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Article

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ZFW - Advances in Economic Geography

Provided in Cooperation with:
De Gruyter Brill

Suggested Citation: Heß, Martin; Horner, Rory (2024) : Driving change in troubling times: Security, risk and the state in global production networks, ZFW - Advances in Economic Geography, ISSN 2748-1964, De Gruyter, Berlin, Vol. 68, Iss. 3/4, pp. 145-150, https://doi.org/10.1515/zfw-2024-0085

This Version is available at:
https://hdl.handle.net/10419/333190

Editorial

Martin Hess* and Rory Horner

Driving Change in Troubling Times: Security, Risk and the State in Global Production Networks

https://doi.org/10.1515/zfw-2024-0085

Abstract: This editorial revisits the state – global production network (GPN) nexus in times of multiple crises affecting the global economy and society. Setting the scene, we first reflect on the role of geopolitics in transforming GPNs under conditions of increasing uncertainty before turning our attention to the ways in which states deal with questions of security and navigate risk. It also highlights the increasingly overt role of strategic state strategies vis-a-vis GPNs. In a second step, we discuss the central, constitutive role of the state in processes of strategic coupling, decoupling and recoupling, before presenting some concluding thoughts.

Keywords: global production networks; state; security; risk; strategic coupling

1 Introduction

Not long ago, in an article mapping out conceptual developments in global production network (GPN) research, Neil Coe and Henry Yeung argued that geopolitical conditions and how these influence GPN formation – albeit already recognised in the literature – deserve enhanced investigation (Coe and Yeung 2019: 793–4). In the five years that have passed since this call for more attention to the effect of geopolitics on GPNs was published, the world economy has seen ever more and increasingly diverse crises and challenges. The Covid-19 pandemic taking hold in 2020, Russia's invasion of Ukraine in 2022, war and conflict across the Middle East resurfacing after the 2023 Hamas terrorist attack on Israel, and rising tensions between the People's Republic of China and Taiwan as well as the United States all gained momentum in rethinking the promises and perils of global economic connectivity of both GPNs and economic development. Consequently, the ascent of economic nationalism, protectionism and 'trade wars' in many parts of the world (cf. Hess 2021), along with the reevaluation of risk by firms operating and being entangled in global supply chains, has had direct implications for transforming GPNs and raised new questions, not least about the state's role and importance in this transformation.

Taking a fresh look at state agency in driving the territorial and organisational reconfiguration of GPNs – seen in multiple economic sectors, from car manufacturing, electronics and medical goods to international retailing and logistics, and leading to new combinations of strategic coupling, decoupling and recoupling – has therefore become an important and arguably urgent task. While the state as a relevant actor in governing GPNs has always been recognised in the literature (cf. Coe et al. 2004; Henderson et al. 2002) ever since its inception (often referred to as GPN1.0), how its role and importance are considered conceptually has shifted over time. Initial formulations of the framework recognised the state as an actor at multiple scales, alongside firms and civil society institutions. Yet subsequent theorising of GPNs, most notably under what is often referred to as GPN 2.0, focused more on lead firms with the state arguably moving into the background (Coe 2021; Coe and Yeung 2015). In light of this, it therefore seems timely to revisit the state-GPN nexus to which the articles in this Special Issue make substantial and original contributions, concentrating in particular on the state in the context of security and risk as drivers of GPN reconfigurations and the strategies and territorial manifestations of the state shaping GPNs as regulator, facilitator, producer and buyer (cf. Horner 2017).

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2 New drivers of GPN reconfigurations – security and risk

As outlined at the beginning, geopolitics seems now much more forthright in relation to GPNs, as signalled for example by Yeung (2023, p. 677) in a recent intervention, where he argues that "geopolitics and risks can no longer be taken for granted in *any* economic-geographical work of the current era because they are now endemic to the remaking of politics, economies and space" (our emphasis). In GPN2.0, theorising the formation and evolution of GPNs is premised on firms managing uncertainty and risk (or the risk environment) as one of four key dynamic drivers, along with optimising cost-capabilities, sustaining market development and working with financial discipline (Coe and Yeung 2015; Yeung 2024; see also Völlers et al. 2023). The focus in this conceptualisation rests firmly on these drivers as determining firm strategies and consequently GPN operation and transformation.

