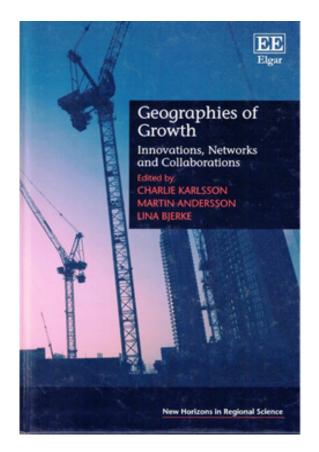
Geographies of Growth: Innovations, Networks and Collaborations



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Edited by

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The book discusses the increasing importance of urban regions, especially in Asia and South America in the overall backdrop of the global economic landscape and the fundamental transformations of the world economy. The key emphasis of the book is the potential of large, functional regions to function as information, knowledge, innovation and entrepreneurship hubs in the global urban network. The problematization employed in the book touches upon the right elements- entrepreneurship, absorption of displacement, pro-

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ductivity and accessibility to human capital to name a few. The nuanced segments on inter-regional and intra-regional balance, in terms of its drivers of change and development, are suitably placed and then contextualized, in terms of the convergence debate. What is worth a read is how structural change and Labour productivity forms the bedrock of this analysis, as well as the meso and micro levels variously conceptualized quite unlike other works of this genre.

Certain themes in relation to entrepreneurship like the local perspective on informal institutions, could have been focused on more entrepreneurship as regards the motivations and barriers to entrepreneurship. For developing countries, where the convergence issue is most acute, this would have been extremely relevant, given the structure of their economies. This is dealt with in part in later chapters exploring the individual characteristics of self-employed firms and their impact on the survival of these firms. However, these are context-driven econometric studies which provide deep insights in different ways. In contrast, the limitations of the datasets in developing countries such as India as regards human capital, survival rates of firms and the drivers of development form a case of institutional apathy of evidence-based policymaking. That makes the themes in the book universal in a sense, yet not replicable in another.

However, the studies outline some stylized facts on the impact of regional agglomeration on phenomena like survival of firms, which challenge the quantitative characterization of costs being a driving factor for agglomeration. This conceptualization is more diverse and qualitative and derives from more demographic factors like immigrant status of firms and the dynamics, as well as in relation to structural elements of sourcing of inputs and the organization of the same, in terms of the global value chain (Chapter 10). The chapter on knowledge absorption in the development of export products helps understand a long-held notion of international trade, as regards trade in technology in embodied forms in this overall context (Chapter 11). Another significant theme is one of the drivers of cross-border innovation cooperation, focusing on partner selection (Chapter 12). The last two chapters examine interesting categories at the micro-level i.e. individual creativity and the creation of a creative class using multi-level approaches and that of university spin-offs in terms of barriers.

Part I seeks to establish structural change, as inherent to economic growth on a long run basis. The unique attempt made to study displacement, in terms of its geography, exposes certain facets, provides insights on their connection with spatial convergence processes, while at the same time, focus on local drivers of employment growth and productivity as a subset of local drivers of change and development. While it may be argued that it does not attempt a sociological world view (on what is essentially a human concern of employment growth and productivity today more so than ever), yet even attempting to conceptualize displacement currently being seen in regions is a laudable attempt at addressing problematic areas, in terms of measurement. It alludes well to Labour mobility, through the reallocation of resources resulting from Schumpeterian "creative destruction". Particularly, insights on the thorny issue of involuntary Labour mobility have been well characterized, in terms of skills and competencies (p. 23). The implications of extra-regional knowledge have been critically viewed from the standpoint of absorptive capacity. The impact of low diversification of Labour markets has also been intuitively derived, in terms of re-employment of displaced workers and the spillovers of knowledge resultant therefrom. The choice of interaction variables i.e. personal characteristics and regional variables is well-suited to demonstrate the

regional effects involved (pp. 24-25). The false firm deaths resulting from the merger, splits, etc. and reemployment as self-employment is excluded from the dataset. The linkage between the stage of the business cycle and the number of displacements is discussed in relation to startups. The specific insight on service sector industries in metropolitan regions (p.32) being vulnerable may bear out, but the structure of Labour displacement in developing countries has been vastly different even in rural areas, even in the time frame of entry into the multilateral regime. The regional effects in respect of the two phenomena i.e. displacement and re-employment were not established and reflect the persistence of other phenomena, which the displacement conceptualization could not effectively capture. Geographical proximity was discussed in terms of the Literature could have been elaborated conceptually. The Impact of other aspects of the regional economic environment in explaining re-employment capacity should have been elaborated to counter the excessive focus on trade facilitation alone. There were some attempts to measure the demographic patterns of displacements and re-employment, however, the narrative of regional resilience could have been more robustly outlined.

