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ARTIFICIAL INTELLIGENCE AND THE NEW SOCIAL CONTRACT: PRODUCTIVITY, INEQUALITY, AND THE FUTURE OF INCLUSIVE GROWTH IN A GLOBAL CONTEXT

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ABSTRACT

Artificial intelligence (AI) is not merely a technological innovation but an applied political-economic shock that is reshaping governance arrangements, labor markets, and the distributive foundations of modern economies. By transforming productivity processes and altering how growth is transmitted to households, AI is reconfiguring the relationship between states, firms, and workers. While macroeconomic projections suggest that AI could increase total factor productivity by approximately 0.25–0.6 percentage points annually, early empirical evidence indicates that realized gains are more modest and highly uneven reflecting differences in sectoral exposure, firm-level capabilities, and institutional capacity. Based on an integrative review spanning applied economics, labor-market analysis, and public policy, this paper shows that AI-driven productivity gains remain concentrated in a small number of large, data-intensive firms and advanced sectors. Workers in high-skill, AI-complementary occupations experience productivity and wage gains, whereas routine and middle-skill jobs face task displacement, intensifying labor-market polarization. These outcomes, however, are not technologically deterministic. They are mediated by labor-market institutions, wage-setting mechanisms, and the strength of social protection systems. In contexts characterized by weak collective bargaining and limited redistributive capacity, productivity growth increasingly decouples from wage growth, constraining aggregate demand and amplifying inequality. Consistent with applied political economy

accounts of secular stagnation, suppressed income transmission undermines consumption-led growth, while rising market concentration and technology rents further skew income distribution. The paper argues that harnessing AI for inclusive growth requires policy interventions centered on education and continuous reskilling, active labor-market policies, fair taxation of digital rents, and coordinated AI governance. By treating AI as an institutionally mediated economic shock, this study explains why similar technologies generate divergent distributional outcomes across political and economic systems.

KEYWORDS: Artificial Intelligence; AI-Driven Productivity; Labor Market Polarization; Income Inequality; Social Contract; Inclusive Growth; Algorithmic Governance; Technological Change and Institutions.

1. INTRODUCTION

Recent advances in artificial intelligence (AI) have renewed expectations of a productivity acceleration comparable to earlier technological revolutions. Owing to its general-purpose character—combined with increasing autonomy and capacity for continuous self-improvement—AI is widely viewed as a potential catalyst for reversing sluggish productivity growth across a broad range of industries (Filippucci et al., 2024; Organisation for Economic Co-operation and Development [OECD], 2019). Early modelling exercises by OECD economists suggest that, under favorable diffusion scenarios, AI adoption could raise annual productivity growth by approximately 0.4–0.9 percentage points (Filippucci et al., 2024). Yet historical experience with earlier general-purpose technologies cautions against overly optimistic expectations. A well-documented "productivity paradox" indicates that substantial firm-level efficiency gains often fail to translate rapidly into broad-based macroeconomic growth. One explanation lies in the interaction between technological change and market structure: innovation at the frontier can reinforce market power, increase markups, and concentrate rents, thereby dampening aggregate productivity spillovers (De Loecker, Eeckhout, & Unger, 2020). Relatedly, innovation-driven growth may disproportionately benefit top income groups, contributing to rising inequality and limiting diffusion through demand channels (Akcigit & Aghion, 2021). Consistent with this pattern, recent OECD analyses emphasize that AI's aggregate productivity effects are likely to remain uncertain and uneven in the near term, shaped by firm capabilities, sectoral heterogeneity, and institutional contexts (Filippucci et al., 2024; OECD, 2019). At present, AI-driven innovation remains highly concentrated in a small number of large technology firms with privileged access to data and computing resources, while adoption continues to vary markedly across sectors and countries. At the same time, artificial intelligence is reshaping labor markets in ways that echo earlier episodes of skill-biased technological change, but with important new characteristics. Unlike previous waves of automation that primarily targeted routine manual tasks, contemporary AI increasingly affects non-routine cognitive activities, expanding the scope of potential disruption across a wider range of occupations (Gmyrek et al., 2023). Advances in large language models and related algorithms are now encroaching on traditionally white-collar domains such as law, journalism, and computer programming, challenging the long-standing assumption that technological displacement would be largely confined to low-skill jobs (Eloundou et al., 2023). Evidence from task-based and exposure-based analyses further indicates substantial heterogeneity across occupations: while some roles face high potential exposure to AI-driven automation or augmentation, others remain comparatively insulated due to their reliance on interpersonal interaction, judgment, or context-specific knowledge (Felten, Raj, & Seamans, 2021). Together, these findings suggest that generative AI broadens the reach of technological change beyond traditional automation pathways, reinforcing the need to reassess labor-market adjustment, skill formation, and institutional responses in the context of rapidly evolving AI capabilities. At the same time, emerging empirical evidence suggests that generative AI is more likely to augment most occupations rather than fully eliminate them *(Bessen et al., 2025; Gmyrek et al., 2023)*. This augmentation, however, is unevenly distributed. High- and upper-middle-income countries—where clerical and administrative occupations are more prevalent—face the greatest exposure to generative AI, particularly in female-dominated roles. The resulting pattern points toward labor-market polarization: workers whose skills complement AI, especially those at the upper end of the skill distribution, are more likely to experience wage gains, while routine and middle-skill roles face contraction, raising renewed concerns about inequality.

These economic shifts raise a broader question concerning the social contract: the implicit bargain linking technological progress to shared prosperity. The mid-twentieth-century social contract rested on the assumption that productivity gains would translate into rising wages, stable employment, and upward mobility. Over recent decades, however, this bargain has weakened as institutions have failed to keep pace with rapid technological and economic change. Declining unionization, rising capital intensity, and the erosion of standard full-time employment relationships have reduced workers' ability to capture a share of productivity gains. A growing body of scholarship warns that, in the absence of renewed institutional arrangements, artificial intelligence could amplify macroeconomic instability, intensify recessionary pressures, and heighten social unrest *(Bénabou, 2024; Occhipinti et al., 2024)*. Indeed, recent analyses explicitly call for a renewed social contract—anchored in progressive taxation, public investment, and strengthened

redistribution mechanisms—to ensure that AI-driven growth is translated into broad social welfare rather than concentrated economic gains.

