

From Restructuring to Transition: Window Dressing in the Programming of Structural Change in an Old Industrial Region

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Adam Drobniak

University of Economics in Katowice, Faculty of Spatial Economy and Regions in Transition, ul. 1 Maja 50, 40-287 Katowice, Poland; e-mail: adam.drobniak@ue.katowice.pl; ORCID: 0000-0002-1421-2923

Florian Kuźnik

University of Economics in Katowice, Faculty of Spatial Economy and Regions in Transition, ul. 1 Maja 50, 4E87 Katowice, Poland; e-mail: florian.kuznik@ue.katowice.pl; ORCID: 0000-0001-5425-7678

Abstract

This paper examines the challenges of implementing contemporary development concepts in old industrial regions, focusing on the Silesian region of Poland. The central question is whether the structural transition declared in Silesian strategic documents represents genuine adaptation or merely symbolic compliance with policy paradigms, that is, window dressing. The analysis highlights a new factor in window dressing, namely a pronounced temporal lag in adopting new development paradigms arising from the legacy of the past compared to Western regions, contributing to heterogeneous structural change across the region. Finally, the study formulates recommendations for regional policy programming to overcome window dressing and support more effective, context-sensitive policy.

Keywords

structural change, regional development concepts, transition, old industrial region, window dressing, Silesia

Introduction

Industrial regions, particularly old industrial regions (OIRs), have been widely discussed in economic geography and regional development for over a century. Their historical formation, structural transformations, and adaptive capacities have been analysed through multiple theoretical lenses, ranging from classical location theories to contemporary evolutionary and institutional approaches. Alfred Weber's (1909) seminal industrial location theory emphasised the cost-driven logic of industrial concentration, in which transportation, labour, and agglomeration economies shape spatial patterns of industrial activity (Isard, 1956; Hoover & Giarratani, 1984). These foundational perspectives informed subsequent models that explore spatial interdependencies, regional growth dynamics, and the role of externalities in shaping industrial concentration.

In the post-war period, growth pole theory (Perroux, 1955; Boudeville, 1966) positioned industrial regions as engines of national economic development. According to this perspective, industrial investment and innovation in concentrated areas generate multiplier effects that diffuse across wider territorial systems. Iconic examples include the Ruhr Area, South Wales, and Silesia, whose trajectories were shaped by heavy industry and state-led modernisation policies. These regions exemplify how spatial concentration and industrial clustering contribute to broader economic development.

The rise of the new economic geography (Krugman, 1991a; Fujita et al., 1999) introduced a dynamic perspective, emphasising agglomeration effects, increasing returns, and cumulative causation. In this framework, the presence of firms, specialised labour, and research institutions reinforces industrial concentration, creating self-sustaining growth mechanisms. OIRs, such as Silesia, historically benefited from these processes. However, by the late twentieth century, many Western OIRs experienced deindustrialisation, structural decline, and labour market disruptions, which challenged the explanatory power of classical growth models (Hudson, 2005; Pike et al., 2010).

To account for these challenges, the literature introduced path dependence and lock-in as key explanatory concepts (Grabher, 1993; Hudson, 2005; Pike et al., 2007; Hassink, 2010). OIRs were understood as regions with structural rigidities, whose adaptive capacity is constrained by historical industrial legacies, institutional configurations, and socio-economic inertia. Overcoming these limitations requires deliberate interventions aimed at diversifying economic bases, fostering innovation, and restructuring governance systems. These perspectives allow for a multi-dimensional analysis of regions such as Silesia, considering not only economic but also institutional and social dimensions.

The debate on structural change has deep roots in economic thought. Lewis (1954) argued that transferring labour from low-productivity sectors, such as agriculture, to higher-productivity industries and services promotes growth and convergence. Subsequent research emphasised sectoral transitions – from primary to secondary and tertiary activities – as mechanisms to stimulate development in less advanced or traditionally industrial regions (Abramovitz, 1986; Gardiner et al., 2004). Yet, in practice, structural change is often constrained by spatial inequalities: more advanced regions adapt faster, reinforcing economic disparities (O’Leary & Webber, 2015).

The emergence of cluster theory (Porter, 1990) and evolutionary perspectives (Boschma & Frenken, 2007; Frenken et al., 2007) highlighted the role of knowledge spillovers, related variety, and regional competitiveness in fostering structural renewal. Industrial regions could, in theory, renew themselves through innovation, entrepreneurship, and institutional adaptation (Martin & Sunley, 2006; Boschma & Frenken, 2007). Empirical studies, however, show that many OIRs remain constrained by limited institutional capacity and historical path dependencies (Tödtling & Trippel, 2013; Dawley et al., 2019). In Silesia, for instance, modern industrial investments coexist with traditional heavy industry and mining, illustrating the dual character of structural change (Szczepański, 2002; Tkocz, 2003).

A growing body of literature identifies ‘window dressing’ as a critical phenomenon in OIRs’ transition (Bailey & Chapain, 2011; McCann, 2015; Duranton & Venables, 2018; Henderson, 2019; MacKinnon et al., 2022). This term refers to symbolic policy actions – such as declarations of commitment to innovation, sustainability, or green growth – that do not substantively alter underlying economic structures or social dependencies. Such superficial adaptation often arises from a temporal misalignment between policy ambitions and structural realities, as regions face both pressure to adopt contemporary development paradigms and constraints imposed by legacy industrial structures (Rodríguez-Pose, 2013). Symbolic modernisation is particularly evident in regions attempting to align with EU-driven frameworks such as smart growth, energy transition, or just transition policies, without sufficient local absorptive capacity or institutional readiness.

Against this theoretical backdrop, the present paper explores the tension between declarative and substantive structural change in OIRs, using the Silesian region as a case study. The research examines how general and region-specific conceptual approaches – ranging from post-Fordism and knowledge-based competitiveness to sustainability and inclusive growth – interact with historical constraints. The central question is whether the structural transitions declared in Silesian strategic documents represent genuine adaptation or merely symbolic compliance with policy paradigms, that is, window dressing.

