Journal of Supply Chain Management

WILEY

Journal of Supply Chain Management

INVITED ARTICLE OPEN ACCESS

Rethinking Supply Chain Management in a Post-Growth Era

Davide Luzzini[1] | Mark Pagell[2] | Veronica Devenin[3] | Joe Miemczyk[4] | Annachiara Longoni[5] | Bobby Banerjee[6]

[1]Department of Marketing, Operations and Supply, EADA Business School, Barcelona, Spain | [2]School of Business, University College Dublin, Dublin, Ireland | [3]Department of Strategy, Leadership and People, EADA Business School, Barcelona, Spain | [4]Department of Sustainability, ESCP Business School, London, UK | [5]Department of Operations, Innovation and Data Sciences, ESADE Business School, Barcelona, Spain | [6]Bayes Business School, City, University of London, London, UK

Correspondence: Davide Luzzini (dluzzini@eada.edu) | Joe Miemczyk (jmiemczyk@escp.eu)

Received: 14 October 2023 | **Revised:** 5 September 2024 | **Accepted:** 9 September 2024

Keywords: downscaling | post-growth | sustainability | systems thinking | wellbeing

ABSTRACT

Supply chain management is grounded on the assumption that endless economic growth is compatible with environmental and social sustainability. Yet scholars from ecological economics question this assumption due to ever increasing evidence showing how hard it is to decouple growth from negative environmental and social externalities. In response, pressure from social movements is mounting, and the agendas of several countries already consider alternatives to growth. Therefore, this article presents a critical thought experiment for the supply chain management discipline: What are the implications of moving from the current endless growth paradigm to a post-growth paradigm for businesses and their supply chains? Using the umbrella term "post-growth," this article identifies three key post-growth principles—(i) *socio-ecological wellbeing*, (ii) *selective downscaling*, and (iii) *systems thinking*—and then examines their implications for supply chain management research and practice.

1 | Introduction

Growing revenue for firms and increasing gross domestic product for countries underpin the traditional economic paradigm of positive societal development. That growth is good is an assumption that is rarely questioned by supply chain management scholars. Yet this view has been challenged elsewhere, with a focus on limits to growth (Daly 1991; Georgescu-Roegen 1971; Meadows et al. 1972) and, in the last 15 years, the development of a post-growth discourse (Fioramonti 2024). This paradigm shift stems from an accelerating awareness of the environmental limits to growth, inequality of wealth and income, and a stagnating quality of life in many countries (e.g., Fanning et al. 2022; Parrique, Raworth, and Liegey 2023).

In the growth-oriented paradigm, a company's performance is determined by its ability to grow profits by generating more revenues and gaining market share. This is how firms are valued, we measure success in business research, and we have trained our students for generations. But this implies constantly growing production and using more natural resources. While it is true that some businesses can remain profitable without growth by focusing on quality and efficiency rather than expanding, this does not maximize shareholder value or grow the economy through expanding gross domestic product (GDP). These companies are not viewed as exemplars because growth has become so embedded in business logic as to become an imperative (Christensen 2001; Rich 1999) and an object of social justification (Ahlstrom 2010; Ferguson and Ferguson 2018). However, to quote the famous report by the Club of Rome, there are *limits to growth* (Meadows et al. 1972).

Like other core management disciplines (e.g., strategy, marketing, and finance), supply chain management (SCM) has also implicitly incorporated growth as a key objective. A multitude of impactful studies investigates the connection between SCM practices with growth and profitability (e.g., Dehning, Richardson, and Zmud 2007; Flynn, Huo, and Zhao 2010; Tan et al. 1999;

Tracey, Lim, and Vonderembse 2005). The fundamental principles of SCM have long embraced customer primacy, demand fulfilment, cost-efficiency, flexibility, and speed. SCM as a management philosophy is characterized by a customer focus: "The objective of every supply chain should be to maximize net value [...] the difference between the value of the end product to the customer and the costs the entire supply chain incurs in fulfilling the customer request" (Chopra and Meindl 2019, p. 15). The term SCM was coined by consultants (Oliver and Webber 1982) and adopted by academics to study how companies could coordinate intra- and inter-organizational processes to fulfill demand. And the goal of SCM is to "achieve effective and efficient flows of products and services, information, money and decisions, to provide maximum value to the customer at low cost and high speed" (Flynn, Huo, and Zhao 2010, p. 59). In other words, SCM has been primarily concerned with meeting demand at the lowest possible cost to maximize profits, demand that should be growing to create and maintain competitive advantage.

Post-growth scholars[1] argue that perpetual economic growth and the planet's ability to sustain human life as we know it are essentially incompatible. The latest Intergovernmental Panel on Climate Change report shows that human activity has "unequivocally caused global warming, with global surface temperature reaching 1.1°C" above pre-industrial levels (IPCC 2023, p. 4), which "is already affecting many weather and climate extremes in every region across the globe [leading] to widespread adverse impacts and related losses and damages to nature and people" (p. 5). Furthermore, while progress has been made, they deem current adaptation planning and implementation insufficient (p. 8), with rapid changes occurring in the atmosphere, oceans, cryosphere and biosphere. The United Nations Environment Programme (2023) confirms these results and emphasizes that global temperatures will surpass the 2015 Paris agreement goal unless countries deliver more than they have promised. This evidence of human-induced climate destruction has sparked social movements to pressurize governments to take concrete measures (Fridays for Future 2023; Parrique, Raworth, and Liegey 2023) and highlights the need for an interdisciplinary approach that tackles the climate crisis with an understanding of the interconnectedness of social and environmental systems (Graham et al. 2023).

The post-growth paradigm is gaining momentum because the (admittedly attractive) goal of reducing carbon dioxide emissions while increasing the GDP—referred to as *green growth*—seems unobtainable while meeting the Paris agreement's deadline (e.g., Fanning et al. 2022; Vogel and Hickel 2023). For countries to meet their 1.5°C target alongside continued economic growth, carbon reduction rates would need to increase 10 times by 2025 (Vogel and Hickel 2023). Therefore, some scholars, including some who had previously advocated for green growth, observe these targets are more "wishful thinking" than a practical reality that we can reach in time (Rockström et al. 2017). This is why climate policy researchers are increasingly skeptical about green growth (e.g., King, Savin, and Drews 2023; Koskimäki 2023; Lehmann, Delbard, and Lange 2022). Proponents of the post-growth paradigm contend that a reduction in production and consumption is therefore necessary, particularly for affluent nations, to cope with the need to limit the climate crisis (Jackson 2021; Parrique et al. 2019).

The climate crisis is only one reason for post-growth's momentum. The current growth-oriented paradigm also clashes with a just society, free of macroscopic inequalities. Fanning and Hickel (2023) show that investments to mitigate climate change cannot be equally shared to reach current climate goals, finding that developed economies must go far beyond current targets. Similarly, the impacts of the climate crisis are not equally shared with racial minority groups, migrants, and indigenous communities facing a disproportionate burden from illness and mortality (Abi Deivanayagam et al. 2023). The promise of growth driven poverty reduction is also in question, with current approaches in developing regions based on exploitation and extraction, rebounding in inequalities, social exclusion and ecosystem degradation (De Schutter 2024). Even the United Nations' Sustainable Development Goals (SDGs) raise questions because aggregate economic growth of 3% per year (SDG 8) is inconsistent with the other SDGs (e.g., SDG 6, 12, 13, 14, and 15) aimed at environmental protection (Hickel 2019).

While there is resistance to post-growth thinking from mainstream economists, post-growth scenarios have a good probability of becoming reality as a consequence of constrained bio-physical limits (Banerjee et al. 2021). The less we tackle ecological degradation and social inequalities, the more likely we are to be forced to substantially downscale economic output. This would not be a planned, smooth transition. To avoid this, some countries are (at least partially) embracing post-growth principles. The European Union's Beyond Growth initiative aims to "deconstruct underlying assumption of GDP being the only mean to achieve economic policy objectives; shift the discourse towards beyond-growth indicators for a wellbeing European economy [...]; and shape the EU's path to a more resilient economic agenda" (Beyond Growth 2023). The governments of Scotland, Iceland, New Zealand, Wales and Finland have joined the Wellbeing Economy Alliance (2024) to actively promote a new policy agenda beyond growth. Prioritizing the environment and people's wellbeing over growth is also making its way into public opinion, with the majority of European and US citizens supporting post-growth principles (Drews, Antal, and van den Bergh 2018; Gallup 2023; Marlon et al. 2018; Paulson and Büchs 2022; Rice-Oxley and Rankin 2019; Umweltbundesamt 2023). As post-growth arguments enter into civil society debates and actions, it is time for scholars to consider how this impacts their disciplines, including our own.

When SCM scholars started studying green operations, the debate was rightly focused on the does-it-pay-to-be-green question (Klassen and McLaughlin 1996). Later, stakeholder pressures led us to consider whether profitability should be the priority if the objective was to create truly sustainable supply chains (Pagell and Shevchenko 2014). Today, we might be on the verge of the next leap with post-growth thinking. Exploring the potential of a post-growth transformation is an act of responsibility, and it does not need to worry (all) businesses or researchers (Roulet and Bothello 2020). While readers may not necessarily agree with all of what post-growth thinking promotes, we suggest that exploring these questions is an intellectual endeavor that must be conducted, because the post-growth paradigm—if adopted—would have profound implications for SCM. The precautionary principle indicates that we need to consider the possibility of a forced and unplanned post-growth transition and then find

ways to avoid it. By exploring what the post-growth paradigm could mean for SCM, we hope to illuminate the "white space" of SCM research to drive positive change (Pflueger, Wieland, and Chapman 2024).

2 | Moving to a Post-Growth Economy

Post-growth is an umbrella term for multiple related paradigms, the most common being degrowth, steady-state, and wellbeing economy (Fioramonti 2024). The basic tenet of post-growth is to question the assumed desirability of continuous economic growth, due to the finite nature of the planet's resources and growth's detrimental environmental impacts (Daly 1991; Jackson 2009; Victor 2010).