At the same time, the global governance landscape surrounding AI is evolving. International initiatives increasingly emphasize human-centric approaches to AI governance. The OECD's Principles on Artificial Intelligence, the G7 Hiroshima Process, and successive G20 declarations all stress transparency, accountability, and the pursuit of inclusive and sustainable development *(Organisation for Economic Co-operation and Development [OECD], 2019; G20, 2024)*. Reflecting this orientation, G20 leaders in 2024 reaffirmed AI's role as a catalyst for inclusive sustainable development and committed to broadening access to its benefits. This emerging international consensus signals a growing recognition that ethical values, institutional design, and governance frameworks must actively shape AI's trajectory rather than follow it.

In this paper, we synthesize multidisciplinary research on AI, productivity, and labor to explore these themes. We develop a conceptual framework with three pillars – the *generation* of AI-driven gains, the *transmission* via labor markets, and the *mediating* role of institutions – all under the umbrella of the evolving social contract. Building on economics, labor studies, public policy and ethics, we show how productivity improvements can translate (or fail to translate) into societal outcomes. Section 3 reviews key literatures on AI's economic effects, labor impacts, and institutional context. Section 4 explains our qualitative integrative methodology. Section 5 (Discussion) presents synthesized findings. We then draw out theoretical implications (Section 6), discuss limitations and future research (7), outline practical and managerial implications (8), and conclude (9) with policy recommendations for ensuring AI benefits all.

2. LITERATURE REVIEW AND RESEARCH GAP

AI as a productivity driver. Artificial intelligence is frequently characterized as a new general-purpose technology (GPT) with the potential to accelerate innovation and long-term economic growth (Filippucci et al., 2024). Similar to earlier GPTs such as electricity and information and communication technologies, AI is expected to generate productivity gains not only through direct efficiency improvements but also through wide-ranging complementarities with skills, organizational practices, and intangible capital (Crafts, 2021). A defining feature emphasized in the recent literature is AI's capacity for autonomy and continuous self-improvement, which distinguishes it from previous digital technologies and underpins expectations that it could help overcome persistent productivity slowdowns in advanced economies. At the same time, existing research cautions against overly optimistic expectations regarding the speed and breadth of these gains. Historical experience with earlier GPTs suggests that productivity effects often follow a delayed "J-curve," as firms and economies require time to invest in complementary intangibles, adapt organizational structures, and reorganize production processes (Brynjolfsson, Rock, & Syverson, 2021). Consistent with this perspective, OECD assessments underline substantial uncertainty surrounding AI's long-term productivity impact, particularly at the aggregate level. Macroeconomic simulations based on general-equilibrium models indicate that, even under favorable diffusion scenarios, AI may raise total factor productivity by no more than around 0.6 percentage points annually. Consequently, while AI is likely to contribute positively to productivity growth, the scale of its impact remains contingent on diffusion dynamics, complementarities with human capital and organizational change, and the broader institutional environment. Several factors help explain why observed productivity gains have so far remained modest. A central challenge is measurement: conventional national accounts tend to understate the contribution of intangible AI-related assets such as data, software, and process innovations. Many AI-enabled services—such as search engines or digital assistants—are provided at zero monetary price or bundled with other products, limiting their direct reflection in GDP statistics. In addition, diffusion lags and adjustment costs slow the translation of firm-level efficiency gains into economy-wide productivity growth. Even when a subset of frontier firms experiences substantial performance improvements, the broader diffusion of these gains across sectors typically takes time. Organizational inertia, skill mismatches, and the costs of workforce retraining further delay the realization of aggregate productivity benefits from AI adoption. Overall, the literature converges on the view that, despite AI's status as a GPT, its economy-wide productivity effects are likely to materialize gradually and will depend critically on sustained investment and supportive policy frameworks *(Filippucci et al., 2024; Organisation for Economic Co-operation and Development [OECD], 2019)*.

Task reallocation and labor polarization. Early research on automation already documented a shift

from occupation-based to task-based analysis, emphasizing that technological change tends to restructure the content of jobs rather than eliminate entire occupations outright (Autor, 2015). Recent advances in artificial intelligence reinforce this perspective. A growing body of empirical research finds that AI-driven automation primarily redistributes tasks within jobs, rather than leading to widespread occupational disappearance *(Bessen et al., 2020; Gmyrek et al., 2023)*. In practice, generative AI systems and robotics automate specific components of work—particularly routine or codifiable tasks—while enabling human workers to concentrate on complementary activities such as supervision, problem-solving, and creative or interpersonal tasks. Consistent with this pattern, an International Labour Organization (ILO) analysis concludes that "the overwhelming effect [of generative AI] will be to augment occupations, rather than to automate them". As a result, many workers are likely to experience substantial changes in job content—such as reduced clerical work and greater emphasis on judgment or oversight—even when their formal occupational titles remain unchanged.

These task-level adjustments generate uneven effects across the labor market. An emerging consensus in the literature suggests that AI is likely to polarize skill demand *(Bessen et al., 2020; Georgieff, 2024)*. Workers performing tasks that complement AI technologies—typically those with higher levels of education and specialized skills—can experience productivity gains and corresponding wage increases, while routine and middle-skill roles face relative decline. At the same time, recent evidence indicates that occupations with higher exposure to AI have, so far, exhibited smaller wage dispersion between top and bottom earners, implying that within-occupation inequality has not necessarily increased and may even have narrowed in some cases *(Georgieff, 2024)*. This pattern, however, does not eliminate broader distributional concerns. As routine and middle-skill tasks are automated, displaced workers may be forced to transition into lower-productivity sectors, creating risks of structural unemployment or underemployment if expanding sectors—such as care or personal services—fail to absorb them. This dynamic closely mirrors the polarization observed during earlier technological revolutions, in which a small group of highly rewarded innovators and specialists coexisted with a broad middle tier facing downward wage and employment pressure.

Changing nature of work and job quality. Beyond its effects on employment levels and wages, artificial intelligence is reshaping the quality of work itself and the degree of autonomy workers retain over their tasks. A growing body of research in labor relations and management studies documents the risks associated with algorithmic management, digital surveillance, and data-driven control of labor processes, particularly when AI systems are used to monitor performance, allocate tasks, or discipline workers in real time (Aloisi, 2024; Doellgast et al., 2023). Even where AI augments rather than replaces jobs, the way these technologies are implemented is decisive. When employers deploy AI to intensify monitoring, algorithmically pace work, or tightly script labor processes—such as through voice-directed picking systems in warehouses—worker discretion, professional judgment, and agency can be substantially eroded (Aloisi, 2024; Moore & Joyce, 2020).