The paper advances the hypothesis that OIRs such as Silesia are subject to temporal pressures: they are required to adopt new development paradigms rapidly due to EU policy imperatives, yet deep-seated path dependencies and institutional inertia substantially constrain the scope for genuine transformation. As a result, policy interventions often manifest as symbolic adjustments, creating an appearance of modernisation while leaving core structural and economic challenges unresolved.

By situating the Silesian experience within a multi-theoretical framework, the study contributes to a critical understanding of regional transition, emphasising the interaction between historical legacies and policy-induced temporal pressures. It highlights the importance of considering both structural and temporal dimensions in the design and evaluation of regional development strategies, offering insights into the uneven trajectories of adaptation in OIRs.

Research methodology

The article adopts a review-based approach, synthesising research on regional development and structural change, with a particular focus on OIRs. The Silesian region serves as a case study, illustrating structural transitions over the past three decades under various sectoral and regional policy frameworks. Methodologically, the study combines desk research on both general and OIR-specific development concepts with empirical analysis using descriptive statistics, location quotients (LQ), and the portfolio approach, providing a multidimensional view of structural dynamics across different parts of Silesia.

The discussion of window dressing and the analysis are informed by extensive empirical material, including the authors' involvement in the planning of strategic documents such as the National Just Transition Plan (Ministry of Climate, 2021), the Territorial Just Transition Plan for the Silesian Voivodeship (TJTP Silesia, 2022), and the Silesian Voivodeship Transition Fund Strategy (SVTFS, 2025). Complementary evidence comes from surveys and projects, including the in-depth interviews (IDIs; $n = 77$) conducted for the SVTFS among regional actors, as well as research within the Horizon DUST project, comprising focus groups and the Transformatorium social survey ($n = 558$) on perceptions of structural change and visions for Silesia's future.

This article presents selected elements of research from the Horizon DUST project and IDIs prepared for the SVTFS (2025), focusing on the phenomenon of window dressing and stakeholders' perceptions of the transition in Silesia. The overall findings from Horizon DUST and the IDIs are used to interpret the results presented in this paper but are not systematically analysed here because presenting the full empirical material would exceed the scope of the article.

The authors acted in a dual role as both researchers and experts, which provided access to practical knowledge but also carried the risk of bias stemming from professional experience. To maintain critical distance, triangulation of sources and systematic self-reflection were employed to distinguish empirical observations from expert opinions.

Results

(I-a) Evolution of general conceptual approaches to structural change in regions

Structural change refers to long-term transformations in regional economic structures, affecting dominant sectors, employment, technologies, and social systems (Hassink, 2005; Todaro & Smith, 2020). Traditionally, this process is illustrated by the transition from heavy industry to services and, ultimately, to knowledge-based economies (Table 1). These changes are systemic and are driven by industrial decline, technological progress, as well as socio-political and demographic factors.

Classical models of the 1950s, including Lewis's (1954) dual-sector model, along with Clark (1940) and Kuznets (1955), emphasised national-level growth and labour shifts from agriculture to industry and services, while largely neglecting regional differences and path dependence. Concepts of deindustrialisation and regional differentiation emerged to address these gaps, highlighting self-reinforcing decline spirals in regions such as the Ruhr Area, Nord-Pas-de-Calais, and Detroit (Bluestone & Harrison, 1982; Massey, 1984; Grosse, 2002). Post-Keynesian, structuralist, and core-periphery frameworks further linked disparities to capital accumulation and spatial inequalities (Harvey, 1982; Smith, 1984; Wallerstein, 1980).

Post-Fordism and flexible specialisation in the 1970s–1980s emphasised adaptable, knowledge-driven economies (Amin, 1994; Piore & Sabel, 1984; Scott, 1988; Jessop, 1994), with a focus on SME networks, product differentiation, local knowledge, and innovation clusters (Porter, 1998; Fujita et al., 1999). These ideas informed regional policies in Western countries, including cluster development, local innovation systems, lifelong learning, and R&D incentives, paving the way for smart specialisation strategies (RIS3) (Porter, 2003; Martin & Sunley, 2003; Camagni & Capello, 2013).

Table 1. Evolution of general conceptual approaches to structural change in regions