Post-growth economics mostly focuses on qualitative development goals instead of quantitative growth targets. This perspective often emphasizes the shortcomings of GDP as *the* measure of societal development and seeks alternative goals such as prioritizing quality of life, social equality, and ecological sustainability (Kallis, Kerschner, and Martinez-Alier 2012; Schmelzer 2015). Rather than trying to adjust the status quo for better or greener growth, it promotes imagining and enacting alternative visions to growth-based development (Kallis 2015).

Post-growth is new and divisive. Hence, it is worth briefly exploring what it is not: What it does not promote. First, post-growth does not negate the possibility of growth. Instead, while sectors that generate negative externalities are expected to shrink or disappear, others that improve the wellbeing of the planet and people will expand. What needs to be reduced, in absolute terms, are overall material production and the consumption of natural resources, which are measures of the inputs used rather than the outputs obtained. Second, post-growth is not synonymous with recession. Recessions have harmful effects like increased unemployment and inequality. The post-growth literature suggests policy pathways that should reduce the overall size of the global economy while at the same time improving wellbeing indicators, including employment (Hasselbalch, Kranke, and Chertkovskaya 2023; Hickel 2021; Olk, Schneider, and Hickel 2023). And recent estimates suggest that ensuring decent living standards for the entire global population would require less than 30% of current global resource use indicating plenty of slack for additional investment, innovation, consumption, and so on (Hickel and Sullivan 2024). Third, the post-growth paradigm is not anti-technology. Technological innovations are fundamental to decarbonize the economy and for finding new ways of work that maximize wellbeing (Jackson, Hickel, and Kallis 2024). Post-growth scholars simply observe that technologies aimed at increasing production efficiency might be destructive for the environment and alienate workers (Rennstam and Paulsson 2024) and that technology alone might not be sufficient to solve the ecological crisis (Hickel 2023).

Appendix A summarizes the most relevant post-growth paradigms and what each proposes as an alternative to the current growth-based economic system. These approaches are not mutually exclusive and different terms are sometimes used interchangeably (Froese et al. 2023; Rennstam and Paulsson 2024). For our purpose of exploring the implications of post-growth for SCM, the differences are far less important than the large areas of similarity. Our synthesis of the post-growth literature identifies socio-ecological wellbeing, selective downscaling, and systems thinking as the key common themes across the various post-growth schools of thought.

Each of these themes is broad based and agreed across thinkers. We acknowledge that post-growth scholars also discuss a plethora of other fiscal, monetary, and labor policies. But because these are not shared, they are outside the article's scope (see, for example, Fioramonti 2024; Olk, Schneider, and Hickel 2023). Finally, it is important to note that these common themes are closely interlinked. For example, understanding what wellbeing means provides guidance about activities that should be downscaled or scaled up and systems thinking requires considering the wellbeing of all supply chain stakeholders.

2.1 | Socio-Ecological Wellbeing

The first principle of post-growth is a paradigm shift in terms of the outcomes of economic activity that should be valued. Post-growth diverges from traditional economic models that prioritize GDP growth as the preferred indicator of societal progress. Martinez-Alier (2008) notes: "Conventional economic accounting is false, it forgets the physical and biological aspects of the economy, it forgets the value of unpaid domestic and voluntary work, and it does not really measure the welfare and happiness of the population" (p. 32). Rather than growing GDP, plural forms of value are needed to emphasize qualitative social and environmental prosperity over quantitative expansion. Post-growth promotes a model of production and consumption that maintains ecological balance and improves quality of life (Funtowicz and Ravetz 1994; Martinez-Alier 2001). The notion of value extends beyond pure economic metrics rooted in GDP to encompass social and environmental outcomes, redefining prosperity as the wellbeing of people and ecosystems. This challenges the use of cost–benefit analyses in favor of multi-criteria evaluations including both environmental and social indicators such as biodiversity, soil degradation, ecosystem functions, environmental justice, health, quality of jobs, work–life balance, equality, and community engagement (Etxano and Villalba-Eguiluz 2021; Fioramonti et al. 2022). Some countries have already taken concrete steps in this direction, as evidenced by New Zealand's wellbeing budget (Anderson and Mossialos 2019), Iceland's 39 indicators of wellbeing (Government of Iceland 2019), and Scotland's 81 indicators in their National Performance Framework (Scottish Government 2019).

Valuing wellbeing not GDP challenges the commodification of labor and the instrumental treatment of nature for production maximization (Kallis, Gómez-Baggethun, and Zografos 2013). It moves away from material production and consumption as the main goals of economic development to encompass physical, psychological, social, and environmental wellbeing (Fioramonti et al. 2022). This reorientation is a departure from the traditional economic paradigm that prioritizes efficiency, productivity, and profit maximization, focusing instead on the provision of decent living standards for all. Post-growth advocates claim that this can be achieved through more equitable distribution of power and resources, rather than perpetual economic expansion

often only benefiting the few (Coote and Percy 2020; Fioramonti et al. 2022; Goddard, Kallis, and Norgaard 2019; Hickel 2019; Millward-Hopkins et al. 2020).

2.2 | Selective Downscaling

The second fundamental principle of post-growth is selective downscaling. Downscaling means reducing production and consumption, decreasing society's energy use and material throughput, and avoiding the commodification of products, service, and resources (Hickel 2019; Kallis 2011; Schneider, Kallis, and Martinez-Alier 2010). We have already surpassed several of the planetary boundaries that play a crucial role in the self-regulating capacity of the Earth, including excessive circulation of nitrogen and phosphorus, accelerating biodiversity loss, and rising carbon dioxide concentration causing the climate crisis (Richardson et al. 2023; Rockström et al. 2017). Downscaling production and consumption would re-establish ecological balance and preserve a safe space for humanity. This would not be an endless downscaling process but a transition to a lower steady state (Kallis, Kerschner, and Martinez-Alier 2012).

However, post-growth is not about absolute downscaling. A post-growth society requires *selective* degrowth (Banerjee et al. 2021). Selective downscaling means less of ecologically destructive and socially less necessary production such as energy from coal and planned obsolescence (Hickel 2021). However, we also need more of other things, such as clean energy and nature-based economic activities, education, social welfare, and wellbeing (Buch-Hansen and Nesterova 2023). This perspective implies a granular analysis of a post-growth economy instead of a simplistic perspective on general downscaling. For instance, while many countries are downscaling or eliminating coal fired power generation and combustion engine cars, they are also scaling up renewables and electric transport. Postgrowth asks what we need to expand, what we need to reduce, and what innovations we need to build a society with a smaller footprint that has a different structure and serves new functions (Gerber and Raina 2018; Pansera and Fressoli 2021).

Post-growth promulgates governments moving beyond the sole pursuit of expanding GDP to direct their efforts towards social and ecological objectives, while actively adopting policies that prevent potential adverse consequences. This is described as "a planned reduction of energy and resource use in advanced economies [...]. It does not seek to reduce GDP as an objective. Nor does it treat GDP decline as a climate mitigation lever. Nonetheless, postgrowth scholars typically do accept that, as a result of the structural and social changes needed to meet climate targets, continual GDP growth may not be possible" (Jackson, Hickel, and Kallis 2024, p. 1).

2.3 | Systems Thinking

Selective downscaling in the pursuit of wellbeing is intended to be a voluntary and planned process. But, like any transition, it will provoke social, environmental, and economic uncertainty, which must be anticipated and accounted for (Burke 2022). Therefore, the third principle characterizing post-growth is the adoption of systems thinking (Cristiano et al. 2020). Systems thinking underpins the SCM discipline (e.g., Lee, Padmanabhan, and Whang 1997; Sterman 1989), but the systems we consider tend to be production systems or supply networks. Post-growth considers the complex pattern of relationships and interdependencies among the infrastructural, social, economic, or environmental elements of the social–ecological system for multiple reasons.

First, social and ecological systems are intertwined (Fischer et al. 2015; Redman, Grove, and Kuby 2004). For example, the climate crisis is associated with increased extreme and more destructive events, with insurers no longer able or willing to provide cover (e.g., Hampton and Curtis 2022). Recent research has moved from talking about the negative impacts of the climate crisis in general, to being able to attribute specific events and the systemic harm they cause, to climate change. For instance, heavy rainfall events that climatologists attribute to climate change in Germany in 2021, the United Kingdom in 2023, and India and Brazil in 2024 caused deaths, population displacement, and cascading impacts on socioeconomic and psychosocial health, particularly for low-income populations (see World Weather Attribution 2021, 2024a, 2024b, 2024c). In other words, when the water receded, things did not return to as they were because the social–ecological system had been permanently altered due to events attributed to the changing climate. This example indicates the depth and complexity of the linkages between natural, social, and economic systems, which are characterized by cross-scale temporal and spatial interdependencies.

Second, the desirability and necessity of growth is taken for granted by most actors in social, political, and economic systems (Vandeventer, Cattaneo, and Zografos 2019). "Growth has acquired a structural quality in our society, shaping a range of tightly coupled structures, including institutions, norms, discourses, culture, technologies, competences, and identities. Therefore, examining alternative scenarios to growth implies affecting these structures in a timely manner" (Büchs and Koch 2019, p. 159). Although this seems to be very difficult to overcome, systems thinking can be used to understand points of leverage that can be used in a manner whereby relatively small changes in one part of the system can affect major changes overall (Boonstra and Joosse 2013).

The third reason why post-growth requires systems thinking is the divide between high- and low-income countries, in terms of resource appropriation, wealth distribution, and the social consequences of the climate crisis. High-income nations have contributed far more to resource depletion and ecological degradation than low-income nations (Fanning et al. 2022; Hickel, O'Neill, et al. 2022). In high-income nations, happiness and wellbeing are no longer explained by GDP (Kallis, Kerschner, and Martinez-Alier 2012). A post-growth transition may initially appear to imply little to gain and something to lose for low-income countries because of fewer opportunities for commodity and manufactured exports. However, the dynamics between high- and low-income countries are characterized by asymmetric power relations, unequal exchange, marginalization, extraction and exploitation that provoke negative social and environmental impacts in the low-income countries (Hanaček et al. 2020; Martinez-Alier 2008).