Organizational research further emphasizes that algorithmic systems can reconfigure power relations at work by obscuring managerial authority behind opaque technical processes, limiting workers' ability to contest decisions or exercise meaningful voice (Kellogg, Valentine, & Christin, 2020). These dynamics raise broader concerns regarding privacy, accountability, and the fragmentation of work into standardized, low-paid microtasks. Several scholars argue that existing labor standards and data-protection frameworks are poorly equipped to address these challenges, particularly as AI-mediated management expands beyond traditional employment relationships. This gap is especially evident in platform-based and gig work, where AI-enabled coordination often places workers outside conventional legal protections and social benefits (Pisani, 2023). Although such qualitative transformations of work are not easily captured by aggregate indicators such as GDP, they are central to evaluating AI's broader social consequences and are closely intertwined with debates on ethics, dignity, and social justice in the digital economy.

The social contract and institutions. A central theme in recent scholarship concerns the role of the social contract in mediating the relationship between technological progress and societal outcomes. The postwar industrial-era social contract was premised on the expectation that productivity growth would translate into stable employment, rising wages, and broad-based improvements in living standards. As Bénabou (2024) and others note, this arrangement has gradually eroded across many advanced economies. Processes such as globalization, labor-market deregulation, and the decline of collective representation have weakened workers' bargaining

power and contributed to a distribution of efficiency gains that increasingly favors capital and highly skilled labor over the workforce at large (Bénabou, 2024; Occhipinti et al., 2024).

Empirical evidence underscores this decoupling between productivity and shared prosperity. Longitudinal analyses of automation-induced displacement, for example, show that affected workers can experience persistent earnings losses even in relatively protective institutional settings. A study of displaced workers in the Netherlands finds wage losses of roughly 9 percent over a five-year period following automation shocks, despite the presence of a comparatively strong welfare state (Bessen et al., 2020). Similar patterns are observed in the United States, where automation has raised productivity but also contributed to job displacement and regional labor-market divergence (Acemoglu & Restrepo, 2020). These findings suggest that, in the absence of active redistribution and institutional adaptation, technological progress can weaken the link between productivity growth and mass prosperity.

Recent contributions therefore argue that institutions must evolve if societies are to manage AI-driven transformation effectively. Education and reskilling are necessary components of adjustment but are insufficient on their own when labor-market institutions and social policies fail to keep pace with technological change. Drawing on historical and contemporary evidence, Burger (2024) emphasize that the distributional consequences of technology are shaped less by technological inevitability than by power relations and institutional choices. A growing body of research further highlights how the expansion of platform work and the erosion of collective labor representation have heightened workers' exposure to AI-related risks, strengthening the case for reforms in social protection systems—such as unemployment and wage insurance—alongside renewed collective bargaining and active labor-market policies (De Stefano & Doellgast, 2023; Occhipinti et al., 2024).

In this context, the International Labour Organization (ILO) identifies social dialogue as a key mediating mechanism. The Employment Protection Convention (No. 158) and subsequent empirical evidence indicate that mandatory employer–worker consultation during technology-induced restructuring can mitigate displacement costs and facilitate smoother transitions (International Labour Organization, 2023). In practice, stronger worker voice and negotiated adjustment mechanisms—through trade unions, works councils, or similar institutions—can steer AI adoption toward improved job quality, retraining, and redeployment rather than abrupt job termination.

International governance and values. Beyond national labor institutions, scholars emphasize that AI raises fundamentally cross-border governance challenges. Regulatory approaches vary widely across jurisdictions: some emphasize binding, risk-based regulation, such as the European Union's AI Act, while others rely primarily on voluntary ethical guidelines. This fragmented landscape has raised concerns about regulatory arbitrage and a potential "race to the bottom" in labor and data-protection standards. From an international perspective, many existing initiatives function largely as soft-law coordination mechanisms rather than enforceable regimes, seeking to shape shared expectations without formal legal harmonization. Several commentators warn that, in the absence of effective coordination, developing countries may find themselves constrained by externally imposed standards, thereby reinforcing global digital divides *(Callegari & Alaamer, 2025; Takemi, 2024)*. In response, emerging international norms increasingly emphasize global human values. The OECD Principles on Artificial Intelligence explicitly call for AI systems that promote inclusive growth and seek to reduce economic, social, and gender inequalities *(Organisation for Economic Co-operation and Development [OECD], 2019)*, while also requiring respect for human rights, human dignity, and labor rights throughout the AI lifecycle *(OECD, 2019)*. Similarly, the G20's 2024 Maceió Declaration urges governments to harness AI as a driver of inclusive sustainable development and commits to narrowing technological gaps between countries *(G20, 2024; Callegari & Alaamer, 2025)*. Taken together, this literature converges on the view that AI's technical and economic dimensions cannot be separated from ethical and political considerations; achieving a fair AI future requires embedding global human values within robust institutional and governance frameworks.

Synthesis: Overall, existing research paints a complex picture: AI is capable of generating significant productivity gains, but those gains are uneven and contingent on context. Much of the literature echoes one central insight: AI itself is not destiny – outcomes depend on how societies manage the transition. In the next section, we explain our analytical approach to integrating these strands and deriving cohesive insights about AI's economic and social impact.

3. METHODOLOGY

3.1. Research Design

This study adopts a qualitative integrative review methodology to synthesize the rapidly evolving literature on artificial intelligence (AI), productivity, labor markets, and public policy. Given the inherently multidisciplinary nature of the research question—and the still-limited availability of harmonized datasets capturing the post–generative-AI period—the analysis does not pursue a narrow econometric identification strategy. Instead, the existing literature is treated as empirical material in its own right, allowing for the systematic integration of theoretical, empirical, and normative insights drawn from economics, labor studies, public policy, and ethics. The objective is not descriptive aggregation, but analytical synthesis: to develop a middle-range theoretical framework linking AI-driven productivity shocks to institutional variation in distributional outcomes. Concretely, the research proceeded in three stages.

First, a **systematic literature survey** was conducted covering English-language academic articles, policy reports, and working papers published between approximately 2019 and 2024. The search focused on AI's macroeconomic effects, labor-market implications, inequality, and governance, with particular attention to recent studies addressing generative AI. Priority was given to contributions from established international organizations (e.g., OECD, ILO, IMF) and leading peer-reviewed journals.