Keywords	Perception of structural change	Representatives of the trend/ key topics	Regional development/ sectoral policy orientation
Classical economic models (Western countries: 1950s–1970s; Poland: until the late 1980s)			
sectoral change: agriculture–industry–services; uneven growth; growth poles; cumulative causality; economic base;	sector-driven linear change; spatial homogeneity; regions develop in stages from agriculture to services;	Clark (1940): typology of sectoral structures – agriculture–industry–services; Lewis (1954): dual development model – agriculture–industry; Kuznetz (1955): classic theory of structural change – agriculture–industry–services; Hirschman (1958): unbalanced growth; Perroux (1955): growth poles; Myrdal (1957): cumulative causation; Tiebout (1956): economic base;	economic and infrastructure investments from the central level; industrialisation; centralisation of economic power;
Regional disparities and deindustrialisation (Western countries: 1970s–1980s; Poland: 1990s)			
deindustrialisation – industrial collapse; unemployment; spatial inequalities; urban decay; social fragmentation; old industrial regions (OIRs);	structural change in regions determined by globalisation, technological change and the decline of traditional industries (e.g., mining, metallurgy); structural change in regions is determined by capital and the logic of accumulation;	Bluestone & Harrison (1982): deindustrialisation; Massey (1984): further progress in Myrdal's (1957) theory of cumulative causality; Smith (1984): uneven development; Cooke (1985): regional innovation; Wallerstein (1980): core–periphery model;	regional subsidies; state intervention; redistributive policies; stimulating growth in regions: investment incentives, industrial and technology parks, reskilling;
Post-Fordism, flexible specialisation, knowledge, and competitiveness (Western countries: 1990s; Poland: 2000s–2010s)			
flexible production; small and medium-sized enterprises (SMEs); innovation collaborations and clusters; regional competitiveness; knowledge-based economy;	structural change in regions associated with a shift from mass to flexible production; structural change determined by innovation-led production; structural change in regions emphasises local networks, knowledge spillover effects;	Amin (1994): post-Fordism; Piore & Sabel (1984); Scott (1988): flexible production systems; Romer (1990): growth based on knowledge and innovation; Porter (1998): clusters and cooperation, ecosystems; Martin & Sunley (2003): spillover effects; Krugman (1991b): knowledge spillovers, agglomeration effects;	support for SMEs; tax relief for R&D activities; hubs, entrepreneurship; support for Triple Helix cooperation: companies, business environment institutions, HEIs and R&D;
Sustainable development, inclusive and smart growth (Western countries: 2000s–2010s; Poland: 2010s–ongoing)			
sustainable development–balancing environmental, social, and economic dimensions of development; intergenerational dimension of development; inclusive growth; smart specialisation and regional innovation systems;	structural change should be socially inclusive and sustainable; structural change should result from knowledge, territorial capital; competitive advantages based on the unique smart specialisations of a region;	UN (2002): sustainable development–global level; EU (2001): sustainable development–European level; Cooke (2001); Tödtling & Tripl (2005): regional innovation systems; Petrakos et al. (2005): integration and growth; WB (2008): sustainable development and inclusive growth; Ranieri & Ramos (2013): inclusive growth;	supporting pro-social activities in the field of education, access to public services; supporting pro-environmental activities: respect for resources, biodiversity, and the development of environmentally friendly technologies; supporting SMEs and R&D that strengthen the region's smart specialisations; support for regional innovation systems;

Table 1. cont.

Resilience, green economy, adaptive capacity, and place-based policy (Western countries: 2010s–ongoing; Poland: 2020s–ongoing)			
resilience; green economy; adaptive systems; place-based approach; path-dependence and lock-in;	structural change is non-linear, adaptive, and multidimensional; structural change takes place in regions perceived as complex adaptive systems; structural change requires a place-based approach and participation to be effective;	UNEP (2011), Newton & Cantarello (2014): green economy; Barca (2009): place-based approach; Boschma & Frenken (2007): path dependence and lock-in; Simmie & Martin (2009): resilience; Rodríguez-Pose & Wilkie (2017): place-based strategies;	crisis intervention funds; start-up support funds; next generation of regional innovation strategies (RIS); local knowledge platforms such as living labs; EU (2019): European Green Deal; subsidiary principle;

Source: Own elaboration.

In the early 21st century, **sustainable development, inclusive growth, and smart growth** became central, integrating environmental, social, and economic objectives and promoting equitable benefits as well as investments in innovation and green technologies (Petrakos et al., 2005; Tödtling & Tripl, 2005).

Subsequently, **resilience, adaptive capacity, the green economy, and place-based policies** were emphasised, requiring regions to reconfigure their development paths in response to shocks and crises (Simmie & Martin, 2009; Hassink, 2010; Drobniak et al., 2021; ESPON, 2021; UNEP, 2011; EU, 2023; Rodríguez-Pose, 2018). Place-based strategies contrast with classical top-down approaches, helping to ensure just transitions in affected areas (Pike et al., 2017; Capello & Nijkamp, 2009; Barca, 2009).

Evolutionary economic geography highlights path dependence, lock-in, and territorial novelty, showing that structural change is dynamic, irreversible, and context-specific (Boschma & Frenken, 2007; Boschma & Martin, 2007; Martin & Sunley, 2006; Gwosdz, 2014; Dopfer & Potts, 2009). In recent years, policy instruments aligned with these approaches have included crisis funds (REACT-EU), SME support, resilient infrastructure investments, updates to RIS3 strategies, the use of living labs, start-up support, and the Just Transition Fund (Szlachta & Zaleski, 2017; EU, 2019; EU, 2020; EU, 2021).

Building on the general conceptual frameworks of structural change discussed above, the next section examines how these approaches have been reinterpreted into specific concepts in the context of OIRs, characterised by inherited industrial structures.

(I-b) Evolution of specific conceptual approaches to structural change in OIRs

OIRs are characterised by industrial monostructure, reliance on traditional sectors such as mining and steel, dominance of large firms, low levels of entrepreneurship, vulnerability to economic shocks, high unemployment, and social tensions (Grabher, 1993; Hassink, 2005). Structural change in OIRs depends on local resources, competencies, infrastructure, human capital, innovation capacity, and adaptation to technological shifts (Phelps & Ozawa, 2003; Phelps et al., 2015). As a result, these regions have been extensively studied, giving rise to conceptual frameworks such as **restructuring, reconversion, regeneration, and transition** (Klasik, 2001; Blazycza, 2003; Hudson, 2005; Morawski & Zawistowski, 2008; Hassink et al., 2019) (Table 2).

Restructuring, emerging in the 1970s in Western countries, involved downsizing, cost reductions, layoffs, and partial closures of uncompetitive industries, addressing persistent unprofitability (OECD, 1986; Van Doren, 1993; Klasik & Kuźnik, 1991; Porter, 1998, 2003). By the 1990s, **reconversion** developed, particularly in France, repurposing industrial activities across economic, industrial, and regional dimensions (Brandenburg, 1998; Daviet, 2006). In Silesia, restructuring in the 2000s addressed ownership, capital, ecological, urban-spatial, and social aspects, with employment security prioritised (Kuźnik, 2003).