Post-growth assumes that natural resources, such as clean air or water, should be considered shared commons to which all people are entitled as part of their wellbeing. It is then argued that exceeding the fair share of cumulative resource usage can be framed as "climate debt" or "climate coloniality" (Sultana 2022; Warlenius 2018). It is also argued that to successfully navigate the systemic downscaling process requires highlighting non-material sources of satisfaction and wellbeing (Alexander 2015; Lorek and Fuchs 2013). This approach implies a re-evaluation of what constitutes enough in society's consumption patterns and advocates for a transition towards sufficiency-based lifestyles that align human wellbeing with ecological limits (Latouche 2017). Ensuring wellbeing globally will then require systems thinking.

There is extensive literature from a macro-economic and policy perspective on what a post-growth transition would entail (Cosme, Santos, and O'Neill 2017). Because growth is an integrated process that is difficult to disentangle (Mastini, Kallis, and Hickel 2021), post-growth scholars advocate ways to downscale while acknowledging the complex set of economic, fiscal, and monetary policies that are intertwined in the social–ecological system (Hickel 2021). However, what post-growth would entail for supply chains and the operations of individual organizations remains an open question. This question is worth exploring because there is increasing recognition that current SCM approaches and the economic frameworks that underpin them are likely insufficient to address the global challenges facing society and the planet (Knight et al. 2022). Hence, while systems thinking is clearly part of the SCM toolkit and it does not take much imagination to see that the post-growth paradigm would have serious implications for SCM, what those implications are requires further investigation.

3 | Implications for SCM

The SCM discipline has embraced the aim of making supply chains more environmentally and socially sustainable. Early studies define sustainable SCM as "the strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systemic coordination of key interorganizational business processes for improving the long-term economic performance of the individual company and its supply chains" (Carter and Rogers 2008, p. 369). This definition is explicitly based on the triple bottom line proposed by Elkington (1998) and is operationalized as the intersection of environmental, social, and economic performance. However, the primary goal remains improved economic performance: "blithely undertak[ing] social and environmental goals relating to the supply chain [...] would be socially irresponsible unless considered within the broader context of a firm's overall strategic and financial objectives" (Carter and Rogers 2008, p. 369). This perspective echoes Milton Friedman's (1970) claim that the prioritization of profits as the only social responsibility of businesses. Hence, most sustainable SCM literature has been firmly situated in the "green growth" paradigm (e.g., Green et al. 2012; Srivastava 2007), and recognizes that some adjustments are necessary, such as decarbonization, technological innovation, or strategies to reduce inequalities (Boarini, Murtin, and Schreyer 2015; OECD 2013).

But what if this was no longer the case? What would happen to SCM as currently conceptualized and practiced, if growth and profit maximization ceased to be the priority? As economists and environmental scientists debate the desirability and ramifications of post-growth (Taylor 2024), the natural question for us is what are the implications of post-growth for SCM? Hence, we explore post-growth as a thought experiment by considering its implications for the foundational principles guiding SCM scholarship and practice.

In so doing, we build upon management scholars who consider what post-growth implies for organizations (Banerjee et al. 2021; Gebauer 2018; Johnsen et al. 2017; Joutsenvirta 2016; Khmara and Kronenberg 2018; Pansera and Fressoli 2021; Roulet and Bothello 2020; Vandeventer and Lloveras 2021). Supply chains represent the fundamental building blocks of our global economy. They would be deeply affected by a shift towards post-growth, making them an essential part of future debates on post-growth scenarios. But at the time of writing, there is no reflection of this debate in the context of SCM.

In the following sections, we reflect on how the three common principles of post-growth challenge the essence of traditional SCM and ask what fundamental premises of SCM could change if we transition to a post-growth scenario (see Table 1).

3.1 | From Customer Primacy to Stakeholders' Wellbeing

Post-growth's first implication for supply chains entails incorporating a different notion of value creation, recentering supply chain activities and work around wellbeing (D'Alisa, Forno, and Maurano 2015; Kallis et al. 2018; Singh 2019). Traditional growth-focused economics has generally reduced wellbeing to consumption opportunities and income. Post-growth instead emphasizes environmental quality, health, social relationships, quality of work and work–life balance, and equality among stakeholders (Andreoni and Galmarini 2014). Sustainable SCM scholars also call for including all stakeholders (e.g., Matthews et al. 2016; Pinnington and Meehan 2023; Mukandwal, Cantor, and Laczniak 2024), but the important difference here is that a great deal of this literature still places the supply chain's profits at the center of decision making. Stakeholders are considered but from the perspective of how they influence the focal firm's profits. In a post-growth world, supply chain managers will need to make the needs of all stakeholders a basis for actions (Cox 2010).

This introduces a fundamental difference between current and post-growth SCM. Typical textbook definitions of SCM revolve around the mantra of matching supply with demand, with the goal of maximizing profits and protecting the focal firm's competitive advantage. Yet we have ample evidence that in many industries, such as electronics with conflict minerals (AI 2016) and electronic waste (WHO 2021), food with palm oil (WWF 2021), or fast fashion with working conditions (Skinner 2023), the pursuit of competitive advantage has disastrous consequences for the environment and people. When using post-growth metrics

TABLE 1 | Implication of post-growth principles for SCM.

Post-growth principle	Description of post-growth principle	Implications for SCM
Socio-ecological wellbeing	Societies will prioritize protecting or restoring ecological systems and people's wellbeing over economic growth to provide: • healthy ecological systems, • decent living standards for all, • universal public services, and • equality.	Supply chains need to be *(re)designed* to pursue stakeholder wellbeing. This means: • protecting people and the environment across the entire supply chain, • integrating different model of production and consumption, with a new definition of net value, • ignoring customer demand until the product or service can be redesigned—if meeting demand implies damage to ecosystem or people, • adopting resource and people-focused SCM practices, • developing models and practices to safeguard planetary boundaries, • engaging in social and ecological systems restoration, and • pursue supply chain transparency.
Selective downscaling	Societies will reduce or eliminate environmentally and socially damaging forms of production by focusing on: • sufficiency criteria, • quality vs. quantity, and • moving workers to sectors that help rapid decarbonization.	Supply chains will need to *(re)scope* and *(re)scale* to address the wellbeing of people and the environment over net value maximization. This means: • targeting peoples' basic needs and avoid oversupply, • prioritizing resource-conscious quality in lieu of production volumes, • exploring multiple, context-specific supply chain configurations, which could favor small-scale and local over large-scale and global supply chains, and • developing supply chain transformation and innovation capabilities.
Systems thinking	Societies will fully account for the externalities of supply chain operations to social and ecological systems by: • considering the interdependencies between social and ecological systems, • fairly sharing resource within and between countries, and • addressing historic imbalances between high- and low-income countries.	Supply chains will need to systemically *(re) think* the connections and governance among stakeholders. This means: • acknowledging the interdependence of social and ecological systems, • splitting the true costs and benefits of supply chain operations fairly across supply chain actors and stakeholders, and considering justice in this context, • abandoning focal firm centricity in favor of democratic stakeholder governance, • engaging and collaborating with the diverse supply chain actors including non-traditional stakeholders when making supply chain decisions, • assessing the positive and negative impacts of a supply chain's operations and remedying them in case of damage, and • redistributing power, costs and benefits across global supply chains.

to assess wellbeing, many current supply chain practices harm wellbeing (e.g., Stevens 2023). Hence, we may need to revisit how we use theories such as agency theory and transaction cost economics, where we take an instrumental approach limited to optimizing individual or organizational gain, which is incompatible with a multipolar world that prioritizes collective wellbeing.

Prioritizing wellbeing would mean that customers are no longer the most important stakeholders in some supply chains, as post-growth principles supersede and constrain the typical customer-centric view. This would not be an easy shift, as supply chains are traditionally designed for customers. Some SCM research has suggested reprioritizing ecological objectives over economic ones (Montabon, Pagell, and

Wu 2016; Touboulic, McCarthy, and Matthews 2020). SCM scholars have also called for more focus on social impact SCM (Longoni et al. 2019; McLoughlin and Meehan 2021; Pullman, Longoni, and Luzzini 2018), regenerative supply chains (Gualandris et al. 2024; Howard, Hopkinson, and Miemczyk 2019), biodiversity (Salmi et al. 2023) and decent (Reinecke and Donaghey 2021; Soundararajan, Wilhelm, and Crane 2021), safe (Pagell, Parkinson, and Veltri 2024) and less precarious work (Fisher et al. 2024). However, an integrative view of wellbeing across supply chains would require an explicit detachment from the assumption of endless growth, a clear statement about firms' goals, and an exposition of the currently unknown strategies and practices that could help transition supply chains beyond growth.

This means preventing the use of polluting or non-renewable resources and restoring the past damage to ecosystems. In terms of concrete changes, this would mean that business models built on immediate access to a wide variety of products will need to be reviewed. Supply chains would need to improve peoples' wellbeing instead of exploiting workers or manufacturing artificial demand. Rather than providing work, post-growth calls for supply chains to provide decent and green jobs and introduce measures for reducing working hours and job sharing (Kallis 2017). Practices like outsourcing or relocating with the aim to evade environmental or social standards would no longer make sense. Companies should expect the same standards to be adopted everywhere or supply chain due diligence regulation that encompass all tiers of the supply chain, irrespective of the final market where the products are sold. In other words, creating demand for products or services that are profitable but have a net negative impact on ecosystems or people would change from best practice that is incentivized to worst practice that is disincentivized or perhaps prohibited.

A shift to prioritizing wellbeing would be difficult, especially considering that firms' visibility over their supply chain dramatically reduces as they move upstream. Post-growth will then require that all supply chains take visibility seriously. Increasing visibility might require a shift to shorter or more local supply chains. And to increase wellbeing, especially in the local community, some supply chains will adapt a craft-oriented model of consumption, in which consumers engage with goods "to learn about them, how they are made and where they come from" (Rennstam and Paulsson 2024, p. 8), in contrast with the mass production of commodified objects. Companies might even work with their customers to reduce demand and production volumes (Bocken and Short 2016; Jungell-Michelsson and Heikkurinen 2022; Niessen and Bocken 2021).