The chapter on productivity and cross-border accessibility to human capital (Chapter 3) using a comparison of border regions can be lauded for entering unchartered territory. This is particularly outlining the experience with unified markets by border regions. The proxy for productivity could have been more qualitatively studied in terms of dimensions, other than gross pay per capita. Similarly, accessibility to human capital, reduced to access university education and data on commuting times between municipal regions appears limited, in terms of the nature of qualification-vocational or otherwise and other indicators of regional effects as regards logistical costs as the sole source of gaining access (p. 55). The assumption that knowledge can be transferred or bought in a similar way to a good or commodity in terms of a public good (p.48-49) renders the prospect of development of technological capabilities limited. Interventions will be imperfect, given informational asymmetry does not figure in this analysis and factor price endowments become the sole determinant of economic growth in this scenario. This is clearly faulty in light of the capabilities literature. The conceptualization of knowledge spillovers, especially ruling out "Learning by doing", runs counter to established wisdom without providing adequate justification. The immediate linkage between knowledge spillovers and productivity and accessibility to human capital is not clearly brought out. It appears to have a mediating effect and the nature of causality is not outlined clearly. Further, as to the known modes of market integration in achieving the goal outlined is far-fetched. There is ample evidence on trade and foreign direct investment. Even what is outlined in relation to migration outlines a mixed picture which is more

qualitatively than quantitatively assessed. The hypotheses in relation to the effect of geographical proximity on integration in border regions occurring on the back of transient and diffuse cross-border interactions like commuting and trade-in non-tradeable goods (p. 51) is a bit of an oxymoron. If Social exchanges were the basis of convention making on exchange in these areas what kind of structures, does this economy replicate is unclear. Also given gross pay per capita as the sole indicator of productivity, this appears to be a pipedream. It, however, plays with a unique idea of border regions integration as a location advantage, without realizing the starting point of knowledge to any extent. The low level of border impediments envisaged in an era of multilateral and to a certain extent, a bilateral trade agreement regime could have been specifically characterized. More so, how the total effect is broken down into local, intra-regional and interregional is unclear and as admitted for intra and extra-regional interaction, incapable of quantitative determination (p. 56). The use of time sensitivity parameter value, as a measure of the frequency of intra-municipality interactions, does little to address the unique elements known to influence knowledge transfer aka absorptive capacity and the dynamics underlying, much less answer to a new economic geography framework being propounded in the Chapter. The results of the regression analysis on inter-regional accessibility are as a result not substantiated in both regions. There is mixed evidence on intra-regional accessibility, which does little to advance the narrative being built around the variables of gross pay as a dependent variable. All it leaves us with a "size does matter" kind of argument, as regards intra-regional accessibility, without specifying how the tacit elements of knowledge translate into productivity, howsoever conceptualized. The evidence on the influence of cross border accessibility to human capital on productivity in border regions should have been specifically explained for the public sector and the private sector (Table 3.5, p. 65).

Chapter 4 outlines the drivers of change and development, in terms of intra-regional and inter-regional balance. These are outlined in the backdrop of the rise of metropolitan areas, based on the agglomeration of technology-related industries and knowledge-intensive services. The good part is an attempt to look at the negative externalities of congestion costs and the social inequality this has given rise to in developing country context. This shift towards knowledge-driven and innovative production systems is positioned as a structural change in relation to Europe. Clearly, as the articulation reveals that focusing on non-linear growth drivers for regions with a traditional industrial base is disadvantageous, the qualitative difference with developing countries is foreclosed, despite similarity at the broad level, as regards the trends (p. 71). A regional balanceoriented developmental strategy investigating the urban-rural divide is, however, the highlight of this Chapter. The use of a complex, multi-dimensional framework based on theories of spatial specialization, theories of agglomeration and new economic growth and political science is used to explain the drivers behind the trend of centralization of high-income activities within countries. The use of non-linear growth factors under a modified approach, where the public sector appears as an independent variable, distinguishing between basic or background environmental endowment, in terms of Information and Communication Technology and human capital and the activators of this potential namely entrepreneurship and innovation. The use of qualitative measures of growth is a promising prospect developed conceptually.