Second, **source selection** followed substantive relevance rather than methodological uniformity. Included works provided direct insights into AI-induced productivity change, workforce transformation, social policy, or institutional governance. Both quantitative analyses (such as productivity simulations or exposure measures) and qualitative or conceptual studies were retained, alongside selected contributions from adjacent fields, including digital labor studies and AI ethics frameworks.

Third, a **thematic analysis** was undertaken. Each source was coded according to a three-pillar framework: (a) productivity generation, capturing mechanisms through which AI produces efficiency gains; (b) labor-market transmission, examining effects on employment, tasks, and wages; and (c) institutional mediation, focusing on how policies, bargaining systems, and social contracts shape distributional outcomes. These categories were iteratively refined as patterns and causal mechanisms emerged across the literature.

Fourth, **Integration and Synthesis.** Guided by a constructivist–realist epistemology, the analysis focused on identifying general patterns, mechanisms, and institutional regularities rather than producing precise causal estimates. Findings were systematically compared across political and economic contexts, including advanced versus emerging economies and sectors with high versus low exposure to AI technologies. This comparative strategy allowed us to distinguish areas of broad consensus from zones of empirical uncertainty and scholarly debate. Where direct evidence remains limited—particularly in relation to the post–generative-AI period—the analysis drew on established theoretical arguments and historically analogous episodes of technological change to infer plausible mechanisms and boundary conditions.

Fifth, Social Contract Lens. Crucially, the synthesized evidence was interpreted through the lens of an evolving social contract. Rather than treating AI's impacts as purely economic outcomes, the analysis explicitly examined the implied reconfiguration of mutual obligations among technology producers, labor, the state, and society. Classical social contract principles—such as fairness, reciprocity, and risk sharing—were used to frame how productivity gains are expected to translate into social protection, employment security, and distributive justice. This lens provided a unifying interpretive framework, linking micro-level technological change to macro-level institutional legitimacy and social cohesion, and anchoring the study's conclusions in applied political economy concerns about governance, accountability, and inclusive growth.

3.2. An Integrative Qualitative Approach: Source of Relevance for This Study

The methodological choice is deliberate. While econometric and simulation-based approaches are indispensable for estimating specific magnitudes, they remain constrained by data lags, measurement challenges, and strong structural assumptions in the context of frontier AI technologies. An integrative qualitative approach is therefore better suited to capturing mechanisms, institutional interactions, and distributional pathways that are central to understanding how AI-driven productivity gains translate— or fail to translate—into inclusive growth within a renewed social contract.

3.3. Methodological Positioning

To situate this approach within the broader AI

economics literature, Table 1 provides a comparative overview of dominant methodological strategies and clarifies their respective strengths, limitations, and relevance to the present study.

Table 1: Comparative Overview of Methodological Approaches to Studying AI, Productivity, And Distribution.

Methodological Approach	Typical Use in AI Literature	Strengths	Limitations	Relevance to This Study
Econometric panel studies	Estimating AI adoption effects on productivity, wages, or employment	Causal inference; quantitative precision	Data lags; weak AI proxies; largely pre–generative-AI	Used as input evidence, not primary method
Macro simulation models (GE / DSGE)	Projecting long-run productivity or growth impacts	Internal consistency; scenario analysis	Strong assumptions; limited distributional detail	Inform background productivity ranges
Firm-level case studies	Understanding organizational AI adoption	Rich contextual insight	Limited generalizability	Used selectively to illustrate mechanisms
Policy and institutional analysis	Evaluating labor regulation and social protection	Captures institutional mediation	Often fragmented or normative	Central to social-contract analysis
Ethical and normative frameworks	Assessing fairness, dignity, and human values	Clarifies societal objectives	Limited economic operationalization	Integrated with economic analysis
Qualitative integrative review (this study)	Synthesizing mechanisms across disciplines	Holistic; mechanism-focused; policy-relevant	No point estimates	Best suited to linking AI, productivity, inequality, and institutions

Source: Author Synthesis.

4. DATA ANALYSIS

4.1. Literature Mapping and Selection

Building on this methodological positioning, the study conducted a systematic review of English-language academic articles, policy reports, and working papers published between approximately 2019 and 2024 addressing AI's macroeconomic effects, labor-market impacts, inequality, and institutional implications. Priority was given to contributions from leading international organizations (notably the OECD, ILO, and IMF) and high-quality peer-reviewed journals, with explicit inclusion of recent work on generative AI.

Sources were retained if they provided substantive insights into at least one of the following dimensions:

- AI-induced productivity change,
- labor-market adjustment and job quality,
- inequality and income distribution, or
- governance, regulation, and social protection.

The resulting corpus therefore includes both quantitative analyses (e.g. productivity simulations and wage studies) and qualitative or conceptual contributions (e.g. digital labor research and AI ethics frameworks). To ensure transparency and analytical coherence, the core literature informing the analysis was mapped and classified according to domain, method, substantive focus, and analytical contribution. Table 2 summarizes the key strands of the literature and clarifies how each informs the conceptual framework developed in this study.

Table 2: Comparative Synthesis of Key Literature Informing the Analysis.

Author(s) & Year	Domain	Method	Core Focus	Key Insight	Role in This Study
Filippucci et al. (2024)	Macroeconomics	GE simulations (OECD)	AI and productivity	Moderate but conditional productivity gains	Productivity benchmark
Georgieff (2024)	Labor economics	Wage analysis	AI exposure and inequality	Polarization risks	Distributional channel
Gmyrek et al. (2023)	Labor markets	Task-based analysis	Generative AI and jobs	Task reallocation dominates	Labor transmission
Bessen et al. (2020)	Labor economics	Longitudinal microdata	Worker displacement	Persistent wage losses	Adjustment limits
OECD (2019)	Governance	Normative framework	Human-centric AI	Inclusive growth imperative	Ethical anchor
G20 (2024)	Global governance	Policy declaration	Inclusive AI development	Need for coordination	Global social contract
Occhipinti et al. (2024)	Macroeconomics	Theoretical analysis	AI and demand	Capital bias risks	Macro-social risk

Source: Author Synthesis.

4.2. Analytical Framework and Synthesis Procedure

Each source was coded according to a three-pillar analytical framework:

1. Productivity generation – how AI creates

efficiency gains and growth potential;
2. Labor-market transmission – how these gains affect employment, wages, and job quality;
3. Institutional mediation – how policies, norms, and governance structures shape distributional outcomes.