3.2 | From Endless Growth to Selective Downscaling

The second principle of post-growth economics is the need to downscale—if not eliminate—economic activities that damage the environment and people. Doing so is required to maximize wellbeing, and this would represent another, and arguably even more radical, shift in priorities for SCM. Companies operating in sectors that are considered inherently *bad* are facing a dramatic reduction in sales or even losing their license to operate. This may seem radical. Yet we can already see mounting stakeholder pressures in industries such as energy (Hauenstein et al. 2023), food and agriculture (McGreevy et al. 2022), automotive (Szász, Csíki, and Rácz 2021), or fast fashion (Karaosman, Marshall, and Ward 2024) to do things such as phase out coal and replace it with renewables or to shift to mainly plant-based diets. Selective downscaling is basically the creative destruction espoused by Schumpeter 80 years ago, with a social ecological driver: And it has already started. In order to survive, supply chains will need to anticipate and transform by rescoping the activities they perform and rescaling their operations. Sectors adopting resource-conscious practices and addressing decarbonization including clean energy, ecosystem recovery, healthcare, education, and social services should experience expansions under post-growth (Hickel, Kallis, et al. 2022).

A selective downscaling process would have profound consequences for companies and their supply chains. First, the focus of companies and supply chains would switch from quantity to quality as the dominant driver of economic success (Banerjee et al. 2021). An emphasis on quality would shrink, slow, and extend resource cycles by offering products and services that help to reduce waste as well as energy and material consumption (Froese et al. 2023). This goes along with addressing the real needs of stakeholders and aligns with the principle of sufficiency or "encouraging consumers to make do with less" (Bocken and Short 2016, p. 46), as opposed to overstimulation of consumer demand (Froese et al. 2023; Jungell-Michelsson and Heikkurinen 2022; Niessen and Bocken 2021).

Second, downscaling will likely lead to more localized sourcing and production (Kallis 2015), to reduce carbon emissions (Nesterova 2020) as well as to avoid product and labor commodification due to sourcing from low-wage countries (Rennstam and Paulsson 2024). Relocalization, in terms of developing locally owned business, using local resources, employing local workers, and satisfying the needs of local consumers would be another strategy linked to post-growth (Xue 2014), with significant implications for the design and management of supply chains.

Third, small companies seem to fit better in a post-growth economy (Nesterova 2020), as they are not constrained by the need to grow at all costs (Banerjee et al. 2021; Gebauer 2018; Liesen, Dietsche, and Gebauer 2015). Smaller companies imply lower production volumes, at least from each individual firm. These decentralized supply chains should increase wellbeing but will not have the advantage of economies of scale, which means they will need to find other ways to avoid being resource inefficient. Alternative scaling routes relying on partnerships and networks rather than individual company growth have been proposed to address this issue (Colombo, Bailey, and Gomes 2023).

Fourth, changing incumbent business practices to such an extent will be neither easy nor painless. It will not happen without destabilizing work and indirectly affecting our way of life. A post-growth scenario would require leveraging innovation and creativity to find new solutions to unaccounted-for problems (Pansera and Fressoli 2021). This may mean changing the position of firms in supply chains and using new, possibly open, sources of knowledge (Roulet and Bothello 2020). Post-growth

SCM will require cultivating new transformation and innovation capabilities to design and create supply chains that align with environmental and social constraints. Hence, theories of long-term competitive advantage, such as the resource-based view and dynamic capabilities, will need to be revisited as the post-growth paradigm seems to be at odds with the theories' espousal of appropriating rare and inimitable resources to benefit a single firm's shareholders.

The COVID-19 pandemic provided a glimpse of what this might entail, with supply chains in many sectors demonstrating an ability to rapidly transform, to find "new ways of doing things" (Flynn et al. 2021, p. 5) when multiple stakeholders collaborated (Handfield, Apte, and Finkenstadt 2022; Kähkönen and Patrucco 2022; Phillips et al. 2022). That this was possible in response to the extreme exogenous shock from the global pandemic suggests that pursuing a common objective under the constraints imposed by a post-growth scenario is also possible.

Finally, scholars warn against assuming that only supply chains in high-income countries should downscale whereas low-income countries need growth (Escobar 2015; Kallis 2015). Instead of replicating the path of high-income countries, a multiplicity of development alternatives is available for emerging economies (Gerber and Raina 2018; Kaul et al. 2022). While all supply chains will need socio-ecological transformations, this will occur via a variety of context-specific approaches, rather than one-size-fits-all solutions (Demaria et al. 2023).

3.3 | From Focal Firm Centricity to Systems Thinking

Post-growth supply chains prioritize wellbeing, shifting the emphasis from demand fulfilment to selective downscaling and replacing overproduction with sufficiency. In this context, supply chains would ultimately serve as instruments to promote the conscientious use of planetary resources and the wellbeing of individuals. This transition necessitates a shift towards a comprehensive viewpoint that considers the effects on various stakeholders, local resource needs, and existing conditions. Post-growth requires systemic thinking that recognizes the importance of interdependencies and adopts a distributive view that accounts for the role of diverse supply chain actors.

The idea that supply chains are systems is not new. In fact, the introduction of supply chains as an object of study is due to the work of systems scholars (e.g., Senge and Sterman 1992). Equally, theorizing supply chains as complex adaptive systems (Choi, Dooley, and Rungtusanatham 2001) is well accepted. While systems thinking has been applied in SCM literature, research often limits the system to certain actors or sub-systems (i.e., suppliers, focal companies, and customers), neglecting or de-emphasizing the connection with ecological and social systems. Yet supply chains can also be considered social–ecological systems, closely connected to their environment and constantly subject to change (Wieland 2021). This is not merely a theoretical realignment but a practical reorientation, considering the intertwining interdependencies at the supply chain, political, and planetary levels (Wieland 2021). Each supply chain decision will thus be reflective of, and responsive to, a broader and more complex set of considerations and implications that transcend the immediate economic context. SCM decision-making becomes a balancing act, where supply chain managers weigh the often competing demands and expectations of various stakeholders while keeping an eagle eye on the overarching objective of ecological and social wellbeing.

Therefore, the first implication of adopting systems thinking from a post-growth perspective is recognizing that supply chain, social, and ecological systems are deeply embedded, connected, and interdependent. Natural scientists advocate for an explicit recognition that social systems co-determine environmental changes (Graham et al. 2023; Van Ginkel et al. 2020). Incorporating the wellbeing of both traditional actors like focal firms, suppliers and customers and non-traditional actors like local communities, governments, NGOs, social enterprises, and meta-organizations (Pagell, Fugate, and Flynn 2018) and including care for all of the natural world (Singh 2019) would radically change supply chain systems thinking. Doing so requires a redistribution of power and influence to include new or previously neglected stakeholders. Decolonizing and ecofeminist perspectives (Banerjee 2021; Lugones 2010) could help to shift supply chain thinking about systems away from the traditional growth-oriented paradigm towards the post-growth paradigm.

Adopting post-growth without rethinking governance may inadvertently disadvantage or further marginalize stakeholders already caught in precarious, vulnerable positions (Moyer 2023). Post-growth SCM means a more balanced and equitable distribution of decision-making power and impact, recognizing the inherent interconnectedness and interdependence across different supply chain tiers (Reinecke and Donaghey 2021; Touboulic, Chicksand, and Walker 2014). Therefore, post-growth SCM also entails implementing corresponding governance mechanisms, designed to navigate the complexities of local and global supply chain configurations and to ensure a safe and just space for all stakeholders. One SCM perspective that might support such a view is related to distributive justice in supply chains (Matthews and Silva 2024). Equally, the role of meta-organizations can be an entry point for research (Berkowitz 2018), where non-traditional supply chain stakeholders can take an active role in supporting and re-orienting SCM activities as they have a long-lasting tradition of prioritizing social and environmental concerns over commercial goals (Pullman, Longoni, and Luzzini 2018).

Finally, the divide between high- and low-income countries is closely linked to the global nature of supply chains and addressing this gap equitably will require thinking about a supply chain's role in global post-growth economic systems. A systemic view is crucial to understand the implications of downscaling or backshoring production activities in global supply chains. This means reversing current practice where the benefits of economic activity are primarily for wealthy nations, and the negative effects of resource depletion are felt by the world's poorest (Hickel 2021). Moreover, it is difficult for a country to undertake a post-growth transition independently because of global interdependent relations between high- and low-income countries (Kallis 2015). The impact on disadvantaged populations and distributive issues must be considered (Muradian 2019).

4 | Conclusion

Rethinking SCM for the post-growth era necessitates facing new economic principles that prioritize socio-ecological well-being, selective downscaling, and systems thinking. This paradigm shift challenges traditional SCM assumptions centered on perpetual economic growth, customer primacy, and focal firm centricity. Post-growth suggests that by focusing on basic stakeholder needs, resource-conscious practices, and equitable power distribution, supply chains can be the engine of the transition to sustainable and just economic systems. There is evidence that post-growth is already beginning in some industries and countries. This transition will require innovative approaches to value creation, production processes, and governance structures that align with social–ecological limits. The creative destruction post-growth is likely to unleash will dramatically alter supply chains. Ignoring these possibilities to continue with the traditional pursuit of growth would be irresponsible, while considering post-growth now offers rich opportunities to create or embrace new theoretical frameworks and do research that does not assume that growth is always desirable. The SCM community needs to start to explore and adapt to these transformative ideas now, rather than waiting to be creatively destroyed by the transition.

Acknowledgements

The authors thank the journal's editorial team of reviewers and co-editors-in-chief for their invaluable comments and suggestions provided during the development of this article. We also extend our gratitude to the multitude of participants to special sessions on post-growth at the EurOMA and Academy of Management conferences in 2024. We treasure all of the questions, comments, and suggestions around this nascent stream and look forward to seeing how future engaged researchers will develop this discourse.