Chapter 5 on the convergence debate (as regards the catching-up hypothesis) seeks to examine the reduction of regional disparities, in respect of regions using Labour productivity convergence. The structural change characterized in terms of shift of employment activity in terms of technological intensity is used to observe the contribution of Labour and technology. This is an interesting approach as compared to previously studied scalar levels. The speed of convergence could have been studied in relation to a technology-intensive sector, in respect of a region to demonstrate the regional effects involved. The regional level has been studied along with the country and industry level to demonstrate the convergence hypothesis at the disaggregated level as a vector. This enables an analysis of directionality, which is qualitatively more revealing. The Chapter outlines the issues with the traditional estimation approach well and compares it with the stochastic convergence approach, where random, unpredictable events are expected to settle into a pattern.

The subsequent part (Part II) limits the structural change to entrepreneurship and the business dynamics is at once a strength and weakness of the Book. The Schumpeterian paradigm with all its trappings and flesh and blood conceptualisation of the entrepreneur did not capture organizational forms like immigrant firms and self-employed firms and phenomena as diverse as captured in this Book. A key limitation in our context is to how to place family-run businesses and cottage industries and the informal economy in this discourse. However, the theme is appreciated for the attempt to provide a local perspective on the social dimensions of entrepreneurship. The context of the institutional turn in the Literature provides the embedded and contextual nature to research on entrepreneurship. The focus is on local differences in values and norms, where it becomes important. The concept of shared norms has been utilized in this context, but the processes involved in movements, as opposed to groups is not followed through. The variation in institutional foundations is contextualized on the basis of local and regional variations of norms. The institutional foundations of entrepreneurship are embedded in the need for diversity and change and the relationship between

the two is well-outlined, in terms of non-localised and localized informal institutions. The qualitative study provides good insight into such shared norms.

The Chapter on the impact of policies for broadband firm dynamics (Chapter 7), in terms of new firm formation and the provision of Internet broadband infrastructure. The study attempts to investigate the effects at the local level, as well as the global level. The second hypotheses (p. 167) on the influence of population growth could have been explained more qualitatively, as to how demand for broadband as a service was likely to grow. Also, the link with higher unemployment rates is not quite automatic from the context, that has been outlined and stating an indeterminate directionality is unclear (p. 167-168). The other hypotheses are traditional expectations of the drivers of new firm formation. The chapter serves to establish the fit of local models compared to global models at the aggregate and economic sector levels. The spatial element of the nature of the association between broadband and the new firm formation and the variation observed has been established to a reasonable extent, however, the discourse on causality remains unaddressed.

The other discussion is on the impact of individual characteristics and regional agglomeration on the survival of selfemployed firms (Chapter 8). This uses a survival analysis methodology to assess the impact of internal factors such as age, gender, immigration status and education in combination with external factors like urbanization, related and unrelated varieties and specialization. The external factors appear to defy easy conceptualization on a first glance. The resource-based view, the emphasis on internal characteristics of the firm to explain heterogeneity in decision making tends to bias the potential outcomes in a certain way. The interaction involved between the two sets of factors is not clearly conceptualized. Urbanization could have been more qualitatively conceptualized as the aim is to study the impact on firm survival which varies across sectors (p. 207). The choice of Jacobean externality from inter-industry knowledge spillover is well considered for the purpose of related and unrelated varieties of technological knowledge. The Marshallian externalities relate to the specialization of a region in a narrow set of industrial sectors which accounts for intra-industry knowledge spillovers supported by the concentration of a particular industry in a region. The role of specialization in firm survival is intuitively established, however, there is a robust discussion of the role of individual characteristics, particularly for age, gender, education and immigrant status. The discussion on the role of education in terms of entrepreneurship appears to contradict the narrative of the previous Chapter in this Book. The asymmetry of concepts within the two sets of factors is likely to bias the results in favor of the external factors which needs further explanation. The results on the

