters with similar agglomeration foundations should not reach uniform scaling across their cluster dynamics. And on a broader scale, it takes financial systems, labour mobility, and policy up from the status quo to the 'activators' of firms' opportunities for growth, productivity-boosting efforts, clustering effects in regional economies, and appreciates their likely varying effects at various points in the cluster's lifecycle and region of operation.

This does not assume that one institutional configuration is inherently better than another. Rather, it focuses on fundamental trade-offs in institutional design. Capital movement and market-based finance can induce fast innovation and global leadership, but at the expense of volatility and inequality. Coordination and cohesion as mediums of stabilization can contribute to stability, resilience, and territorial balance, even though it may inhibit the explosive growth. Cluster pathways, after all, are indicative of societies' bigger choices about efficiency, equity and long-term stability. In the round, agglomeration might be universal, but its effects aren't.

Tourism and hospitality clusters also add weight to the paper's core assertion that agglomeration is not solely responsible for results. They exemplify the role of institutions in shaping the trajectory not only of firms but also of labour relations, regional growth, and tourism destinations. Hence, they offer a crucial perspective on how institutional moderation affects the development of a cluster.

Future empirical research into the development of tourism and hospitality cluster is important due to their reliance on service ecosystem, seasonal labor migration, and institutional policies in place. The comparative studies of tourist regions in the US and Europe can serve as an excellent platform for applying IMMCD framework to the study of cluster development in the specific empirical context. Using multiyear datasets (e.g., 2000-2025) will allow examining the role of institutional dynamics on cluster development over the time period. In order to test moderating role of financial architecture, labor migration, and policy intensity on the relation between agglomeration and cluster scaling, the researchers can apply panel regression, multilevel modeling, or difference-in-differences methods. The data on venture capital and private equity financing, labor migration, tourism employment, regional public spending, and firm performance can help to investigate the impact of institutional arrangements on knowledge diffusion and firm development in various institutional settings.

Clusters don't function in isolation from national governance regimes: capital markets, labour institutions and policy priorities will dictate how growth will result. In conceptualizing clusters as institutionally embedded forms of amplification or moderation, this paper provides a fuller account of spatial economic divergence, and we open up a research agenda that connects strategy and economic geography with comparative capitalism.

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