Endnote

[1]There are different streams of literature addressing the critiques to growth. Schmelzer (2023) provides an overview of the different currents, including ecological, socio-economic, feminist, South–North, cultural, anti-capitalist, critique of industrialization, and reactionary growth criticism.

References

Abi Deivanayagam, T., S. Selvarajah, J. Hickel, et al. 2023. "Climate Change, Health, and Discrimination: Action Towards Racial Justice." *Lancet* 401, no. 10370: 5–7.

Ahlstrom, D. 2010. "Innovation and Growth: How Business Contributes to Society." *Academy of Management Perspectives* 24, no. 3: 11–24.

AI. 2016. "Democratic Republic of Congo: "This Is What We Die for": Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt." https://www.amnesty.org/en/documents/afr62/3183/2016/en/.

Alexander, S. 2015. "Simplicity." In *Degrowth. A Vocabulary for a New Era*, edited by G. D'Alisa, F. Demaria, and G. Kallis, 132–136. Routledge: Oxon.

Anderson, M., and E. Mossialos. 2019. "Beyond Gross Domestic Product for New Zealand's Wellbeing Budget." *Lancet Public Health* 4, no. 7: e320–e321.

Andreoni, V., and S. Galmarini. 2014. "How to Increase Well-Being in a Context of Degrowth." *Futures* 55: 78–89.

Banerjee, S. B. 2021. "Decolonizing Management Theory: A Critical Perspective." *Journal of Management Studies* 59: 1074–1087.

Banerjee, S. B., J. M. Jermier, A. M. Peredo, R. Perey, and A. Reichel. 2021. "Theoretical Perspectives on Organizations and Organizing in a Post-Growth Era." *Organization* 28, no. 3: 337–357.

Berkowitz, H. 2018. "Meta-Organizing Firms' Capabilities for Sustainable Innovation: A Conceptual Framework." *Journal of Cleaner Production* 175: 420–430.

Beyond Growth. 2023. "Beyond Growth Conference 2023." https://www.beyond-growth-2023.eu/about-beyond-growth/.

Boarini, R., F. Murtin, and P. Schreyer. 2015. "Inclusive Growth: The OECD Measurement Framework." *OECD Statistics Working Papers*, No. 2015/06. Paris: OECD Publishing. https://doi.org/10.1787/5jrqppxjqhg4-en.

Bocken, N. M., and S. W. Short. 2016. "Toward a Sufficiency-Driven Business Model: Experiences and Opportunities." *Environmental Innovation and Societal Transitions* 18: 41–61.

Boonstra, W. J., and S. Joosse. 2013. "The Social Dynamics of Degrowth." *Environmental Values* 22, no. 2: 171–189.

Buch-Hansen, H., and I. Nesterova. 2023. "Less and More: Conceptualising Degrowth Transformations." *Ecological Economics* 205: 107731.

Büchs, M., and M. Koch. 2019. "Challenges for the Degrowth Transition: The Debate About Wellbeing." *Futures* 105: 155–165.

Burke, M. J. 2022. "Post-Growth Policies for the Future of Just Transitions in an Era of Uncertainty." *Futures* 136: 102900.

Carter, C. R., and D. S. Rogers. 2008. "A Framework of Sustainable Supply Chain Management: Moving Toward New Theory." *International Journal of Physical Distribution and Logistics Management* 38, no. 5: 360–387.

Choi, T. Y., K. J. Dooley, and M. Rungtusanatham. 2001. "Supply Networks and Complex Adaptive Systems: Control Versus Emergence." *Journal of Operations Management* 19, no. 3: 351–366.

Chopra, S., and P. Meindl. 2019. *Supply Chain Management: Strategy, Planning, and Operation*. 7th ed. Boston: Pearson.

Christensen, C. M. 2001. "Competitive Advantage." *MIT Sloan Management Review* 42, no. 2: 105–109.

Colombo, L. A., A. R. Bailey, and M. V. Gomes. 2023. "Scaling in a Post-Growth Era: Learning From Social Agricultural Cooperatives." *Organization* 31, no. 6: 907–928.

Coote, A., and A. Percy. 2020. *The Case for Universal Basic Services*. Cambridge, UK: John Wiley & Sons.

Cosme, I., R. Santos, and D. W. O'Neill. 2017. "Assessing the Degrowth Discourse: A Review and Analysis of Academic Degrowth Policy Proposals." *Journal of Cleaner Production* 149: 321–334.

Cox, R. 2010. "Some Problems and Possibilities of Caring." *Ethics, Place and Environment* 13, no. 2: 113–130.

Cristiano, S., A. Zucaro, G. Liu, S. Ulgiati, and F. Gonella. 2020. "On the Systemic Features of Urban Systems. A Look at Material Flows and Cultural Dimensions to Address Post-Growth Resilience and Sustainability." *Frontiers in Sustainable Cities* 2: 12.

D'Alisa, G., F. Forno, and S. Maurano. 2015. "Grassroots (Economic) Activism in Times of Crisis: Mapping the Redundancy of Collective Actions." *Partecipazione e Conflitto* 2015, no. 2: 328–342.

Daly, H. 1991. *Steady-State Economics*. 2nd ed. Washington, DC: Island Press.

Daly, H. 2014. *From Uneconomic Growth to a Steady-State Economy*. Northampton, MA: Edward Elgar Publishing Limited.

De Schutter, O. 2024. "Eradicating Poverty Beyond Growth: Report of the Special Rapporteur on Extreme Poverty and Human Rights." United

Nations. https://www.ohchr.org/en/documents/thematic-reports/ahrc5661-eradicating-poverty-beyond-growth-report-special-rapporteur.

Dehning, B., V. J. Richardson, and R. W. Zmud. 2007. "The Financial Performance Effects of IT-Based Supply Chain Management Systems in Manufacturing Firms." *Journal of Operations Management* 25, no. 4: 806–824.

Demaria, F., A. Kothari, A. Salleh, A. Escobar, and A. Acosta. 2023. "Post-Development: From the Critique of Development to a Pluriverse of Alternatives." In *The Barcelona School of Ecological Economics and Political Ecology. Studies in Ecological Economics*, edited by S. Villamayor-Tomas and R. Muradian, vol. 8. Cham: Springer. https://doi.org/10.1007/978-3-031-22566-6_6.

Demaria, F., F. Schneider, F. Sekulova, and J. Martinez-Alier. 2013. "What Is Degrowth? From an Activist Slogan to a Social Movement." *Environmental Values* 22: 191–215.

Drews, S., M. Antal, and J. C. van den Bergh. 2018. "Challenges in Assessing Public Opinion on Economic Growth Versus Environment: Considering European and US Data." *Ecological Economics* 146: 265–272.

Elkington, J. 1998. "Partnerships From Cannibals With Forks: The Triple Bottom Line of 21st-Century Business." *Environmental Quality Management* 8, no. 1: 37–51.

Escobar, A. 2015. "Degrowth, Postdevelopment, and Transitions: A Preliminary Conversation." *Sustainability Science* 10: 451–462.

Etxano, I., and U. Villalba-Eguiluz. 2021. "Twenty-Five Years of Social Multi-Criteria Evaluation (SMCE) in the Search for Sustainability: Analysis of Case Studies." *Ecological Economics* 188: 107131.

Fanning, A. L., and J. Hickel. 2023. "Compensation for Atmospheric Appropriation." *Nature Sustainability* 6: 1–10.

Fanning, A. L., D. W. O'Neill, J. Hickel, and N. Roux. 2022. "The Social Shortfall and Ecological Overshoot of Nations." *Nature Sustainability* 5, no. 1: 26–36.

Felber, C., and G. Hagelberg. 2017. "The Economy for the Common Good: A Model for a Future Market Economy." *The Anthropocene Review* 4, no. 1: 64–75.

Ferguson, P., and P. Ferguson. 2018. *The Growth Imperative. Post-Growth Politics: A Critical Theoretical and Policy Framework for Decarbonisation*, 75–99. The Growth Imperative.

Fioramonti, L. 2024. "Post-Growth Theories in a Global World: A Comparative Analysis." *Review of International Studies*: 1–11.

Fioramonti, L., L. Coscieme, R. Costanza, et al. 2022. "Wellbeing Economy: An Effective Paradigm to Mainstream Post-Growth Policies?." *Ecological Economics* 192: 107261.

Fischer, J., T. A. Gardner, E. M. Bennett, et al. 2015. "Advancing Sustainability Through Mainstreaming a Social–Ecological Systems Perspective." *Current Opinion in Environmental Sustainability* 14: 144–149.

Fisher, S. L., A. Longoni, D. Luzzini, M. Pagell, M. Wasserman, and F. Wiengarten. 2024. "A Just Transition Towards Making Precarious Work Rare, Safe, and Legal." In *The Supply Chain: A System in Crisis*, 111–125. Northampton, MA: Edward Elgar Publishing.

Flynn, B., D. Cantor, M. Pagell, K. J. Dooley, and A. Azadegan. 2021. "From the Editors: Introduction to Managing Supply Chains Beyond Covid-19-Preparing for the Next Global Mega-Disruption." *Journal of Supply Chain Management* 57, no. 1: 3–6.

Flynn, B. B., B. Huo, and X. Zhao. 2010. "The Impact of Supply Chain Integration on Performance: A Contingency and Configuration Approach." *Journal of Operations Management* 28, no. 1: 58–71.

Fridays for Future. 2023. "Who We Are." https://fridaysforfuture.org/what-we-do/who-we-are/.

Friedman, M. 1970. "A Friedman Doctrine—The Social Responsibility of Business Is to Increase Its Profits." *The New York Times*. https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html.

Froese, T., M. Richter, F. Hofmann, and F. Lüdeke-Freund. 2023. "Degrowth-Oriented Organisational Value Creation: A Systematic Literature Review of Case Studies." *Ecological Economics* 207: 107765.