We argue that state strategies to manage risk and uncertainty have become increasingly important in driving GPN evolution in their own right and need renewed attention. Farrell and Newman (2019; 2023) for instance discuss how states strategically 'weaponise' supply chains, while UNCTAD (2024) demonstrate how FDI is now increasingly shaped by geopolitical alignment among nation-states which aims at forging new connections and breaking up existing ones. 'Friendshoring' has been used by various states, including Germany among others, to re-align with different territories (Kalvelage and Tups 2024). In a similar vein, Aoyama et al. (2024) refer to diplomacy-driven governance of GPNs, showing how East Asian states are negotiating their dependence on the US and China by multilateral alliances of states.

What we see, then, is a shift in direction on the continuum from state/geopolitics as a frame for strategic action by firms to much more, increasingly overt, state intervention aimed at reshaping GPNs. Consider for example the currently brewing dispute between Iran and its neighbours over three islands in the Strait of Hormuz, a crucial global shipping route especially for oil and gas, which clearly will have an impact on firm strategies not only in shipping and logistics but also their customers' networks. The increasingly visible role of the state as active driver is now evident through more and more policies clearly directed at reconfiguring GPNs and supply chains. This can be exemplified by the Inflation Reduction Act (IRA) under the Biden administration in the US (now under threat of being revoked by the incoming Trump administration) or the UK Government's Critical Imports and Supply Chains Strategy published in 2024, among many other initiatives. And while state-owned enterprises and sovereign wealth funds have long been a part of the global economy, amid heightened security concerns in a turbulent world their involvement goes beyond the producer role to also act as investors, buyers and regulators (cf. McGregor and Coe 2023). Their varying presence across different industries, from parts of the defence industry (Blažek and Lypianin 2024a, b) to utilities and energy (Guo et al. 2023), is reshaping state strategies to try and address the growing concerns about military security to reduce the associated risk of dependence on volatile and vulnerable supply chains. For instance, Blažek and Lypianin (2024a, b) explore this through the lens of the Russia-Ukraine war and demonstrate how military conflict shapes participation in GPNs. Addressing the question of energy security and sovereignty, and building on Horner's (2017) work on state roles in GPNs, Vezzoni (2024) highlights the nuanced role of the state and the many hats it wears in the energy transition by looking at the European Union's hydrogen policy to drive a move towards renewable energies.

Security concerns and risk mitigation clearly have become key influences on state action vis-à-vis GPNs, especially in 'critical' industries such as semiconductors, pharma/medical, electric vehicles, and critical minerals. Along with the military and the quest for energy security, states also develop strategies to 'de-risk' their investment in industries critical for achieving a country's commitments to comply with global agreements to tackle climate change. In their work on Germany's state investment in a GPN for sustainable aviation fuel as part of its net-zero policies, Walker and Coulomb (2024) go beyond prevalent macro-level perspectives in the existing de-risking literature to conceptualise a more fine-grained analysis of state-capital relations. They demonstrate how states can shape the organisation of production and de-risk dependency on some places but also re-risk others in the process. And since the Covid-19 global pandemic, health security concerns of course also have altered how states actively work towards transforming the GPNs of pharmaceuticals and medical goods to promote greater 'local' production (cf. Dallas et al. 2021; Horner forthcoming). Taken together, the examples outlined here serve to illustrate how the multiple roles of the state – beyond facilitator – are deployed in navigating security and risk.