Urban regeneration emphasises territorial and multidimensional transformations of post-industrial areas, integrating social, economic, environmental, and spatial objectives (Roberts & Sykes, 2005; Mak & Stouten, 2014; Bryson et al., 2018; Tallon, 2013; Hausner & Markowski, 2025; Giradet, 2015; Klasik et al., 2023). More recently, transformative approaches have focused on advanced technologies, digitalisation, and Industry 4.0, shifting toward ‘civilisation-sensitive’ paradigms, including the green economy and social, cultural, ecological, and economic transitions (Simmie, 2013; Szomburg et al., 2022). Path dependence slows these transitions in OIRs, but frameworks such as the European Green Deal provide guidance for resilience, reconversion, and regeneration (EU, 2019; UN, 2015a, 2015b).

The **just transition**, as a concept initially proposed by trade unions in the 1980s, now aims to green the economy inclusively, creating new industries and jobs while phasing out traditional sectors (Smith, 2017; ILO, 2015; Drobnik, 2022; Civic Congress, 2018). It is closely linked to the energy transition, which involves replacing fossil fuels with renewables and promoting distributed energy systems that generate new business models, social practices, and economic opportunities (Keirstead, 2013; Popkiewicz, 2015; Rifkin, 2016; Yang et al., 2024).

Table 2. Evolution of specific concepts of structural change addressed to OIRs

Keywords	Perception of structural change	Representatives of the trend/ key topics	Targeting regional development policy or sectoral policy
Restructuring (Western countries: 1970s–1980s; Poland: 1990s)			
restructuring, cost-cutting, and organisational approaches	structural change based on individual factors, mainly economic and organisational; consolidation of enterprises and reduction of inefficient units; reduction of employment;	OECD (1986): radical changes, structural transformations, economic efficiency; Klasik & Kuźnik (1991): traditional industrial regions; Porter (2003): mature and declining sectors; Karbownik & Turek (2002): mining sector restructuring;	dominance of a sectoral approach; policies aimed at eliminating unprofitable activities, reducing production volumes and employment to improve profitability; <i>Reform of the hard coal mining sector in Poland (1998–2002)</i> ;
Reconversion and regeneration (Western countries: 1990s; Poland: 2000s–ongoing)			
reconversion: industrial, economic, and regional urban regeneration	structural change regarded as ‘repurposing’ and adaptation; structural change takes place across several dimensions: economy, industry, region, city; structural change consists of modernisation and reconstruction of the local economic tissue, and the ‘healing’ of selected spheres of urban life;	OECD (1986): reconversion; Brandenburg (1998): economic, industrial, and regional reconversion; Kuźnik (2003): reconversion as multidimensional restructuring; Daviet (2006): alternative use of existing economic infrastructure; Roberts & Sykes (2005): urban regeneration; Hausner & Markowski (2025): regenerative city;	incorporating territorial issues (e.g., mining communes) into sectoral restructuring policies; drawing attention to the need to seek new development paths in OIRs (Strategy 2000);
Just transition (Western countries 1980s–ongoing; Poland 2020s–ongoing)			
just transition	structural change as a complex approach based on multiple factors: social, economic, environmental, spatial, cultural-identity, and institutional; minimising the negative effects of structural changes and creating new activities;	Smith (2017); Heffron & McCauley (2018): just transition; Drobnik (2022): just transition in Polish coal regions;	territorially oriented sectoral policies (mitigating the effects of changes in coal regions); Social Agreement (2021); Regional policies and funds (JTF) addressed to coal regions (JTTP Silesia, 2022);

Table 2. cont.

Energy transition (Western countries: 2010s–ongoing; Poland: 2020s–ongoing)			
energy transition; climate policies	changes in the economic structure as a result of diversification of energy sources, decarbonisation, and improved energy efficiency; new economic structure built on a low- or zero-carbon economy in response to climate change;	Milani (2000): green economy; Keirstead (2013): low- or zero-emission economy; Rifkin (2016): distributed and prosumer energy; Yang et al. (2024) energy based on renewable energy sources (RES);	UN (2015b): Agenda 2030; UN (2015a) Paris Agreement; UE (2019): Green Deal; EU (2020): Just Transition Mechanism; Hybrid approach to sectoral and regional policies of a low-emission economy in regional (i.e., TJTP Silesia, 2022) and central government policies (KPEiK, 2019; Social Agreement, 2021);

Source: Own elaboration.

Through these successive frameworks – from restructuring to reconversion, urban regeneration, and transformative strategies – scholars and policymakers have built a comprehensive basis for guiding structural change in OIRs, balancing historical constraints with contemporary development imperatives. Against this conceptual background of structural change in OIRs, the following section examines how these approaches have been translated into development programming in the Silesian region.

(II-a) Programming structural change in the Silesian region

Until the late 1980s, Poland's centrally planned economy followed classical models, with little awareness of the need for industrial restructuring. The market transition in the early 1990s quickly exposed inefficiencies and politicised restructuring as an issue of economic efficiency (Hausner et al., 1995).

During the 1990s and early 2000s, restructuring was driven mainly by central sectoral programmes (Kuźnik, 2003). In coal mining, the 1998–2002 government programme (Karbownik & Turek, 2002) prioritised output reduction, mine closures, debt restructuring, and asset transfers. Employment in mining fell from about 400,000 in the early 1990s to about 128,000 by 2004, while coal production was halved, deeply affecting the Silesian economy (Kuźnik, 2003; Szpor & Ziółkowska, 2018).

After 1998, the process gradually incorporated regional elements, but implementation was delayed and underfunded. Fiscal privileges for mining municipalities proved insufficient to counteract social and economic decline (Kaczorowski & Gajewski, 2008; NIK, 2016). The European Green Deal (2019) accelerated the transition toward a coal phase-out (except for coking coal). The Social Agreement (2021) formalised a gradual closure of coal mines by 2049 and introduced instruments such as the Silesian Voivodeship Transition Fund (2025).