Funtowicz, S. O., and J. R. Ravetz. 1994. "The Worth of a Songbird: Ecological Economics as a Post-Normal Science." *Ecological Economics* 10, no. 3: 197–207.

Gallup. 2023. "Environmental Protection vs. Economic Growth." https://news.gallup.com/poll/1615/environment.aspx.

Gebauer, J. 2018. "Toward Growth-Independent and Post-Growth-Oriented Entrepreneurship in the SME Sector." *Management Revue* 29, no. 3: 230–256.

Georgescu-Roegen, N. 1971. *The Entropy Law and the Economic Process*. Cambridge, MA: Harvard University Press.

Gerber, J. F., and R. S. Raina. 2018. "Post-Growth in the Global South? Some Reflections From India and Bhutan." *Ecological Economics* 150: 353–358.

Goddard, J. J., G. Kallis, and R. B. Norgaard. 2019. "Keeping Multiple Antennae up: Coevolutionary Foundations for Methodological Pluralism." *Ecological Economics* 165: 106420.

Government of Iceland. 2019. "Indicators for Measuring Well-Being." Prime Minister's Office. https://www.government.is/library/01-Ministries/Prime-Ministrers-Office/prosperity%20and%20quality%20of%20life_ENSKA_NOTA.pdf.

Graham, S., M. Wary, F. Calcagni, et al. 2023. "An Interdisciplinary Framework for Navigating Social–Climatic Tipping Points." *People and Nature* 5: 1445–1456.

Green, K. W., P. J. Zelbst, J. Meacham, and V. S. Bhadauria. 2012. "Green Supply Chain Management Practices: Impact on Performance." *Supply Chain Management: An International Journal* 17, no. 3: 290–305.

Gualandris, J., O. Branzei, M. Wilhelm, et al. 2024. "Unchaining Supply Chains: Transformative Leaps Toward Regenerating Social–Ecological Systems." *Journal of Supply Chain Management* 60, no. 1: 53–67.

Hampton, S., and J. Curtis. 2022. "A Bridge Over Troubled Water? Flood Insurance and the Governance of Climate Change Adaptation." *Geoforum* 136: 80–91.

Hanaček, K., B. Roy, S. Avila, and G. Kallis. 2020. "Ecological Economics and Degrowth: Proposing a Future Research Agenda From the Margins." *Ecological Economics* 169: 106495.

Handfield, R., A. Apte, and D. J. Finkenstadt. 2022. "Developing Supply Chain Immunity for Future Pandemic Disruptions." *Journal of Humanitarian Logistics and Supply Chain Management* 12, no. 4: 482–501.

Hasselbalch, J. A., M. Kranke, and E. Chertkovskaya. 2023. "Organizing for Transformation: Post-Growth in International Political Economy." *Review of International Political Economy* 30, no. 5: 1621–1638.

Hauenstein, C., I. Braunger, A. Krumm, and P. Y. Oei. 2023. "Overcoming Political Stalemates: The German Stakeholder Commission on Phasing out Coal." *Energy Research & Social Science* 103: 103203.

Hickel, J. 2019. "The Contradiction of the Sustainable Development Goals: Growth Versus Ecology on a Finite Planet." *Sustainable Development* 27: 873–884. https://doi.org/10.1002/sd.1947.

Hickel, J. 2021. "What Does Degrowth Mean? A Few Points of Clarification." *Globalizations* 18, no. 7: 1105–1111.

Hickel, J. 2023. "On Technology and Degrowth." *Monthly Review* 75, no. 3: 44–50.

Hickel, J., G. Kallis, T. Jackson, et al. 2022. "Degrowth Can Work—Here's How Science Can Help." *Nature* 612, no. 7940: 400–403.

Hickel, J., D. W. O'Neill, A. L. Fanning, and H. Zoomkawala. 2022. "National Responsibility for Ecological Breakdown: A Fair-Shares Assessment of Resource Use, 1970–2017." *Lancet Planetary Health* 6, no. 4: e342–e349.

Hickel, J., and D. Sullivan. 2024. "How Much Growth Is Required to Achieve Good Lives for All? Insights From Needs-Based Analysis." *World Development Perspectives* 35: 100612.

Howard, M., P. Hopkinson, and J. Miemczyk. 2019. "The Regenerative Supply Chain: A Framework for Developing Circular Economy Indicators." *International Journal of Production Research* 57, no. 23: 7300–7318.

IPCC. 2023. "Summary for Policymakers." In *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by Core Writing Team, H. Lee, and J. Romero, 1–34. Geneva, Switzerland: IPCC. https://doi.org/10.59327/IPCC/AR6-9789291691647.001.

Jackson, T. 2009. *Prosperity Without Growth: Economics for a Finite Planet*. London, UK: Earthscan.

Jackson, T. 2021. *Post Growth: Life After Capitalism*. John Wiley & Sons.

Jackson, T., J. Hickel, and G. Kallis. 2024. "Confronting the Dilemma of Growth. A Response to." *Ecological Economics* 220: 108089.

Jackson, T., and P. Senker. 2011. "Prosperity Without Growth: Economics for a Finite Planet." *Energy & Environment* 22, no. 7: 1013–1016.

Johnsen, C. G., M. Nelund, L. Olaison, and B. Meier Sørensen. 2017. "Organizing for the Post-Growth Economy." *Ephemera: Theory and Politics Organization* 17, no. 1: 1–21.

Joutsenvirta, M. 2016. "A Practice Approach to the Institutionalization of Economic Degrowth." *Ecological Economics* 128: 23–32.

Jungell-Michelsson, J., and P. Heikkurinen. 2022. "Sufficiency: A Systematic Literature Review." *Ecological Economics* 195: 107380.

Kähkönen, A. K., and A. Patrucco. 2022. "A Purchasing and Supply Management View of Supply Resilience for Better Crisis Response." *Journal of Purchasing and Supply Management* 28, no. 5: 100803.

Kallis, G. 2011. "In Defence of Degrowth." *Ecological Economics* 70: 873–880.

Kallis, G. 2015. "The Degrowth Alternative." Great Transition Initiative, February 2015. http://www.greattransition.org/publication/the-degrowth-alternative.

Kallis, G. 2017. "Radical Dematerialization and Degrowth." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 375, no. 2095: 20160383.

Kallis, G., E. Gómez-Baggethun, and C. Zografos. 2013. "To Value or Not to Value? That Is Not the Question." *Ecological Economics* 94: 97–105.

Kallis, G., C. Kerschner, and J. Martinez-Alier. 2012. "The Economics of Degrowth." *Ecological Economics* 84: 172–180.

Kallis, G., V. Kostakis, S. Lange, B. Muraca, S. Paulson, and M. Schmelzer. 2018. "Research on Degrowth." *Annual Review of Environment and Resources* 43: 291–316.

Karaosman, H., D. Marshall, and I. Ward. 2024. "For the Many Not the Few: Introducing Just Transition for Supply Chain Management." *International Journal of Operations & Production Management*.

Kaul, S., B. Akbulut, F. Demaria, and J. F. Gerber. 2022. "Alternatives to Sustainable Development: What Can We Learn From the Pluriverse in Practice?." *Sustainability Science* 17, no. 4: 1149–1158.

Khmara, Y., and J. Kronenberg. 2018. "Degrowth in Business: An Oxymoron or a Viable Business Model for Sustainability?." *Journal of Cleaner Production* 177: 721–731.

King, L. C., I. Savin, and S. Drews. 2023. "Shades of Green Growth Scepticism Among Climate Policy Researchers." *Nature Sustainability* 6, no. 11: 1316–1320.

Klassen, R. D., and C. P. McLaughlin. 1996. "The Impact of Environmental Management on Firm Performance." *Management Science* 42, no. 8: 1199–1214.

Klein, E., and C. E. Morreo, eds. 2019. *Postdevelopment in Practice: Alternatives, Economies, Ontologies*. New York, NY: Routledge.

Knight, L., W. Tate, S. Carnovale, et al. 2022. "Future Business and the Role of Purchasing and Supply Management: Opportunities for 'Business-Not-as-Usual' PSM Research." *Journal of Purchasing and Supply Management* 28, no. 1: 100753.

Koskimäki, T. 2023. "Targeting Socioeconomic Transformations to Achieve Global Sustainability." *Ecological Economics* 211: 107871.

Latouche, S. 1999. "The Paradox of Ecological Economics and Sustainable Development." *Democracy and Nature* 5, no. 3: 501–509.

Latouche, S. 2017. "The Misadventures of the Good Life Between Modernity and Degrowth: From Happiness to GDP to Buen Vivir." In *The Good Life Beyond Growth*, 17–27. London, UK: Routledge.

Lee, H. L., V. Padmanabhan, and S. Whang. 1997. "Information Distortion in a Supply Chain: The Bullwhip Effect." *Management Science* 43, no. 4: 546–558.

Lehmann, C., O. Delbard, and S. Lange. 2022. "Green Growth, a-Growth or Degrowth? Investigating the Attitudes of Environmental Protection Specialists at the German Environment Agency." *Journal of Cleaner Production* 336: 130306.

Liesen, A., C. Dietsche, and J. Gebauer. 2015. "Successful Non-Growing Companies." Humanistic Management Network, Research Paper Series, (25/15).

Longoni, A., D. Luzzini, M. Pullman, and M. Habiague. 2019. "Business for Society Is Society's Business: Tension Management in a Migrant Integration Supply Chain." *Journal of Supply Chain Management* 55, no. 4: 3–33.

Lorek, S., and D. Fuchs. 2013. "Strong Sustainable Consumption Governance—Precondition for a Degrowth Path?." *Journal of Cleaner Production* 38: 36–43.

Lugones, M. 2010. "Toward a Decolonial Feminism." *Hypatia* 25, no. 4: 742–759.

Marlon, J., P. Howe, M. Mildenberger, A. Leiserowitz, and X. Wang. 2018. "Yale Climate Opinion Maps 2018." https://climatecommunication.yale.edu/visualizations-data/ycom-us-2018/.