Themes were iteratively refined to reflect areas of consensus, disagreement, and empirical uncertainty. Adopting a constructivist–realist epistemological stance, the analysis emphasizes recurring mechanisms and conditional relationships rather than precise causal magnitudes. Findings are compared across contexts—advanced versus emerging economies and high versus low AI exposure sectors—to highlight heterogeneity and boundary conditions. Where empirical evidence remains limited, particularly for the generative-AI era, the analysis draws on theoretical reasoning and historically analogous technological transitions.

4.3. Social Contract Lens

Finally, the synthesized evidence is interpreted through the lens of an evolving social contract. This involves explicitly examining the implied mutual obligations between technological progress, economic organization, and societal welfare, drawing on classical principles of fairness, reciprocity, and shared prosperity to frame the study's conclusions.

4.4. Methodological Contribution

By combining comparative evidence across disciplines within a transparent analytical structure, this methodology delivers a holistic and policy-relevant understanding of AI's economic and social consequences. It avoids overreliance on any single dataset or model and foregrounds the contingent role of institutions and governance in translating AI-driven productivity gains into inclusive growth. In doing so, the methodology extends existing scholarship by systematically connecting previously fragmented literatures within a unified social-contract framework.

5. DISCUSSION

Grounded in the qualitative integrative methodology outlined in the previous section, the discussion synthesizes evidence across macroeconomic, labor-market, institutional, and governance literatures to identify recurring mechanisms and conditional relationships, rather than isolated empirical effects. By comparatively analyzing findings across methodological traditions, sectors, and country contexts, the discussion traces how AI-driven productivity gains are generated, transmitted through labor markets, and ultimately mediated by institutions within an evolving social contract. The preceding analysis therefore yields several converging insights about AI's economic and social impact. In what follows, we present the main findings of this synthesis, highlighting both opportunities and risks, and explicitly linking observed outcomes to the institutional and distributional pathways identified through the integrative review. The preceding analysis yields several converging insights about AI's economic and social impact. In what follows, we present the main findings of our synthesis, highlighting both opportunities and risks. AI's productivity dividends appear real but highly skewed. Across the literature, productivity gains from artificial intelligence appear to be highly concentrated within a relatively small segment of the economy. Firms equipped with advanced data infrastructure, computational capacity, and specialized AI talent capture a disproportionate share of the benefits. Consistent with this pattern, OECD economists note that AI-driven progress remains largely concentrated in a limited number of large technology firms and is diffusing only gradually across the broader economy *(Filippucci et al., 2024)*. Empirical evidence reinforces this observation: high-productivity sectors such as digital services and finance have exhibited faster output growth, while productivity improvements among lagging firms have remained modest. Therefore, aggregate productivity growth may increase only incrementally despite substantial efficiency gains at the firm level. Macro-model simulations support this interpretation, projecting moderate aggregate effects—up to approximately 0.9 percent annual labor productivity growth—under scenarios of widespread AI adoption *(Filippucci et al., 2024)*. However, these projections typically assume significant catch-up by less productive firms. In practice, organizational frictions, skill shortages, and adjustment costs constrain diffusion, helping to explain why observed aggregate productivity effects have thus far been uneven and limited.

AI also influences market structure. Technology consolidation means that major AI platforms may extract outsized rents, potentially dampening competition. Higher concentration can reinforce inequality: if productivity gains accrue mainly to capital owners in tech hubs, then labor's share stagnates. Our review underscores this: when AI gains are captured by a few, overall wage growth can decouple from output growth. This pattern is reminiscent of recent trends in advanced economies

(declining labor share). Unless countered by policy (e.g. antitrust or data-sharing mandates), concentration may persist, making the social contract more tenuous.

Turning to labor markets, the literature indicates that artificial intelligence is reshaping tasks and job content rather than producing large, immediate changes in overall employment levels. A broad consensus holds that AI tends to augment existing occupations by automating specific tasks while leaving others to be performed by human workers *(Bessen et al., 2020; Gmyrek et al., 2023)*. In practice, this often involves task reconfiguration within jobs—for example, customer service roles may shift away from handling routine inquiries toward managing complex cases and exceptions with AI support. Such transformations can alter job quality in both positive and negative ways. While many workers benefit from enhanced productivity tools, they may simultaneously face increased work intensity, monitoring, or performance pressure. The International Labour Organization (ILO) emphasizes that these technological transitions are most effectively managed when workers are actively involved in the adoption process. Evidence from countries with strong traditions of workplace dialogue—such as the Nordic economies—suggests that social dialogue and worker participation are associated with more adaptive and inclusive responses to automation *(International Labour Organization, 2023)*.

Despite the predominance of task augmentation, the net distributional effect of artificial intelligence appears to lean toward skill polarization. High-skill workers—such as AI researchers, data analysts, and creative professionals—tend to complement AI technologies and are therefore more likely to experience productivity gains and rising wages. By contrast, occupations characterized by routinized tasks, including clerical work, certain manufacturing roles, and basic accounting functions, face a higher risk of relative decline. Evidence from the period preceding the widespread diffusion of generative AI illustrates this dynamic. In particular, occupations with greater exposure to AI technologies were found to exhibit reduced wage dispersion between top- and bottom-earning workers, suggesting that mid- and low-wage workers within those occupations did not fall further behind their higher-paid peers *(Georgieff, 2024)*. However, this evidence is based on data from 2014–2018 and may not fully capture the effects of more recent generative AI tools. Importantly, even where within-occupation wage gaps narrow, the overall skill premium across the economy may still widen, as higher-end occupations pull further ahead while displaced workers transition into lower-productivity sectors, thereby exacerbating aggregate inequality.

Another critical channel through which AI affects economic outcomes is aggregate demand. If productivity gains generated by AI accrue primarily to capital owners rather than translating into broad-based income growth, consumption may fail to keep pace with output. The synthesis of existing studies suggests that this is a non-trivial risk. As one analysis argues, when AI-related efficiency gains disproportionately benefit capital, aggregate demand may lag behind productive capacity, necessitating fiscal intervention to stabilize economic activity *(Occhipinti et al., 2024)*. In more extreme scenarios, a sustained imbalance between AI-augmented capital and labor income could give rise to a self-reinforcing cycle of weak demand and recurrent recessionary pressures *(Bénabou, 2024)*. Without redistributive mechanisms—such as progressive taxation, wage subsidies, or public investment—productivity growth alone is therefore unlikely to translate into broad improvements in economic well-being.