Steel industry restructuring followed a distinct path. In the early 2000s, consolidation created the Polish Steelworks Holding, later privatised as ArcelorMittal Poland (2004), preserving about 70,000 jobs. Modernisation and investment improved efficiency, despite reduced employment and output (Bocian et al., 2024).

The energy sector underwent slower restructuring, retaining coal and lignite dominance. Consolidation into capital groups (TAURON, PGE) aimed at modernisation, but environmental pressures and financial constraints limited progress. Only the 2019 National Energy Policy (KPEiK, 2019) initiated a strategic shift toward renewables, aligning with EU goals.

At the regional level, early initiatives such as the Katowice Industrial Restructuring Project (Barteczek et al., 1991) and the Contract for Silesia (Kuźnik, 1996) promoted locally driven approaches to industrial decline. The 1997 administrative reform and EU accession (2004) strengthened territorial programming through NUTS2 regions and structural funds.

Successive regional strategies show the following evolution of development paradigms:

- Strategy 2000¹ (2000) focused on inclusion, education, and sustainable development but remained largely declarative.
- Strategy 2010² (2010) emphasised competitiveness, innovation, smart growth, and metropolitan functions. However, due to the innovative nature of these ideas in relation to Silesia's historical legacy, it initiated these processes rather than fully consolidating them.
- Silesia 2030 (2020) integrates low-emission and green economy goals, reflecting post-Fordist and competitiveness-oriented logic, yet it gives limited attention to adaptability. The strategy draws on the latest development paradigms; however, their implementation in the context of declining or radically transforming traditional sectors poses a significant challenge.

An enabling factor for Silesia 2030 (2020) is the region's inclusion in the Just Transition Fund (2020), marked as a milestone: seven of eight subregions received €2.2 billion for diversification, higher education, and technology projects (TJTP Silesia, 2022).

Despite the development of three generations of regional development strategies, numerous sectoral decarbonisation programmes, and high availability of European funds for the transition, stakeholders involved in Silesia's transition point to a temporal and substantive misalignment between the socio-economic context and new concepts such as sustainable growth, energy transition, and just transition. Research conducted within the Horizon DUST project (n = 558) revealed the following opinions in this regard:

- 64% of respondents agree that *there is no comprehensive vision for Silesia's post-mining development*, reflecting a gap between strategic priorities and the requirements of decarbonisation.
- 66% report that *transition funding and support are not easily accessible or inclusive*, pointing to a mismatch between interventions and actual needs.
- 75% believe that *conditions are not yet in place to fully abandon coal-based energy*, highlighting the impracticality of current transition concepts.
- 79% argue that *energy transition must be long-term and gradual*, suggesting that the timing of transition policies is misaligned with regional realities.

Perceptions regarding the alignment of strategies, programmes, and accompanying financial instruments captured in the Horizon DUST project are also reflected in the results of IDIs with decision-makers from key institutions and the business sector conducted for SVTFS (2025). Among the ten most significant challenges facing the region, six relate to window dressing:

- the lack of a comprehensive vision and roadmap for the region's economic transition;
- limited financial support for the diversification of firms in traditional industries;
- the absence of economic transition projects that create new value chains;
- the lack of strategies for transferring workers from traditional sectors to other industries;
- the lack of institutional capacity to develop transition projects in small mining municipalities;
- an overly rapid pace of economic transition, risking a repetition of the labour market collapse experienced at the turn of the 20th and 21st centuries.

Overall, Silesia's experience reflects a gradual shift from sectoral, centralised restructuring to territorially oriented strategies. Despite notable progress, the region continues to exhibit a temporal lag compared to its Western counterparts in adopting contemporary development concepts. Their incorporation followed a delayed and uneven trajectory, which is examined in the subsequent section.

(II-b) Temporal lag in structural change concept programming

Analysis of general and region-specific concepts of structural change, including those applied to OIRs, reveals a **temporal lag** in their adoption in Silesia and highlights the time pressures involved in translating these approaches into regional policy (Fig. 1).

In Western Europe, general models evolved from the classical economic theories of the 1950s toward post-Fordism, flexible specialisation, and knowledge-based competitiveness in the 1980s, followed by sustainable, inclusive, and smart growth in the 1990s and 2000s, and more recently

¹ This strategy was updated in 2005.

² This strategy was updated in 2013.

resilience, green economy, and place-based adaptive strategies in the 2010s. Specific OIR frameworks – restructuring, reconversion, energy transition, just transition, and regeneration – emerged as proactive responses to deindustrialisation.

In Poland, these concepts appeared two to three decades later. Until the 1980s, classical models prevailed; in the 1990s, deindustrialisation and regional disparities gained importance; and in the 2000s, post-Fordist and knowledge-based approaches emerged. Concepts of resilience and green economy became visible only after 2020. For Polish OIRs such as Silesia, this lag reflects delayed policy learning and reactive adaptation, reinforcing dependence on traditional industries. Thus, the translation of policy from theory to practice remains incomplete, contributing to uneven development and risks of window dressing in policy implementation.

The notion of **window dressing** refers to policies that emphasise appearance and formal compliance over substantive transformation. In the EU Cohesion Policy context, scholars highlight tensions between institutional alignment and actual impact. Huber (2006) questioned whether EU evaluations serve as genuine learning processes or legitimising rituals; Bachtler and Mendez (2007) and Kupiec (2015) similarly argue that evaluations often fulfil procedural aims rather than inform strategy. Heinemann et al. (2024) note that many studies, commissioned by interested institutions, reinforce symbolic success rather than critical reflection. A related phenomenon, symbolic Europeanisation (Dąbrowski, 2013), manifests in ‘ritual partnership’, where consultations meet EU expectations without shaping policy. Marchevska (2024) finds similar patterns in Bulgaria, while Domorenok (2018) observes symbolic alignment within the European Semester. Crescenzi and Giua (2016) show that in regions with weak institutions, Cohesion Policy implementation often remains superficial, producing visible but short-lived results.