role of immigration status on firm survival contradicts the findings of a subsequent chapter which studies the various liabilities associated with foreign ownership in terms of new firm life duration (Chapter 9). Also, the unique contribution of gender as a factor in other factors like immigration status and education group has not been found, which runs counter to the idea of double discrimination and limits its explanatory power. Even more paradoxical results are seen in relation to the role of education in the case of both manufacturing firms and knowledge-intensive business firms (p. 211). The findings on urbanization as the total employment in a functional region show a small, positive but insignificant effect, except in the case of knowledge-intensive business services is contrary to the findings derived on the regional effects on the total, industrylevel employment derived in a displacement scenario. The reflection on how effects of displacement vary in comparison to congestion effects should help contextualize the benefit and costs associated with the firm, entrepreneurial activity at the various levels and their drivers. The absence of other sources of knowledge over and above technological knowledge also constraints how it squares up overall or compares to them. The case for specialization and self-employment (particularly inservice sectors) with agglomeration renders its pursuit relatively fruitless (p. 215). The insights on the impact of external factors, except related variety and specialization overall and in some sectors need further investigation. The narrative on firm size and its influence has been avoided and heterogeneity overall has been demonstrated. The suggestions for policymakers should have been more appropriately contextualized with the results (p. 218).

The subsequent Chapter 9 studies the case of immigrant and native entrepreneurs more deeply in terms of "liability of newness", "liability of adolescence" and the "liability of foreignness". The Chapter aims to provide insights into the complex interaction between entrepreneur characteristics, firms and their institutional contexts on firm duration or survival to provide pointers for inclusive entrepreneurship policies aimed at increasing the start-up rate among disadvantaged and under-represented groups. The choice of ethnicity is unique when used in combination with neighborhood features context provided earlier. Factors belonging to environmental characteristics should have been discussed in order to establish the relation with the neighborhood context, as most of the factors so characterized do not manifest the influence of ethnicity and firm survival (p. 230, 231, 233). Given the variations in the evidence on ethnicity and firm survival rates during the recession and the life stages outlined earlier, it appears to be a mixed case (in terms of evidence), as it is controlling for various personal and environmental factors. This seems to position ethnicity, in terms of variations in the institutional foundation, which is partially true and does not show interactions with personal characteristics at least in-

tuitively. Moreover, sector heterogeneity and environmental factors being excluded render the prospect of neighborhood features interacting with ethnicity equally weak. The investments in human capital, therefore, appear influential in neighborhood contexts, accounting for the real-world phenomena of migration. The paradox is that the resilience of migrant entrepreneurs is increasingly susceptible across stages, despite capability development potential that it offers. This is in sharp contrast to an earlier chapter, where the regional effect was emphasized over the individual characteristics, in relation to the new firm formation. Firm characteristics have been studied using variables like the number of home-based businesses and rent or owner-occupied businesses which make it more realistic and relevant, as opposed to firm characteristics like ownership structure and firm Size, which do not relate well with how new firms should be characterized, given the constraints under which they operate. Access to finance variables, institutional context has been surprisingly bypassed. The narrative on environmental factors has been omitted altogether, especially those considered as structural in nature, viz informal institutions discussed earlier (p. 230, 233) and conflated with neighborhood features. More so, the symmetry of comparison of market based environmental factors and structural ones is not self-evident and begs the question of whether the market structure is not structural enough. Given the discussion on geographical proximity not being part, how can such an effect be inferred directly in relation to neighborhood features alone is not clear? Particularly, the neighborhood features chosen are largely sectoral determinants and that sectoral heterogeneity has been controlled for appears to be both mythical and mystical (p. 233). Surprisingly enough, while the spatial determinants are considered in previous chapters like the impact of broadband connections on new firm births and commuting and logistical costs like Information and Communication technology, market size appears to be emphasized in the discussion on the neighborhood context. The more qualitative indicators like sources of competitive advantage, the structure of economies, inclusivity and access to finance are not relevant considerations for ethnic entrepreneurs is surprising. The use of entrepreneur characteristics in the data and methods viz., Labour market experience and then controlling for work experience at different time points like before start-up needs some contextual discussion/explanation. Similar is the control implemented for socio-economic status of neighborhood (p. 237). The interaction effect, in respect of neighborhood factors, appears suspect. The composition effect of one or more variables inferred in relation to ethnicity could have been seen in the context of other entrepreneur characteristics, either cross-section ally or longitudinally, given their huge variation in the dataset. This substantiates the vulnerability of nonwestern ethnic entrepreneurs and paradoxically, the entrepreneur characteristics linked to it, as outlined is not known