This is precisely where institutions and social policy become decisive. A robust social contract can internalize some of the distributional externalities generated by AI-driven technological change. Strong collective bargaining institutions and progressive tax systems, for example, can help reallocate a portion of AI-related productivity gains to the wider population. Research by the International Labour Organization (ILO) emphasizes that negotiated retraining arrangements and income-support measures—embedded either in legislation or collective agreements—can substantially mitigate the adverse effects of technology-induced layoffs *(International Labour Organization, 2023)*. Similarly, public investment financed through AI-related tax revenues, including investments in infrastructure and the green transition, can help sustain aggregate demand and social welfare. In the absence of such institutional responses, the literature suggests that outcomes may deteriorate, with stagnant real wages for the majority of workers coexisting alongside rapidly rising executive compensation, thereby undermining social cohesion.

Beyond purely economic mechanisms, ethical and human values are deeply intertwined with these dynamics. Transparency, accountability, and justice emerge as recurring themes across the governance literature. International guidelines developed by the Organisation for Economic Co-operation and

Development emphasize that AI development should actively advance the inclusion of underrepresented populations and contribute to the reduction of economic, social, and gender inequalities *(Organisation for Economic Co-operation and Development [OECD], 2019)*. The present synthesis confirms that such values are not merely normative add-ons but prerequisites for sustainable and inclusive growth. Public trust in AI—shaped by perceptions of fairness, accountability, and respect for privacy—plays a critical role in determining adoption rates and societal acceptance. International initiatives such as the G7 Hiroshima Process and UNESCO's AI ethics framework explicitly call for AI systems aligned with human rights and democratic values. This normative dimension implies that a renewed social contract for the AI era must encompass rights to data protection, non-discrimination, and meaningful voice at work, rather than focusing exclusively on economic performance indicators.

Finally, the global dimension of artificial intelligence is paramount. While advanced economies currently lead AI innovation and deployment, lower-income and developing countries face a significant risk of being left behind or bypassed altogether. These regions often encounter substantial barriers to capturing AI-related benefits, including gaps in digital infrastructure, shortages of relevant skills, and limited regulatory and institutional capacity. Such asymmetries reflect broader patterns in the global political economy, where technological leadership and the ability to set standards that later diffuse globally tend to be concentrated among a small number of advanced economies. The literature increasingly warns of a "new digital divide," whereby insufficient access to data, skills, and locally adapted regulatory frameworks leaves many developing countries shaped by externally defined rules and norms *(Callegari & Alaamer, 2025)*. International policy discourse has begun to acknowledge this risk. The G20, for example, has explicitly highlighted the need to narrow technological divides to ensure that AI serves the interests of all countries rather than reinforcing existing global inequalities *(G20, 2024)*. Taken together, these insights underscore the importance of international cooperation—through technology transfer, inclusive standard-setting processes, and multilateral policy forums—if AI is to contribute meaningfully to global objectives such as poverty reduction, education, and sustainable development.

In summary, the evidence reviewed in this study indicates that the economic and social consequences of artificial intelligence are highly conditional rather than technologically predetermined. AI holds genuine potential to enhance productivity and support long-run economic growth; however, in the absence of proactive policy intervention and institutional adaptation, these gains risk reinforcing existing inequalities instead of mitigating them. AI creates new productivity opportunities, but whether these opportunities translate into broad-based prosperity depends critically on the strength and design of the social contract. Education and skills systems, labor-market institutions, social protection frameworks, and global governance norms jointly mediate how AI-driven growth is distributed across societies.

Importantly, this institutional perspective aligns with emerging ethical frameworks that emphasize human-centered and inclusive approaches to AI development. Normative scholarship highlights that technological progress must be embedded within principles of fairness, accountability, and respect for human dignity if it is to contribute to a "good AI society" rather than exacerbate social fragmentation (Floridi et al., 2018). Similarly, international consensus reflected in UNESCO's Recommendation on the Ethics of Artificial Intelligence underscores the responsibility of governments and stakeholders to ensure that AI supports social justice, human rights, and inclusive development across countries and regions (UNESCO, 2021). Together, these perspectives reinforce the central conclusion of this study: AI-driven productivity growth can serve as a foundation for inclusive development only when guided by robust institutions, ethical governance, and a renewed social contract capable of translating technological progress into shared societal benefits. Our synthesis underscores that productivity growth alone is not destiny – it must be harnessed through a renewed social contract. The subsequent section draws out how this finding informs theory across fields.

Implications Of Theory

Our integrative analysis yields several theoretical contributions to understanding AI's role in society. Below we summarize key implications:

- **Reframing the social contract**. Classical social contract theory conceptualizes a pact between citizens and institutions in which technological and economic progress is exchanged for social welfare and collective security. We argue that this contract now requires an explicit extension into the digital domain. In practical terms, this implies the formulation of a "digital social

contract" that safeguards workers' rights over their data and employment conditions, while ensuring democratic oversight of algorithmic decision-making processes. This perspective aligns closely with contemporary global governance initiatives. The OECD Principles on Artificial Intelligence, alongside G20 and UNESCO statements, explicitly treat values such as fairness, transparency, and inclusion as foundational elements of AI governance (Organisation for Economic Co-operation and Development [OECD], 2019; G20, 2024). From a theoretical standpoint, our framework suggests that efficiency-based arguments alone are insufficient to evaluate AI-driven growth; instead, normative principles must be systematically integrated into economic analyses of productivity, distribution, and technological change.