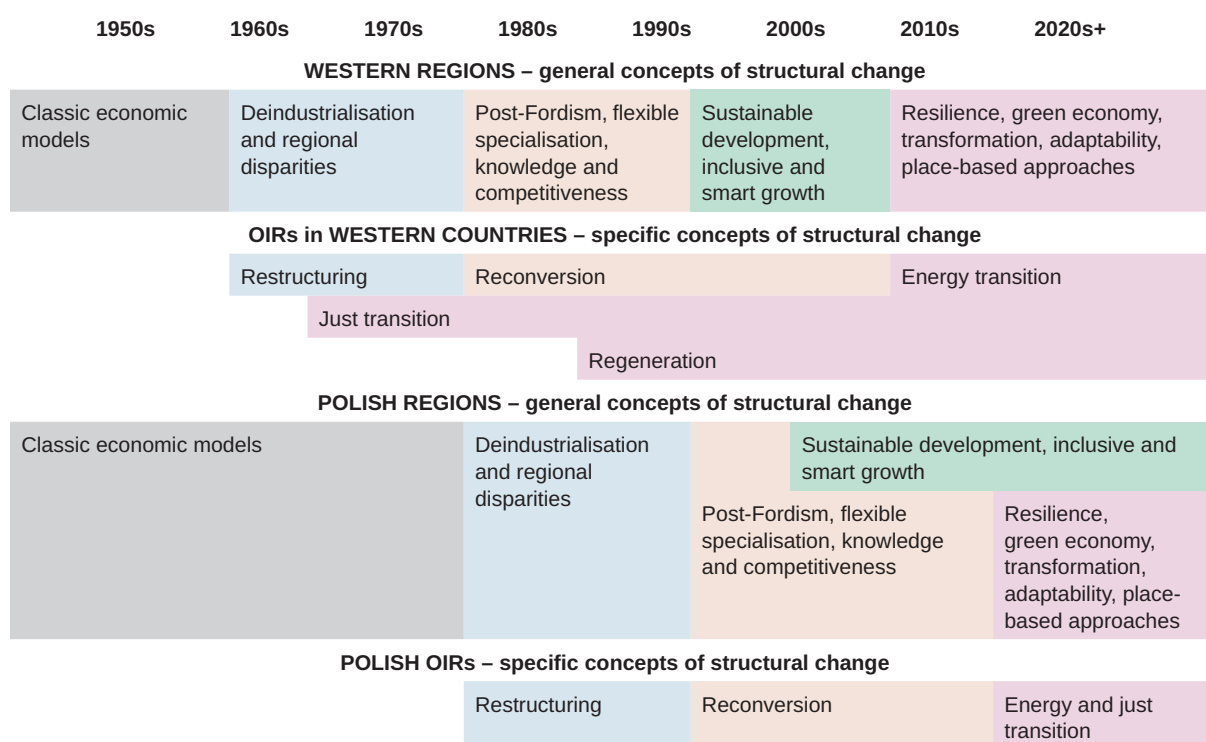


Figure 1. Evolution of the use of development and structural change concepts implemented in regions of Western countries and in Polish regions, with reference to OIRs such as the Silesian region.

Source: Own elaboration.

Window dressing has been analysed mainly as a formal compliance issue within EU frameworks. However, in regions such as Silesia, its persistence also stems from the temporal delay in adopting both development and structural change concepts, which limits the depth and effectiveness of policy interventions.

The temporal lag in incorporating structural change concepts into regional programmes raises questions about its consequences. The next section addresses this issue by analysing selected labour market effects of structural change in Silesia.

(III) Selected effects of structural changes in the Silesian region

Comparing the temporal lag in adopting structural change concepts within regional policy with the actual transitions observed in Silesia provides valuable insight into the region's development dynamics. Employment indicators serve as key measures of these processes, capturing both sectoral shifts and broader socio-economic impacts of industrial change (Basile, 2001; Rodríguez-Pose, 2018). In OIRs such as Silesia, the decline in coal mining has deeply reshaped local labour markets, revealing patterns of workforce displacement (Kuźnik, 2003; Szpor & Ziółkowska, 2018). These trends illustrate how sectoral programmes and territorial strategies translate into shifts in labour demand and socio-economic adaptation, while policy lags exacerbate implementation challenges.

Between 1995 and 2004, mining employment fell from 244,000 to 129,000 (−115,000), and total employment in Silesia decreased by 356,000. After 2004, mining continued to shrink, reaching about 70,000 jobs by 2023, while overall employment increased by 160,000 (to 1.26 million), reflecting gradual diversification. Despite progress, benefits were unevenly distributed. Employment concentration (LQ) rose, indicating polarisation over the period 1995–2023: Katowice's LQ grew from 1.79 to 2.44, widening the gap with other cities (e.g., Bielsko-Biała, 1.63).

CHANGE IN THE TOTAL NUMBER OF EMPLOYEES	+20k and above		Katowice	bielski, częstochowski, Bielsko-Biała, Tychy	
	+10k to +20k			raciborski, tarnogórski, Częstochowa, Gliwice	cieszyński, kłobucki, żywiecki
	+0.1k to +9.9k	mikołowski, Siemianowice Śląskie	myszkowski, rybnicki, Chorzów, Jastrzębie-Zdrój, Jaworzno		lubliniecki, Żory
	−0.1k to −9.9k	będziński, bieruńsko-lędziański, Dąbrowa Górnicza, Mysłowice, Piekary Śląskie, Świętochłowice,	gliwicki, pszczyński	wodzisławski, zawierciański, Rybnik	
	−10k to −20k	Ruda Śl.	Sosnowiec, Zabrze		
	−30k and below	Bytom			
		−30k and below	−20k to −30k	−10k to −20k	−0.1k to −9.9k
	CHANGE IN THE NUMBER OF EMPLOYEES IN INDUSTRY				

Figure 2. Local government unit groups in relation to structural changes in the labour market: change in industrial employment vs. change in total employment

Source: Own elaboration.