More specifically, addressing security concerns and mitigating risk in/through GPNs creates a need for both new state regulation 'outwards' (i.e. global firms and their production networks) and ‘inwards’ (national firms and their networks, labour markets and civil society including its consumption practices) through a combination of coercion and consent. In addition to existing approaches to the analysis of the state-GPN nexus such as the strategic-relational approach (cf. Smith 2015; Teixeira 2024) and state capitalism/the capitalist state (cf. McGregor and Coe 2023; Schindler et al. 2024), this need is also conceptually acknowledged by theorising the state through a neo-Gramscian lens. This relates in particular to the understanding of state as ‘integral state’, a social formation where coercion operates through political society and coercion works through civil society (c.f. Arnold and Hess 2017; Hess 2021; Werner 2021). State regulation and facilitation may take specific territorial forms at various scales. At the local and regional level, it becomes manifest in the form of, for instance, export processing zones (EPZs) or Special Economic Zones (SEZs) such as Freeports – currently being established in the UK as part of a post-Brexit strategy to bring in new foreign direct investment and ‘anchor down’ new GPNs. At the national and global scale, new state policies to regulate firms and society have been devised both inwards and outwards, in areas such as labour market and skills policy (cf. McGrath 2013; Müller and Franz 2019) or renegotiation of trade agreements and migration policies, among others.

All these processes across different scales and discussed so far are reshaping the dynamics of state-driven strategic coupling in post-developmental and neoliberal states alike, on which we will now further elaborate.

3 Territorial strategies and manifestations

As with the drivers of GPNs, the role of the state is now increasingly recognised as playing a major role in processes of strategic coupling – a central concept in the GPN literature related to understanding territorial development. First introduced by Coe et al. (2004), the term refers to the dynamic interactions between territorial assets and the strategic needs of lead firms. Ultimately, the nature of value creation, enhancement and capture which emerge are recognised as crucial for regional development, with more positive outcomes expected where regional economies of scale and scope “complement the strategic needs of trans-local actors situated within global production networks” (Coe et al. 2004, p. 471). While the multi-scalar state has always been recognised as playing a role in strategic coupling, including as an “inter-scalar mediator” (Coe and Yeung 2019, p. 782), various recent contributions suggest its role may be more prominent and central. Accordingly, the state should be conceived of as more than a partner for extra-firm bargaining.

A number of recent analyses have argued that the state is an influential player in commencing coupling processes, i.e. in initiating the integration of firms in a regional or national economy into the production networks of global lead firms. The state can play a major role in “coupling creation” at the national (Dawley et al. 2019; MacKinnon et al. 2019; Yeung 2016) or regional level (e.g. Teixeira 2024). Moreover, the state can play multiple roles in forging connections with GPNs, as Scholvin and Atienza (2024) demonstrate via the case of the National Mining Company (ENAMI) in Chile and its formalisation of artisanal and small-scale mining to make possible integration into global markets (see also Irarrázaval 2020 on the case of natural gas in Bolivia and Peru).

Ongoing turbulence in the global economy gives greater salience to the need for strategic coupling to be a dynamic concept (e.g. Coe and Yeung 2015) and not just a “one-way flow of articulation” or integration into GPNs (Yeung 2015, p. 3). Decoupling and recoupling have been recognised as key elements of the evolution of coupling processes for some time (e.g. Coe and Hess 2011; Horner 2014; MacKinnon 2012; Yang 2013), but appear increasingly relevant as development strategy in various parts of the world is more oriented not just to integration into the global economy, but to disconnecting or reconnecting in alternative ways. For example, geopolitical decoupling is a recently recognised category of decoupling (Blazek and Lypianin 2024a; see also Pavlinek 2024), as relevant in the case of Ukraine after the 2014 Russian military aggression in Donbas.