clearly. That prospect was however foreclosed and thus is a limitation of the study.

Chapters 11 and 12 provide suitable insights for partner selection for innovation cooperation and the drivers of introduction of knowledge-intensive export products with a special focus on the dynamic aspects of knowledge absorption and have used the Asian countries in the sample, particularly, the chapter on international outsourcing and global value chains characterizing the Input-Output structure, in relation to a diversity of sectors. However, more technology-intensive sectors like Pharmaceuticals and Information Technology were not discussed there.

Lastly, Chapter 13 investigates a truly unique concept of the creative class using a multi-level approach to measure creative individuals and analyses the characteristics of their regional environment. The quantitative occupational approach given by Florida is criticized and the five-factor model from psychology is used to describe an individual's personality. The significant variables on the regional level relate to personality traits more in most cases, except that for self-employed rates is unique and surprising and makes a strong case for the creative class being less socially conformant, except for ethnicity and education levels. Even more so the likelihood their being self-employed is higher which points to their being well-embedded in society. The GDP per capita and patents per inhabitants being significant, as regards soft location factors perhaps points to the western neoliberal influence on their culture. The significance and direction of the influence of variables in relation to the subgroups of the creative class are nuanced for regional variables. Certain sectoral effects in knowledgeintensive services, as opposed to high-tech manufacturing and cultural sectors, are also revealing. The direction of causality is not ascertained in this study. Creativity not being associated with prosperity bears some truth. This is in line with Florida's findings on occupational groups and their relation with regional prosperity and impact on technology. Creativity per se, as opposed to occupational and industry-specific effects in conjunction with human capital, not influencing regional development makes it an overrated virtue. The case for regional development is therefore very limited. Overall there is a limited case for regional effects in relation to creative individuals. Openness and tolerance as soft location factors appear relevant on a context-dependent basis. Perhaps, the occupation-based approach may be valid in our context, which is very differently characterized, in terms of share of self-employed people. Perhaps their contribution is not clear in the study. The nuanced variation in respect of occupational classes is well-appreciated. The limitations of the study are well-acknowledged. Future research directions are also well-characterised.

The last chapters study the generation of university spin-offs in terms of barriers. The Innovation ecosystem framework has been used to conceptualize the study. The barriers are institutional factors, individual attributes of the faculty entrepreneur, lack of interest, regional environment and macroeconomic conditions at the country level, etc. are used. The specific institutional conditions and knowledge assets are well-outlined. The analysis of questionnaires is well suited to the context of the study. The impact of universities gaining autonomy in terms of budgetary process and allocation and independent sources of funding. The efficacy of negotiated performance agreements is outlined well. Organizational barriers in terms of the co-existence of two employee contracts systems are also outlined, in addition to lack of critical mass of R&D, lack of risk-taking culture and a lack of implementation. Individual characteristics of entrepreneurs of a diverse and specific variety also factor in this study. Training and access to funding and seed capital, besides lack of incentives or rewards and lack

of angel and early-stage investors are also found to be influential in varying degrees. National government policies and regulations do not constitute major barriers, which is unlikely to bear out in other contexts. The Intellectual Property protection in terms of regulations, as well as conflict of interests regarding the utilization of university infrastructure, are not major barriers, of which the latter is unlikely to bear out in the Indian Context. As regards the former, opinions may vary widely as to the utility of intellectual property protection to commercialization within university spin-offs.

Overall, the book has some interesting dimensions and methodologies in its toolkit and is a good read for the planning empirical research on various aspects of innovation, collaborations and growth with a sharp focus on the economic geography elements and interdisciplinary toolkits which are diverse and well-characterised in large part.

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