Employment dynamics among local government units (LGUs) reveal four main categories (Fig. 2):

- *diversifying growth LGUs*: offset industrial losses through new jobs in services, business sectors, and creative industries (e.g., Katowice, Bielsko-Biała, Tychy, Gliwice)

- *weakly diversifying LGUs*: modest overall growth despite industrial decline (e.g., Rybnik, Chorzów, Jaworzno)
- *slow diversification LGUs*: limited industrial decline and small service gains (e.g., Cieszyń, Żywiec, Lubliniec)
- *industrial-dependent shrinking LGUs*: parallel declines in industrial and total employment (e.g., Bytom, Ruda Śląska, Sosnowiec, Zabrze)

The structural changes observed in the Silesian labour market reflect not only long-term industrial decline but also the temporal and qualitative gap between the formal adoption of new development concepts and their effective implementation. Although regional policies increasingly incorporated narratives of diversification, innovation, and post-industrial transition, their translation into tangible economic restructuring was often delayed or uneven. This mismatch is consistent with the logic of window dressing, in which strategic alignment with dominant development paradigms precedes – and at times substitutes for – substantive action.

Employment trends across LGUs reveal that only a limited group managed to offset industrial job losses through timely and sustained diversification into services, business activities, and knowledge-based sectors. These cases indicate that the timely and consistent implementation of new development concepts can generate cumulative employment gains. In contrast, many traditionally industrial LGUs experienced parallel declines in industrial and total employment despite the presence of numerous regional strategic documents and access to support instruments. Here, the persistence of shrinkage suggests that policy responses remained largely declarative or were introduced too early relative to the industrial legacy to counteract structural erosion.

The growing concentration of employment, evidenced by rising LQ in leading centres such as Katowice, further underscores the consequences of delayed adaptation. Rather than fostering a balanced regional transition, the lag in implementing new development approaches has contributed to increasing polarisation between a small number of successful diversifiers and a larger group of structurally dependent localities. In this sense, the Silesian case illustrates how window dressing and time lag in policy implementation can shape not only the pace but also the spatial distribution of structural change.

Overall, the Silesian case demonstrates the heterogeneity of structural change, shaped by multiple factors such as industrial legacy and diversification capacity. Diversified LGUs show job growth, while traditional industrial areas experience stagnation despite numerous strategies and support funds.

Discussion

The thirty-year transformation of the Silesian region exemplifies the complex, uneven, and path-dependent nature of structural change in this OIR. The analysis reveals a pronounced temporal lag in the adoption of contemporary development concepts within Silesia's policy framework compared with those in Western Europe. This delay has generated temporal pressures for regional actors and has magnified the difficulty of implementing effective, transformative strategies based on new development concepts.

This finding opens a broader debate on the phenomena of window dressing and two-speed regions. Bailey and Cowling (2006) identified the façade of industrial measures in UK OIRs, while Hassink (2010) described window dressing as superficial transformation efforts that fail to address underlying socio-economic lock-ins. Rodríguez-Pose (2013) similarly criticised EU Cohesion Policy for its limited effectiveness in lagging regions. Complementary studies by McCann and Ortega-Argilés (2015) and Gorzelak (2020) confirmed that cohesion frameworks, though conceptually advanced, have not halted deepening interregional disparities. The Silesian case extends this debate by suggesting that window dressing may stem not only from institutional weakness or political incentives but also from temporal misalignment in the implementation of structural change concepts.

Following Poland's EU accession, regional and sectoral policies were shaped by paradigms of sustainable, inclusive, and smart growth. However, Silesia's socio-economic base continued to reflect earlier post-Fordist and restructuring-era paradigms from the 1990s. This coexistence produced a disjunction between policy rhetoric and structural realities, with a temporal lag reinforcing

apparent structural change (Rodríguez-Pose, 2013). In this context, ‘two-speed regions’ emerge within Silesia: leading areas successfully adapt to new paradigms such as RIS3 and the energy transition, benefiting from job growth, while lagging areas remain constrained by inherited industrial structures and policy misalignment.

The 2020s continue to reflect this duality. EU policy frameworks grounded in resilience, green economy, and place-based adaptation (MFIPR, 2023; Strategy, 2020) are being introduced in regions that only recently began implementing reforms inspired by early 2000s Western models. Consequently, the temporal lag becomes a structural barrier, delaying modernisation and amplifying regional divergence.

This aligns with earlier findings by Szczepański (2002) and Tkocz (2003), who described Silesia as a region of coexistence between modern industrial investments in the automotive sector and traditional heavy industry. The persistence of path dependence noted by Domański (2003) and Domański and Gwosdz (2018) limits strategic flexibility, while modernisation efforts identified by Baranyai and Lux (2014) prove effective only when aligned with local institutional capacity.

The delay in implementing new development concepts in OIRs often stems from historical and economic conditions that shape path dependence. Historically formed industrial structures, socio-economic networks, and established institutional procedures exhibit a degree of inertia that limits the pace of transition and forces a gradual adoption of new development concepts and related policies (Henderson, 2019; Evenhuis, 2017). Limited institutional capacity slows the effective implementation of reforms, leading to situations in which new concepts are adopted primarily rhetorically, while real structural change occurs much more slowly. Such a mechanism reinforces the phenomenon of window dressing: regions can quickly ‘show’ innovative strategies in documents, while their actual transition remains constrained.