Martinez-Alier, J. 2001. "Ecological Conflicts and Valuation: Mangroves Versus Shrimps in the Late 1990s." *Environment and Planning. C, Government & Policy* 19, no. 5: 713–728.

Martinez-Alier, J. 2008. "Languages of Valuation." *Economic and Political Weekly* 43, no. 48: 28–32. http://www.jstor.org/stable/40278233.

Martínez-Alier, J., U. Pascual, F. D. Vivien, and E. Zaccai. 2010. "Sustainable De-Growth: Mapping the Context, Criticisms and Future Prospects of an Emergent Paradigm." *Ecological Economics* 69, no. 9: 1741–1747.

Mastini, R., G. Kallis, and J. Hickel. 2021. "A Green new Deal Without Growth?." *Ecological Economics* 179: 106832.

Matthews, L., D. Power, A. Touboulic, and L. Marques. 2016. "Building Bridges: Toward Alternative Theory of Sustainable Supply Chain Management." *Journal of Supply Chain Management* 52, no. 1: 82–94.

Matthews, L., and M. E. Silva. 2024. "Supply Chain Justice." In *The Supply Chain: A System in Crisis*, 74–83. Northampton, MA: Edward Elgar Publishing.

McGreevy, S. R., C. D. Rupprecht, D. Niles, et al. 2022. "Sustainable Agrifood Systems for a Post-Growth World." *Nature Sustainability* 5, no. 12: 1011–1017.

McLoughlin, K., and J. Meehan. 2021. "The Institutional Logic of the Sustainable Organisation: The Case of a Chocolate Supply Network." *International Journal of Operations & Production Management* 41, no. 3: 251–274.

Meadows, D. H., D. L. Meadows, J. Randers, and W. W. Behrens. 1972. *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. New York, NY: Universe Books.

Millward-Hopkins, J., J. K. Steinberger, N. D. Rao, and Y. Oswald. 2020. "Providing Decent Living With Minimum Energy: A Global Scenario." *Global Environmental Change* 65: 102168.

Montabon, F., M. Pagell, and Z. Wu. 2016. "Making Sustainability Sustainable." *Journal of Supply Chain Management* 52, no. 2: 11–27.

Moyer, J. D. 2023. "Modeling Transformational Policy Pathways on Low Growth and Negative Growth Scenarios to Assess Impacts on Socioeconomic Development and Carbon Emissions." *Scientific Reports* 13, no. 1: 15996.

Mukandwal, P. S., D. E. Cantor, and R. N. Laczniak. 2024. "Consumer Reactions to Environmentally Irresponsible Sourcing Practices: An Intentionality and Motive Perspective." *Journal of Supply Chain Management* 60, no. 3: 39–58.

Muradian, R. 2019. "Frugality as a Choice vs. Frugality as a Social Condition. Is De-Growth Doomed to Be a Eurocentric Project?." *Ecological Economics* 161: 257–260.

Nesterova, I. 2020. "Degrowth Business Framework: Implications for Sustainable Development." *Journal of Cleaner Production* 262: 121382.

Niessen, L., and N. M. Bocken. 2021. "How Can Businesses Drive Sufficiency? The Business for Sufficiency Framework." *Sustainable Production and Consumption* 28: 1090–1103.

OECD. 2013. *Putting Green Growth at the Heart of Development*. OECD Green Growth Studies.

Oliver, R. K., and M. D. Webber. 1982. "Supply-Chain Management: Logistics Catches up With Strategy." *Outlook* 5, no. 1: 42–47.

Olk, C., C. Schneider, and J. Hickel. 2023. "How to Pay for Saving the World: Modern Monetary Theory for a Degrowth Transition." *Ecological Economics* 214: 107968.

Pagell, M., B. Fugate, and B. Flynn. 2018. "From the Editors: Introduction to the Emerging Discourse Incubator on the Topic of Research Where the Focal Actor in the Network Is Not a For-Profit Firm." *Journal of Supply Chain Management* 54, no. 2: 1–2.

Pagell, M., M. Parkinson, and A. Veltri. 2024. "Putting Worker Safety at the Heart of Supply Chain Management." In *The Palgrave Handbook of Supply Chain Management*, 679–696. Cham: Springer International Publishing.

Pagell, M., and A. Shevchenko. 2014. "Why Research in Sustainable Supply Chain Management Should Have No Future." *Journal of Supply Chain Management* 50, no. 1: 44–55.

Pansera, M., and M. Fressoli. 2021. "Innovation Without Growth: Frameworks for Understanding Technological Change in a Post-Growth Era." *Organization* 28, no. 3: 380–404.

Parrique, T., J. Barth, F. Briens, et al. 2019. "Decoupling Debunked. Evidence and Arguments Against Green Growth as a Sole Strategy for Sustainability." A Study Edited by the European Environment Bureau EEB.

Parrique, T., K. Raworth, and V. Liegey. 2023. "Post-Growth Europe: 400+ Experts Call for Wellbeing Economy." Friends of the Earth Europe. https://friendsoftheearth.eu/publication/post-growth-europe-letter.

Paulson, L., and M. Büchs. 2022. "Public Acceptance of Post-Growth: Factors and Implications for Post-Growth Strategy." *Futures* 143: 103020.

Pflueger, D., A. Wieland, and C. S. Chapman. 2024. "Theory as an Engine: Illuminating "White Space" of the SCM System of Knowledge Production." *Journal of Purchasing and Supply Management* 30, no. 2: 100910.

Phillips, W., J. K. Roehrich, D. Kapletia, and E. Alexander. 2022. "Global Value Chain Reconfiguration and COVID-19: Investigating the Case for More Resilient Redistributed Models of Production." *California Management Review* 64, no. 2: 71–96.

Pinnington, B., and J. Meehan. 2023. "Learning to See Modern Slavery in Supply Chains Through Paradoxical Sensemaking." *Journal of Supply Chain Management* 59, no. 4: 22–41.

Pullman, M., A. Longoni, and D. Luzzini. 2018. "Emerging Discourse Incubator: The Roles of Institutional Complexity and Hybridity in Social Impact Supply Chain Management." *Journal of Supply Chain Management* 54, no. 2: 3–20.

Redman, C. L., J. M. Grove, and L. H. Kuby. 2004. "Integrating Social Science Into the Long-Term Ecological Research (LTER) Network: Social Dimensions of Ecological Change and Ecological Dimensions of Social Change." *Ecosystems* 7: 161–171.

Reinecke, J., and J. Donaghey. 2021. "Towards Worker-Driven Supply Chain Governance: Developing Decent Work Through Democratic Worker Participation." *Journal of Supply Chain Management* 57, no. 2: 14–28.

Rennstam, J., and A. Paulsson. 2024. "Craft-Orientation as a Mode of Organizing for Postgrowth Society." *Organization*. https://doi.org/10.1177/13505084241231461.

Rice-Oxley, M. and J. Rankin. 2019. "Europe's South and East Worry More About Emigration Than Immigration—Poll." https://www.theguardian.com/world/2019/apr/01/europe-south-and-east-worry-more-about-emigration-than-immigration-poll.

Rich, J. T. 1999. "The Growth Imperative." *The Journal of Business Strategy* 20, no. 2: 27–31.

Richardson, K., W. Steffen, W. Lucht, et al. 2023. "Earth Beyond Six of Nine Planetary Boundaries." *Science Advances* 9, no. 37: eadh2458.

Rockström, J., O. Gaffney, J. Rogelj, M. Meinshausen, N. Nakicenovic, and H. J. Schellnhuber. 2017. "A Roadmap for Rapid Decarbonization." *Science* 355, no. 6331: 1269–1271.

Roulet, T., and J. Bothello. 2020. "Why 'Degrowth' Shouldn't Scare Businesses." *Harvard Business Review*. https://hbr.org/2020/02/why-de-growth-shouldnt-scare-businesses.

Salmi, A., A. M. Quarshie, J. Scott-Kennel, and A. K. Kähkönen. 2023. "Biodiversity Management: A Supply Chain Practice View." *Journal of Purchasing and Supply Management* 29, no. 4: 100865.

Schmelzer, M. 2015. "The Growth Paradigm: A Critique." *International Journal of Green Economics* 9, no. 2: 131–149.

Schmelzer, M. 2023. "From Luddites to Limits? Toward a Systematization of Growth Critiques in Historical Perspective." *Globalizations* 20, no. 3: 447–464.

Schneider, F., G. Kallis, and J. Martinez-Alier. 2010. "Crisis or Opportunity? Economic Degrowth for Social Equity and Ecological Sustainability." *Journal of Cleaner Production* 18, no. 6: 511–518.

Scottish Government. 2019. "Scotland's Wellbeing—Delivering the National Outcomes." The National Performance Framework Team. https://nationalperformance.gov.scot/sites/default/files/documents/NPF_Scotland%27s_Wellbeing_May2019.pdf.

Senge, P. M., and J. D. Sterman. 1992. "Systems Thinking and Organizational Learning: Acting Locally and Thinking Globally in the Organization of the Future." *European Journal of Operational Research* 59, no. 1: 137–150.

Singh, N. M. 2019. "Environmental Justice, Degrowth and Post-Capitalist Futures." *Ecological Economics* 163: 138–142.

Skinner, B.E. 2023. "The True Cost of a $12 T-Shirt." *The New York Times*. https://www.nytimes.com/2023/04/24/opinion/fast-fashion-apparel-worker-conditions-rana-plaza.html.

Soundararajan, V., M. M. Wilhelm, and A. Crane. 2021. "Humanizing Research on Working Conditions in Supply Chains: Building a Path to Decent Work." *Journal of Supply Chain Management* 57, no. 2: 3–13.

Srivastava, S. K. 2007. "Green Supply-Chain Management: A State-of-the-Art Literature Review." *International Journal of Management Reviews* 9, no. 1: 53–80.

Sterman, J. D. 1989. "Modeling Managerial Behavior: Misperceptions of Feedback in a Dynamic Decision Making Experiment." *Management Science* 35, no. 3: 321–339.