- **Bridging disciplines**. By synthesizing insights from economics, labor studies, and ethics, this study advances a unified analytical lens for research on artificial intelligence. Economic models of productivity, for example, increasingly need to incorporate labor-market frictions, institutional constraints, and distributional feedback effects highlighted in the labor economics literature. Conversely, debates in ethics and AI governance gain analytical concreteness when linked to measurable economic outcomes, such as wage dispersion, employment stability, or the progressivity of tax and transfer systems. Building on political economy theories that connect technological change with inequality (e.g., Piketty; Autor), our contribution extends this tradition by explicitly integrating institutional and ethical dimensions into the analysis. This interdisciplinary approach underscores that AI-related outcomes are not technologically determined but are co-produced by technological capabilities and the social, institutional, and normative structures within which they are embedded.
- **Emphasizing Institutional Complementarity**. The findings highlight the theoretical importance of complementarity between institutions and technology. In other words, AI's effects are not exogenous but conditioned on policy regimes. This suggests enriching models of innovation with institutional variables. For example, growth models could incorporate union strength, corporate governance norms, or international treaties as parameters that shape the productivity-distribution trade-off. Such an approach extends theories of endogenous growth to include political and social infrastructure as fundamental factors.
- **Global public goods perspective**. The analysis further supports treating certain outcomes of artificial intelligence as global public goods—or global public bads—thereby underscoring AI governance as a domain that inherently requires collective action. Unilateral national strategies are unlikely to be sufficient for managing the cross-border economic, social, and political effects associated with the diffusion of AI technologies. Analogies with climate policy are instructive: just as countries negotiate shared frameworks to address transboundary environmental externalities, the global expansion of AI similarly calls for coordinated transnational governance. From a theoretical standpoint, this perspective implies that scholarship in international relations and global governance should increasingly conceptualize AI as a case of transboundary technology governance. The G20's framing of AI as a driver of inclusive development, together with its emphasis on international cooperation and capacity building, reflects this emerging understanding (G20, 2024). More broadly, the analysis suggests that future theory must account for the interaction between multi-level governance architectures and technological trajectories in shaping AI's global economic and social outcomes.
- **Ethics as Analytical Variable.** Finally, our synthesis foregrounds ethical principles as analytical factors rather than mere constraints. Concepts like human dignity, autonomy and justice directly influence which policies are feasible and how stakeholders behave. For example, corporate decisions on AI deployment may be influenced by social norms (workplace privacy expectations) and not purely profit calculus. Thus, theorizing about AI must include insights from ethical AI frameworks (e.g. algorithmic fairness literature) as drivers of economic dynamics. This integration of ethics into theory enriches both fields, offering more realistic models and normative clarity.

In sum, our theoretical contribution is to propose a value-infused political economy of AI. This perspective links productivity models with labor market theory and normative ethics, under a social contract schema. It invites future research to build formal models and hypotheses around these new links (e.g., how specific policies reshape AI's wage

curve). The next section discusses practical constraints and research gaps that accompany this theoretical agenda.

6. LIMITATIONS AND FUTURE RESEARCH

Our analysis is subject to several limitations, which also point to avenues for further study:

- **Qualitative Scope:** This study relies on secondary sources and conceptual synthesis rather than new empirical data. While this allows broad coverage, it cannot quantify effects precisely. Future research should test our propositions with empirical data – for example, firm-level studies on AI adoption and wages, or cross-country panel analyses of labor share trends in the AI era.
- **Evolving technology.** Artificial intelligence technologies are advancing at a rapid pace. The present review draws primarily on studies published up to 2024, which may not fully capture the economic and labor-market effects of the most recent generation of AI systems, including large language models such as GPT-4 and subsequent iterations. As a result, some empirical patterns identified in the literature may evolve as AI diffusion accelerates. Future research should therefore monitor the impacts of generative AI adoption on employment, wages, and inequality in near real time. This need is particularly salient given that existing OECD evidence on wage inequality and AI exposure relies largely on data from the 2014–2018 period and may not reflect post-2020 developments in AI deployment *(Georgieff, 2024; Organisation for Economic Co-operation and Development [OECD], 2019)*.
- **Contextual Variability:** The impacts of AI vary greatly by country, sector, and firm. Our high-level synthesis necessarily glosses over heterogeneity. For example, developing economies with large informal sectors might experience different dynamics than advanced economies. Detailed comparative studies are needed to understand how the social contract idea applies in diverse political and cultural settings.
- **Measurement Challenges:** Many AI contributions are hard to measure (as noted earlier), which hinders empirical analysis. Future work should develop better indicators of AI adoption and output, and incorporate intangible capital more effectively into growth accounting.
- **Policy Dynamics:** Finally, there is uncertainty about how quickly and effectively policies can adapt. Our recommendations assume that institutional reforms (e.g. stronger bargaining or social programs) are implementable. Research should examine political feasibility, including the interests of incumbent firms and workers, and how coalitions might form around an AI-era social contract.

In summary, while we have distilled key themes from current knowledge, the fast-changing nature of AI and its many open questions call for continuous research. In particular, interdisciplinary empirical studies testing the role of specific institutions (unions, data regulations, welfare systems) in mediating AI's effects would be highly valuable.

7. MANAGERIAL IMPLICATIONS

Our findings suggest several concrete actions for business and organizational leaders implementing AI:

Invest in human capital. Firms should proactively invest in training and upskilling their workforce to ensure that employees can adapt effectively to AI-enabled work environments. The Organisation for Economic Co-operation and Development emphasizes that stakeholders must empower individuals "to effectively use and interact with AI" through continuous learning and skills development *(Organisation for Economic Co-operation and Development [OECD], 2019)*. Managers should therefore design ongoing training programs and clearly articulated career pathways that enable workers to transition into AI-complementary roles, rather than facing displacement without adequate support.

Engage in social dialogue. Actively involving workers—and, where applicable, trade unions—in AI adoption and deployment plans is crucial for achieving sustainable outcomes. The International Labour Organization underscores that negotiation and consultation processes lead to better adjustment outcomes, noting that requirements for employer–worker consultation can "minimize the negative externalities" associated with technology-induced displacement *(International Labour Organization, 2023)*. In practice, firms can establish AI steering committees that include employee representatives, co-design job-redesign strategies, and ensure fair severance, retraining, or redeployment arrangements. Such collaborative approaches enhance organizational legitimacy and can reduce the risk of industrial conflict.

Promote transparency and accountability. Corporations should adopt clear and publicly

articulated policies for AI governance. International initiatives such as the Hiroshima AI Process encourage firms to disclose how they identify, manage, and mitigate AI-related risks. Participating organizations signal that they manage AI responsibly and align with evolving global expectations *(World Economic Forum, 2025)*. Firms can further build trust by voluntarily publishing AI ethics guidelines, audit outcomes, or algorithmic impact assessments, consistent with international principles of explainability and auditability.