Similar dynamics are observed in other OIRs of Central and Eastern Europe, where historical economic and institutional conditions – as in Silesia – interact with adaptive delays, resulting in the rapid adoption of new strategic rhetoric often preceding the actual restructuring of local economic and social structures (Gabor, 2009; Dyba et al., 2018).

Contemporary studies (Brezdeń, 2015; Baron, 2016; Krzysztofik & Kantor-Pietraga, 2025) emphasise a dual innovation model, where advanced manufacturing coexists with nascent SME ecosystems, yet uneven implementation underscores the importance of coordination and timing. Recent analyses (Micek et al., 2022³; Drobnik, 2020, 2022) demonstrate that the success of smart growth and just transition initiatives depends on synchronised, time-sensitive policy frameworks. The ‘temporal lag’ thus complements existing theories of path dependence by introducing a dynamic, time-oriented dimension to regional adaptation. As Micek et al. (2022) argue, recognising ‘critical conjunctures’ is essential for understanding when and how structural convergence can occur. In Silesia, however, the persistence of policy window dressing is particularly detrimental for fast-shrinking localities, where successive strategies invoking new concepts have failed to generate tangible employment recovery.

These findings also enrich the broader debate on multiple transition paths in OIRs. Boschma and Lambooy (1999) distinguished between *pathless innovation* (deep restructuring) and *path-dependent innovation* (selective adaptation). Hudson (2005) and Grabher (1993) documented trajectories of stagnation and negative lock-ins, while Martin and Sunley (2006) linked transformation outcomes to regional resilience. Asheim et al. (2011) emphasised the decisive role of knowledge bases, and Klasik (2001) showed that structurally similar regions (Silesia and Northern Moravia) may diverge due to institutional and temporal factors.

In Silesia, areas closely aligned with emerging paradigms – diversified economies, knowledge-intensive sectors, and skilled labour markets – exhibit better adaptive capacity, as reflected in employment growth. In contrast, areas dominated by traditional industries demonstrate limited diversification and greater susceptibility to policy window dressing. This divergence explains the

³ The authors analyse the Silesian region, arguing that the interplay between the endogenous IT services sector and the exogenous, foreign investment-driven automotive industry has shaped a new regional growth trajectory. This synergy supported adaptation to Industry 4.0, though recent plant closures by Stellantis, Shiloh Industries, Siro, Hutchinson, and Aptiv in the Bielsko subregion indicate a phase-out in the automotive sector.

coexistence of modernisation and stagnation within a single regional system, which can partly result from a temporal lag in the adoption of structural change concepts.

Overall, the Silesian case confirms that structural change in OIRs is neither linear nor uniform. It is shaped by path dependence, temporal misalignment, and symbolic adaptation. Recognising these dimensions is vital for designing context-sensitive, temporally aware policies capable of fostering genuine transition rather than reproducing symbolic compliance with evolving development paradigms.

Conclusions

Collectively, these findings suggest that *window dressing* in the programming of structural change in OIRs, such as the Silesian region, often manifests through the production of strategic documents that are formally impressive but unevenly applied in practice. While some regions have successfully leveraged these documents and associated development or transition concepts as genuine opportunities for learning and reform, the persistence of formalistic approaches indicates that the transformative potential of policy remains uneven. Understanding window dressing not merely as bureaucratic inertia but as a systemic feature linked to temporal lags in adopting contemporary structural change concepts provides critical insight into the functioning of multilevel policy programming. It challenges scholars and policymakers to distinguish between procedural compliance and meaningful change, and between *doing things right* and *doing the right things*.

The temporal lag in adopting modern structural change concepts, compounded by path-dependence effects in OIRs, calls for improvements in regional policy programming and further research. Based on these insights, several recommendations can be formulated:

- **Evidence-based diagnosis and independent evaluation:** Effective and timely assessment of structural changes at subregional levels is essential to identify the dynamics of regional development. Without robust diagnosis, the selection of development concepts and accompanying policies is prone to symbolic implementation. Establishing independent policy evaluation agencies and introducing clear standards can transform evaluations from legitimising rituals into instruments of genuine accountability.
- **Flexibility in high-level programming and place-based approaches:** Policies formulated at the European or national level should incorporate greater flexibility to enable lagging regions to adapt development concepts to their specific path-dependent and institutional conditions. Such flexibility enhances coherence within multilevel governance while supporting the gradual development of adaptive capacity. Regional programming should emphasise bottom-up, place-based approaches, allowing regions to align general development frameworks (e.g., resilience, green economy) and specific transitions (e.g., just transition, energy transition) with local realities. In cases where a temporal lag exists, targeted institutional support for adaptive measures and knowledge acquisition becomes essential.
- **Institutionalised participatory mechanisms:** Deliberative mechanisms such as citizens' panels, stakeholder assemblies, and future literacy labs (UNESCO, 2023) should be institutionalised to carry real decision-making weight. Providing financial and organisational support for civil society actors ensures meaningful participation rather than token consultation. Moreover, embedding assessments of participatory quality into institutional audits strengthens accountability and the impact of engagement.
- **Enhanced sectoral-regional coordination:** In OIRs, sectoral policies – often run by the central government – can strongly shape structural change and generate significant socio-economic impacts. Misalignment between sectoral and regional programmes, including temporal lags, may lead to conflicting objectives, inefficiencies, and uneven outcomes. Regional policy should therefore introduce systemic coordination mechanisms, such as formal dialogue structures between central ministries and regional authorities, joint planning committees, and integrated multilevel governance frameworks incorporating regular consultation, impact assessments, and feedback loops.

Implementing these measures would not only improve the alignment of development concepts with the realities of sensitive regions such as OIRs but also enhance the effectiveness of regional

interventions. By combining evaluation, adaptive policy design, meaningful participation, and coherent multilevel governance, policymakers can reduce the risk of window dressing, foster more balanced socio-economic development, and maximise the transformative potential of structural change programmes.

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