Geopolitical developments are now more recognised as major drivers of state influence on coupling processes (Gong et al. 2022). For example, the regulatory supply chain controls imposed by the US government in the semiconductor industry are leading to “coercive coupling/decoupling” (Aoyama et al. 2024, 4), an argument that resonates with Gramsci’s notion of the state as political society operating through coercion. Offshoring is redirected, on/reshoring promoted and friendshoring negotiated in accordance with geopolitical alliances. In another example, in response to the geopolitical imperatives of reducing risk, de-/weaponizing supply chains, and maintaining extraterritorial influence, Kalvelage and Tups (2024) argue that friendshoring leads to ‘state-orchestrated coupling’. Through the examples of Chinese soybean investment in Tanzania (in light of shifting away from Latin American producers given China's tensions with the US) and German-led green hydrogen investments in Namibia (related to reducing dependence on Russian natural gas), they show how the state proactively and strategically alters the risk environment for investment.

As the above examples demonstrate, state influence on strategic coupling articulates not just within the borders of the nation-state (e.g. Fu and Lim 2022), but is also manifest extra-territorially (see also McGregor and Coe 2023). The United States' restrictions on China's semiconductor and wider ICT industry shape coupling processes elsewhere, most notably in East Asia as a key macro-region within GPNs in that sector (Aoyama et al. 2024). This arguably gives further meaning to the idea of the multi-scalar state in GPNs.

Of course, states also encounter limits when seeking to shape coupling processes, including in the form of the structure of GPNs. For example, the dynamics of LNG production networks have presented obstacles to the shift from an export-oriented strategy to a focus on the domestic market for the LNG sector in Indonesia (Dodge and Rye 2024). While much contemporary attention (including in this collection) has gravitated towards the most powerful and influential states in the global economy, clearly huge geographical variation is present in the degree of state agency in shaping GPNs. This agency is certainly constrained by capitalist imperatives of securing capital accumulation and economic growth in an era of variegated neoliberalisms and what Yeung (2024, p. 238) argues are now post-developmental states in Asia in which institutions and firms have become "disembedded from dwindling developmental state control and policy influences". Even so, the potential of strategic state action towards GPNs – albeit not always realised – is now abundantly clear.

4 Concluding thoughts

The dynamism and turbulence of the empirical terrain, especially in relation to issues of security and risk, has led to greater attention to what had been an acknowledged but under-scrutinised and under-theorised actor in GPNs. An increasing range of examples from several geographical and empirical contexts – of which those touched upon in this editorial and Special Issue compose just a fraction – cumulatively demonstrate that the state indeed is a central actor in GPNs and related processes of territorial development.

Alongside the empirical dimension, the state-GPN nexus is arguably ripe for further theoretical development. Recent works continue to adopt and build on both the strategic-relational (Smith 2015), neo-Weberian (Horner 2017) and more recently neo-Gramscian (e.g. Hess 2021) approaches adopted in initial work which placed greater explicit attention on the state in GPNs. Clearly, no consensus has emerged, nor perhaps should it, around a single approach to theorising this multi-faceted dynamic. Intriguingly, some contributors have demonstrated the value of more than one approach, to leverage different respective strengths. For example, the neo-Weberian state roles can be combined with the strategic-relational approach (e.g. Vezzoni 2024; Walker and Coulomb 2024), while Teixeira (2024) further adds uneven and combined development to the previous two. This nexus is arguably ripe for further theoretical development and timely scrutiny in light of ongoing empirical changes. More critical state-theoretical reflection may also shed new light on wider debates about the capitalist state and state capitalism (cf. Alami and Dixon 2020, 2023, 2024) as well as the legacies of ideas about the developmental state at this current geopolitical and economic conjuncture.

We hope that this editorial and the papers contained within this Special Issue help contribute to, and inspire further research on, the crucial relationship between states and GPNs and its various tensions and uneven consequences in the contemporary global economy. The central role of the state in this context shows no immediate sign of disappearing – if anything, the opposite is the case. Some, if not many, of the trajectories of economic globalisation over the last decade were scarcely predictable. Nevertheless, the GPN framework and core concepts still retain validity in helping understand the evolving dynamics of the state-GPN relationship, but where the concepts are also dynamic and adapt in line with the changing context. It is imperative that future work continue this reflexivity and address the flux, as well as continuity, in the changing world economy.

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