Stevens, M. 2023. "Introduction to the Special Issue on Mobility, Climate Change, and Economic Inequality." *Journal of Operations Management* 69, no. 1: 4–8. https://doi.org/10.1002/joom.1233.

Sultana, F. 2022. "The Unbearable Heaviness of Climate Coloniality." *Political Geography* 99: 102638.

Szász, L., O. Csíki, and B. G. Rácz. 2021. "Sustainability Management in the Global Automotive Industry: A Theoretical Model and Survey Study." *International Journal of Production Economics* 235: 108085.

Tan, K. C., V. R. Kannan, R. B. Handfield, and S. Ghosh. 1999. "Supply Chain Management: An Empirical Study of Its Impact on Performance." *International Journal of Operations & Production Management* 19, no. 10: 1034–1052.

Taylor, M. 2024. "These Ideas Are Incredibly Popular: What Is Degrowth and Can It Save the Planet?." *The Guardian*. https://www.theguardian.com/environment/article/2024/aug/27/what-is-degrowth-can-it-save-planet.

Touboulic, A., D. Chicksand, and H. Walker. 2014. "Managing Imbalanced Supply Chain Relationships for Sustainability: A Power Perspective." *Decision Sciences* 45, no. 4: 577–619.

Touboulic, A., L. McCarthy, and L. Matthews. 2020. "Re-Imagining Supply Chain Challenges Through Critical Engaged Research." *Journal of Supply Chain Management* 56, no. 2: 36–51.

Tracey, M., J. S. Lim, and M. A. Vonderembse. 2005. "The Impact of Supply-Chain Management Capabilities on Business Performance." *Supply Chain Management: An International Journal* 10, no. 3: 179–191.

Umwelt Bundesamt. 2023. "Environmental Awareness in Germany 2022—Results of a Representative Population Survey." https://www.umweltbundesamt.de/publikationen/umweltbewusstsein-in-deutschland-2022.

United Nations Environment Programme. 2023. "Emissions Gap Report 2023: Broken Record—Temperatures Hit New Highs, yet World Fails to Cut Emissions (Again)." Nairobi. https://doi.org/10.59117/20.500.11822/43922.

Van den Bergh, J. 2011. "Environment Versus Growth—A Criticism of "Degrowth" and a Plea for "a-Growth"." *Ecological Economics* 70, no. 5: 881–890.

Van Ginkel, K. C., W. W. Botzen, M. Haasnoot, et al. 2020. "Climate Change Induced Socio-Economic Tipping Points: Review and Stakeholder Consultation for Policy Relevant Research." *Environmental Research Letters* 15, no. 2: 023001.

Vandeventer, J. S., C. Cattaneo, and C. Zografos. 2019. "A Degrowth Transition: Pathways for the Degrowth Niche to Replace the Capitalist-Growth Regime." *Ecological Economics* 156: 272–286.

Vandeventer, J. S., and J. Lloveras. 2021. "Organizing Degrowth: The Ontological Politics of Enacting Degrowth in OMS." *Organization* 28, no. 3: 358–379.

Victor, P. 2010. "Questioning Economic Growth." *Nature* 468, no. 7322: 370–371.

Victor, P. A. 2018. *Managing Without Growth: Slower by Design, Not Disaster*. Northampton, MA: Edward Elgar Publishing.

Vogel, J., and J. Hickel. 2023. "Is Green Growth Happening? An Empirical Analysis of Achieved Versus Paris-Compliant CO_2–GDP Decoupling in High-Income Countries." *Lancet Planetary Health* 7, no. 9: e759–e769.

Warlenius, R. 2018. "Decolonizing the Atmosphere: The Climate Justice Movement on Climate Debt." *The Journal of Environment & Development* 27, no. 2: 131–155.

Wellbeing Economy Alliance. 2024. "Wellbeing Economy Governments." https://weall.org/wego.

WHO. 2021. "Children and Digital Dumpsites: E-Waste Exposure and Child Health." https://www.who.int/publications/i/item/9789240023901.

Wieland, A. 2021. "Dancing the Supply Chain: Toward Transformative Supply Chain Management." *Journal of Supply Chain Management* 57, no. 1: 58–73.

World Weather Attribution. 2021. "Heavy Rainfall Which Led to Severe Flooding in Western Europe Made More Likely by Climate Change." https://www.worldweatherattribution.org/heavy-rainfall-which-led-to-severe-flooding-in-western-europe-made-more-likely-by-climate-change/.

World Weather Attribution. 2024a. "Autumn and Winter Storm Rainfall in the UK and Ireland Was Made About 20% Heavier by Human-Caused Climate Change." https://www.worldweatherattribution.org/autumn-and-winter-storms-over-uk-and-ireland-are-becoming-wetter-due-to-climate-change/.

World Weather Attribution. 2024b. "Climate Change, El Niño and Infrastructure Failures Behind Massive Floods in Southern Brazil." https://www.worldweatherattribution.org/climate-change-made-the-floods-in-southern-brazil-twice-as-likely/.

World Weather Attribution. 2024c. "Landslide Triggering Rainfall Made More Intense by Human-Induced Climate Change, Devastating Highly Vulnerable Communities in Northern Kerala." https://www.worldweatherattribution.org/landslide-triggering-rainfall-made-more-intense-by-human-induced-climate-change-devastating-highly-vulnerable-communities-in-northern-kerala/.

WWF. 2021. "Deforestation Fronts: Drivers and Responses in a Changing World." https://www.worldwildlife.org/stories/deforestation-fronts.

Xue, J. 2014. "Is Eco-Village/Urban Village the Future of a Degrowth Society? An Urban Planner's Perspective." *Ecological Economics* 105: 130–138.

Appendix A: Post-Growth Approaches

Approaches	Description	Sample references
Degrowth	Degrowth is the deliberate downscaling of economic activity by wealthy economies, abandoning GDP as a goal and focusing on reducing energy and material use to secure basic human needs and wellbeing, making the economy consistent with biophysical boundaries. It challenges the logic of promoting perpetual economic growth to focus on a diverse understanding of prosperity and wellbeing. Degrowth calls for collective limits. In practical terms, this implies the scaling down of working hours, reducing the production of fossil fuels, mass meat and dairy, fast fashion, aviation, and advertising, among other sectors (Hickel, Kallis, et al. 2022). To counter the negative effects on society, degrowth proponents call for improving universal access to public services, guaranteeing green jobs, work sharing, and aligning taxes on resources rather than work itself (Kallis 2017). In France, for example, this has become a social movement "Décroissance" stemming from political economy, economic anthropology and a culturalist perspective critiquing the effect of productivism, modern work structures and the division of labor, and the dominant economic values.	Demaria et al. (2013), Hickel, Kallis, et al. (2022), Kallis (2015, 2017), Latouche (1999), Martínez-Alier et al. (2010), Schneider, Kallis, and Martinez-Alier (2010)
Steady-state economy	The steady-state economy concept suggests an economy with a stable or mildly fluctuating size. It advocates for a stable population and stable consumption within ecological limits. While also criticizing the growth imperative, it differs from degrowth by focusing on maintaining constant stocks of physical wealth—instead of downscaling—increasing their efficiency through the reduction of throughput and service efficiency.	Daly (1991, 2014)
A-growth	A-growth proponents argue that policy makers should be indifferent to GDP growth, as it is not a reliable indicator of social welfare. They should instead focus on more relevant and effective social and environmental objectives regarding climate agreements, safe environmental limits, work-time norms, technology-specific policies, and pro-environmental behavior. Unlike degrowth, it has no predetermined negative stance toward growth, as GDP growth is good for some periods or countries. Instead, it encourages an open-ended discussion on the need for it.	Van den Bergh (2011)
Post-development	Post-development questions the core assumptions of "development" based on a Western modernity economic, social, and cultural model that has undermined local subsistence economies and livelihoods. This perspective, strongly influenced by Global South scholarship, values alternatives to development, decentering from the Western logic that created the idea of underdeveloped countries, and instead prioritizes knowledges and practices from grassroots movements. Post-development promotes alternate conceptions of economy that prioritize solidarity, reciprocity, and genuine participatory democracy.	Demaria et al. (2023), Escobar (2015), Klein and Morreo (2019)
Planetary boundaries	The planetary boundaries, introduced by the Stockholm Resilience Centre, define nine critical thresholds within Earth's systems that should not be crossed to avoid destabilizing the planet's environment. These boundaries include climate change, biodiversity loss, ocean acidification, and others. Crossing these limits could lead to irreversible environmental damage, threatening human survival and global ecosystems. The framework emphasizes maintaining Earth's resilience by staying within these boundaries, ensuring a safe operating space for humanity. It highlights the interconnectedness of global systems and the need for sustainable development to prevent exceeding these critical thresholds.	Richardson et al. (2023)

(Continues)

Appendix A | (Continued)

Approaches	Description	Sample references
Wellbeing economy	The concept of wellbeing economy has been explicitly related to post-growth and shares common principles with it. The central idea is prioritizing human wellbeing, quality of life, social justice, and ecological sustainability over mere economic growth. Wellbeing economy acknowledges the importance of the economy but asserts that it should serve broader societal objectives, instead of aiming at material production and consumption. The wellbeing economy perspective questions material growth per se, differentiating between what we need to grow and what we need to decrease, according to the negative or positive impact it has in terms of wellbeing outputs in a personal (work–life balance, psycho-physical health and empowerment), economic (customization, localized production, prosumer approach, total cost and benefit accounting), social (cohesion, equality and community engagement) and natural level (healthy ecosystem functions and urban–rural–wild balance).	Felber and Hagelberg (2017), Fioramonti et al. (2022)
Beyond growth	The beyond growth perspective tends to view growth as a multidimensional phenomenon, arguing for a redirection of growth from an aimless increase in GDP to purposeful development that aligns with sustainable, equitable, and qualitative aims. Beyond growth does not necessarily reject the growth narrative but redefines it to fit a broader spectrum of societal goals.	Jackson and Senker (2011), Victor (2018)