Uphold ethical standards. Managers must ensure that AI systems respect labor rights, protect employee privacy, and avoid discriminatory outcomes. This requires translating OECD-style AI principles into operational practice, including bias mitigation, safeguards against intrusive monitoring, and respect for human dignity in algorithmic decision-making *(OECD, 2019)*. For example, when AI systems are used to assess worker performance, firms should ensure meaningful human oversight and provide mechanisms for review and appeal of automated decisions. Aligning AI deployment with social justice objectives can also strengthen organizational reputation and stakeholder trust.

Collaborate on governance. Firms should actively participate in multi-stakeholder governance initiatives at both national and international levels. Evidence from the ILO suggests that effective technological transitions depend on policy frameworks that are co-shaped by governments, employers, and workers *(International Labour Organization, 2023)*. Corporate engagement may include participation in industry consortia for standard-setting, constructive dialogue with regulators on fair AI rules, or contributions to shared data and compliance infrastructures. Through such engagement, firms can help develop outcome-based governance approaches that balance innovation with worker protection.

Share data and resources responsibly. Companies can further support inclusive innovation by contributing to open data initiatives, shared AI research consortia, or data-trust arrangements under appropriate safeguards. The OECD highlights the role of data trusts and open standards in democratizing access to AI capabilities and reducing excessive concentration *(OECD, 2019)*. Collaboration with academic institutions, public agencies, or non-profit organizations to develop non-proprietary AI tools for public-interest applications can help ensure that smaller firms and less-resourced actors also benefit from advances in AI.

By following these managerial practices – focusing on skills, fairness and stakeholder engagement – businesses can align AI deployment with the broader social contract. Not only does this mitigate risks (strikes, reputational damage), but it can also maximize AI's benefits: well-trained, engaged employees generate better results, and ethical practices can drive innovation acceptance.

8.CONCLUSION AND POLICY RECOMMENDATIONS

Artificial intelligence represents a structural inflection point for the global economy, comparable in scope to earlier general-purpose technologies but distinct in speed, scale, and institutional implications. This study has shown that AI possesses genuine potential to enhance productivity and long-term growth; however, the translation of these gains into broadly shared prosperity is neither automatic nor technologically determined. Rather, outcomes are contingent on the interaction between AI adoption patterns, labor-market institutions, and governance frameworks that collectively define the contemporary social contract.

The integrative analysis demonstrates that AI-driven productivity gains are currently highly uneven, concentrating in data-intensive firms and advanced sectors while diffusing only slowly across the wider economy. In the absence of complementary policies, this concentration risks reinforcing existing trends of labor share decline, market power consolidation, and aggregate demand weakness. At the same time, the literature indicates that AI is reshaping tasks more than eliminating jobs outright, creating opportunities for augmentation alongside risks of polarization, job-quality erosion, and unequal adjustment costs. These findings underscore a central conclusion of this study: AI is not destiny. Its economic and social effects are mediated by institutional choices that determine who benefits, who bears the adjustment costs, and how quickly societies adapt.

Reimagining the social contract for the AI era therefore emerges as the central policy challenge. A renewed social contract must explicitly reconnect productivity growth with social inclusion by ensuring that efficiency gains are shared through wages, employment opportunities, public investment, and social protection. This requires moving beyond narrow innovation policy toward a coordinated framework that integrates labor-market regulation, education and skills systems, fiscal policy, and ethical governance of AI technologies. International principles emphasizing fairness, transparency, and human rights are not peripheral

considerations but foundational conditions for sustainable AI-driven growth.

Equally important is the global dimension. Without international coordination, AI risks deepening digital divides between and within countries, leaving developing economies constrained by data gaps, infrastructure deficits, and externally imposed standards. In this sense, international cooperation around AI reflects the extension of domestic social contract concerns beyond national borders. Just as governments are expected to manage technological changes with the nation's public interest in mind, early policy choices in leading AI countries already shape the constraints and opportunities faced by other countries. Therefore, coordination becomes a practical necessity rather than a purely normative one. This logic is reflected in the evidence reviewed here, which suggests that inclusive AI governance must be treated as a global public good, requiring cooperation in standard-setting, technology transfer, and capacity building.

In sum, AI can become either a catalyst for inclusive growth or a force that entrenches inequality. The difference lies in institutional design and collective action. The window for shaping these outcomes remains open, but it is narrowing. Decisions taken in the present decade will determine whether AI strengthens the social foundations of growth or accelerates economic and social fragmentation.

Drawing directly from the mechanisms identified in the analysis, several policy priorities emerge:

First, align AI adoption with inclusive labor-market institutions. Governments should strengthen collective bargaining, social dialogue, and worker participation in technological change. Evidence suggests that negotiated transitions—through retraining rights, redeployment pathways, and income protection—significantly mitigate the social costs of automation. Labor institutions must evolve alongside AI to protect job quality, autonomy, and fair remuneration.

Second, invest strategically in human capital and lifelong learning. Education and training systems must shift from one-off skill acquisition to continuous, modular learning aligned with AI-augmented tasks. Public–private partnerships can help ensure that training investments are broad-based rather than confined to elite firms or sectors, reducing polarization and facilitating labor mobility.

Third, rebalance the distribution of AI-generated gains through fiscal policy. Progressive taxation of excess rents, data-driven market power, and capital-intensive AI applications can help finance social protection, public investment, and demand-supporting policies. Without such redistribution, productivity gains risk translating into macroeconomic instability rather than sustained growth.

Fourth, strengthen competition and data governance. Antitrust enforcement, data-sharing mechanisms, and open standards are essential to prevent excessive concentration in AI markets. More competitive ecosystems accelerate diffusion, enhance innovation, and improve the likelihood that productivity gains spill over to smaller firms and lagging sectors.

Fifth, embed ethical and human-rights principles into AI governance. Transparency, accountability, non-discrimination, and privacy protections should be treated as enforceable governance standards rather than voluntary guidelines. Trust in AI systems is a key determinant of adoption and social acceptance, directly influencing economic outcomes.

Finally, deepen international cooperation on inclusive AI development. Global coordination is required to narrow digital divides, harmonize standards, and support AI capacity building in developing economies. Multilateral frameworks can help ensure that AI contributes to shared global objectives such as poverty reduction, decent work, and sustainable development. The central message of this study is both cautionary and hopeful. AI's economic promise is real, but its social benefits are conditional. By consciously reshaping the social contract—through inclusive institutions, ethical governance, and coordinated global action—societies can harness AI as a force for shared prosperity rather than exclusion. The challenge is not technological inevitability, but political and institutional capacity.

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