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Neil Lee^a

ABSTRACT

Two of the canonical approaches in regional studies are global production networks (GPNs) and evolutionary economic geography (EEG). Recent geopolitical and economic events have shown the importance of both theories in explaining regional economic change. Yet they remain discrete and separate, and there is now consensus that, together, they could explain more. A vibrant debate on the relationship between these two approaches is needed, starting with identifying unifying themes and areas of analytical difference, to develop a research agenda for future work which can better explain regional change.

KEYWORDS

global production networks; global value chains; relatedness; evolutionary economic geography; complexity

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1. INTRODUCTION

The world economy is going through a turbulent period. Geopolitics – in particular US-China tensions, the Russia-Ukraine war and the Israel-Hamas war – have had important implications for national and regional competitiveness. Businesses are seeking to adjust their supply chains in efforts to decarbonise. And, while technological change has been a long-term issue, new forms of generative artificial intelligence (AI) are likely to pose the most severe challenge yet faced by national and sub-national policymakers (De Propris & Bailey, 2021). Each of these three challenges – of geopolitics, net zero and technological change – would be difficult in normal times. Yet we face them in a time of political upheaval, with many countries electing populist politicians who are often highly sceptical about the prevailing economic order (Rodríguez-Pose, 2018).

This changing economic landscape has underscored the relevance of two of the canonical theories of economic geography, global production networks (GPNs) and evolutionary economic geography (EEG). These are two analytically rich and diverse fields. But, to caricature them, research on GPNs tends to focus on exogenous, firm level processes, with multinational firms portrayed as crucial external actors for regional economic outcomes (see Coe & Yeung, 2015). In contrast, the emphasis of EEG research has been on endogenous processes, with the

micro-behaviour of individual regional actors being seen as fundamental drivers of regional evolution (see Boschma & Frenken, 2018). It is tempting to portray these theories as macro and micro: macro-GPN research is focused on major firms and portrays regional development as exogenous; micro-EEG focuses instead on individual, local actors, and highlights the importance of endogenous processes in driving regional development. But this divide is, to some extent, artificial. As Poon (2024) suggests, both have firm capabilities as an important part of their explanations of regional development. Together, they provide two complementary approaches which illuminate regional development in new ways.

We can see the relevance of these two approaches by examining some of the most important economic policy agendas of recent years. Geopolitical tensions have highlighted the strategic and economic importance of GPNs, as firms are increasingly forced to pick sides in what is clearly not a neutral phase of globalisation. The United States, China and the European Union have all attempted to reshore production of semiconductor manufacturing, as part of an attempt to secure supply chains (The Economist, 2022). Research on GPNs has much to say about these US policies and their likely outcomes. In the US, much of this reshoring has happened through President Joe Biden's 2022 CHIPS and Science Act,¹ which had an additional aim of rebuilding industrial bases in the US heartlands. One key feature has been the development of a series of

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new tech hubs in US regional economies, building on promising local strengths (Muro et al., 2023). These are an attempt to plant seeds in fertile soil and, in doing so, help encourage local economies to evolve in new ways. In the first phase, funding has been given to develop initiatives such as the Heartland BioWorks in the Indianapolis–Carmel–Anderson metropolitan area which aims to bring biopharmaceutical manufacturing to places where relevant research takes place (Economic Development Administration, 2024). EEG approaches are extremely relevant in helping understand the likely success of these approaches and potential policy design (Boschma, 2023).

Both EEG and GPN approaches have had a major impact across academia. They have become important in teaching and shaped the way in which countless students understand regional economies (e.g., MacKinnon & Cumbers, 2018; Boschma & Frenken, 2018). But there is likely to be more to come, both in terms of improved theorising, understanding and policy impact. Yet, ironically for two approaches which stress networking and evolution, there have been relatively few attempts to reconcile the two approaches. To begin to address this lacuna, this special section of *Regional Studies* has four pieces which compare and contrast these two approaches and identify areas of reconciliation and themes for the future.

Writing from the perspective of global production networks, Henry Yeung (2024) argues that heightened risks and geopolitics mean that there will be a renewed focus on the region as a unit of analysis, with this raising questions about epistemology and the search for casual explanations, along with ‘common ground’ issues around networks and resilience, institutions and the state, inequalities and uneven development, and new forms of regional policy. He argues that these issues create opportunities which can only be fully understood by the two approaches working in alignment. Because ‘strategic coupling and related variety almost always interact in dialectical ways that shape any regional formation and transformation’ the two approaches are ‘mutually constitutive – the branching of regional actors into related industries is reinforced by their strategic coupling with global production networks that in turn strengthens the capabilities of these actors for further related diversification within regions’ (Yeung, 2024, p. 1).

Reflecting these shared opportunities, Ron Boschma (2023) directly develops a theoretical-analytical approach which links global value chains (GVCs), a closely related approach to GPNs, to the literature on evolutionary economic geography (EEG). To do this, he builds on the idea of relatedness and the idea that local capabilities help determine the opportunities available for regional participation in and upgrading in GVCs. He raises a set of promising avenues of exchange between these different bodies of work, for instance by characterising GVCs ‘in terms of the capabilities they share with others’ and ‘their levels of complexity’ (Boschma, 2023, p. 9). In doing so, the analytical tools of EEG can be used to deepen our understanding of how GPNs develop.

In a first commentary on this exchange, Jessie Poon (2024) identifies the ‘common ground’ of regional capability as a fruitful area which can help link the two approaches. She focuses in on the firm as a unifying area of work, and the capabilities which develop into regional advantages. But she distinguishes this from the geopolitical forces which are stressed by Yeung, focusing instead on the role of policy in developing new capabilities in non-core regions. For Poon (2024, p. 7), in many regions ‘the opportunity to increase economic complexity through evolutionary technological capability remains considerable’. But these policy goals can only be achieved with a better understanding of how GPNs evolve.

This is the common thread with Lisa De Propris (2024), who makes an argument for an interventionist approach in regional development, building on the idea that there should be a set of new industrial policies. She reminds us of the problems of regional inequality, the low carbon transition and so on, and the challenges of addressing these core challenges. Because ‘Markets and the private sector are too slow, too timid and too risk adverse, for example, in getting to Net Zero by 2050’, there is a need for state action, something which she argues requires a strong and theoretically driven policy response.

This is a critical juncture in the world economy and, as a result, new forms of activist policy are being attempted. But it is also a critical juncture for theory – these two approaches have been vital in helping understand the nature of the world economy. But, as the nature of global capitalism changes, so must efforts to analyse them. By finding common ground between these two approaches, our collective aim is to identify new areas of research to ensure each remain relevant and useful in their own right, but benefit from the cross-fertilisation of knowledge which has, to this point, remained untapped potential for explaining regional change.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author(s).

NOTE

1. CHIPS = Creating Helpful Incentives to Produce Semiconductors.

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