

Commentary

Intervening in the Shallow End: The Sustainable Development Goals Through the Lens of Meadows' Leverage Points

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The 2030 Agenda for Sustainable Development commits the international community to 17 goals whose achievement would require deep transformation of the global economy: the end of poverty and hunger, the reversal of ecological degradation, and substantial reductions in inequality within and between countries. This article argues that the Sustainable Development Goals (SDGs) are structurally incapable of producing such transformation on their own, not because their aims are undesirable but because their governance architecture concentrates intervention at low-leverage points while leaving deeper leverage points largely untouched or actively reinforced. Drawing on Donella Meadows' hierarchy of places to intervene in a system, we show that the SDG architecture — 169 targets, hundreds of indicators, voluntary national reviews, and non-binding commitments — operates primarily through aspirational parameters and weakly coupled information flows. Where recent scholarship has operationalized the leverage points framework to assess SDG implementation vehicles such as multi-stakeholder partnerships and acceleration pathways, this article applies the hierarchy to the governance architecture of the 2030 Agenda itself. Sustainable Development Goal 8 in particular reinscribes sustained economic growth as a system goal — a commitment that systematic reviews of decoupling evidence and the IPCC's Sixth Assessment Report render increasingly difficult to reconcile with the Agenda's ecological objectives. Evidence of goal trade-offs, burden-shifting, selective progress, and predominantly discursive institutional effects is consistent with policy resistance: the tendency of systems to absorb or displace interventions that do not alter their deeper structure. We assess the 2024 Pact for the Future as a partial test case, arguing that it names the deep leverage points the SDGs avoided — debt architecture, rule-making power, moving beyond GDP — without yet operating them. The SDGs function less as an engine of systemic change than as a

stabilizing mechanism for the prevailing development paradigm, unless coupled to deep-leverage reforms in rules, power, goals, and paradigms.

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1. Introduction

When the United Nations General Assembly adopted the 2030 Agenda in September 2015, it described the Sustainable Development Goals as “a plan of action for people, planet and prosperity” of “unprecedented scope and significance”^[1]. The ambition is not in dispute. Ending poverty “in all its forms everywhere” (SDG 1), achieving zero hunger (SDG 2), reducing inequality within and among countries (SDG 10), and taking urgent action on climate change (SDG 13) would each, on its own, require restructuring of trade regimes, fiscal systems, energy infrastructures, property arrangements, and consumption patterns that have developed over centuries. Taken together, they amount to a demand for systemic transformation of the global political economy.

Yet the instrument chosen to deliver this transformation is a voluntary, non-binding framework of goals, targets, and indicators, monitored through self-reported national reviews, with no enforcement mechanism and a financing gap measured in trillions of dollars annually^{[2][3]}. The latest official UN assessment continues to show meaningful but insufficient progress. The Sustainable Development Goals Report 2026 finds that, among 139 targets with trend data, only 36 per cent are on track or making moderate progress, 49 per cent are advancing too slowly, and 15 per cent have regressed below 2015 baselines^[4]. This pattern matters for the argument developed here: the problem is not simply that implementation has been interrupted by exogenous shocks, although conflict, debt, climate disruption, and the COVID-19 pandemic have clearly mattered. It is that progress on some indicators has repeatedly coexisted with regress on others, suggesting a structural pattern of compensation, displacement, and burden-shifting.

Critiques of the SDGs are well established. They have been faulted for their unwieldy scope^[5], their internal contradictions between growth and ecological objectives^[6], the politics embedded in their indicator apparatus^[7], and their weak steering effects on institutions and resource allocation^[8]. What these critiques often lack, however, is a unifying theoretical account of *why* a framework of this kind should be expected to fail at systemic change. Without such an account, the critiques read as a list of

remediable design flaws — too many targets, too little money, insufficient political will — implying that a better-engineered goal framework could succeed where this one struggles.

This article supplies that theoretical account by reading the SDGs through the systems theory of Donella Meadows. Meadows' essay on leverage points provides the hierarchy used here to classify the SDG architecture^[9], while *Thinking in Systems* provides the broader concepts of system purpose, feedback, delays, policy resistance, and the difference between information and structural change^[10]. Meadows' central insight is that interventions in complex systems differ enormously in transformative power, and that the interventions people most readily reach for — adjusting parameters, setting numerical targets, improving information flows — often have the least capacity to alter system behavior unless they are coupled to changes in rules, goals, and paradigms. The argument presented here is that the SDG framework is an almost paradigmatic case of intervention at low leverage: it is constituted by aspirational parameters and reporting systems, it leaves the system's rules essentially untouched, and — through SDG 8's commitment to sustained economic growth — it explicitly reaffirms the system goal and paradigm that generate many of the problems the Agenda seeks to solve. On a systems-theoretic reading, the SDGs are not merely under-implemented; they are misdirected as instruments of transformation. Their loftiness is not accidental ambition awaiting better execution but a structural feature of a framework that demands transformation while intervening at levels insufficient to produce it.

This article offers a conceptual systems analysis rather than an empirical impact evaluation, and its contribution should be situated precisely within a rapidly maturing literature. The leverage points framework has recently been operationalized to assess components of the SDG regime: Allen and Malekpour^[11] review how transformations toward the SDGs might be unlocked and accelerated within socio-technical systems, and Koloffon Rosas^[12] applies the hierarchy empirically to score the transformative potential of multi-stakeholder partnerships as SDG implementation vehicles. The present article differs in its unit of analysis: it maps the governance architecture of the 2030 Agenda itself — its targets, indicators, review mechanisms, and normative commitments — onto Meadows' hierarchy, and asks what the distribution of that architecture across the hierarchy predicts about its transformative capacity. The article also extends the analysis to the 2024 Pact for the Future, the most significant institutional development since the Agenda's adoption, which we treat as a partial test case for the diagnosis. The contribution is not another inventory of SDG performance problems, but a systems-theoretic explanation of why the observed pattern of trade-offs, selective progress, absorption, and weak

institutional effects should be expected from an intervention concentrated at low leverage — and an account of what would count as evidence that global governance is beginning to reach deeper.

The article proceeds as follows. Section 2 reviews the principal empirical critiques of the SDGs, updating the growth–ecology contradiction with recent evidence on decoupling and the circular economy. Section 3 sets out Meadows' leverage–points framework, its application in sustainability science, and this article's position within that literature. Section 4 maps the SDG architecture onto the hierarchy, showing its concentration at shallow and mid-level leverage points and its reinforcement of deep ones. Section 5 interprets the empirical record of trade-offs and stalled progress as policy resistance in Meadows' sense, clarifying the distinction between the empirical findings cited and the theoretical interpretation advanced here. Section 6 engages the strongest defenses of the SDGs — that they operate as norm cascade, coordination device, and mobilizing discourse — and explains why these defenses are insufficient without changes in rules, resources, and power. Section 7 sets out minimum design criteria for intervention at deep leverage points and assesses the Pact for the Future against them, and Section 8 concludes.

2. The empirical case against the SDGs as an engine of transformation

Four strands of critique recur in the literature, and each is well documented.

The first concerns scope and prioritization. The 2030 Agenda comprises 17 goals, 169 targets, and a global indicator framework that has grown to more than 230 indicators. Easterly^[5] characterized the result as “senseless, dreamy, garbled,” arguing that a framework in which everything is a priority provides no guidance for the allocation of scarce political attention and fiscal resources. The contrast with the eight Millennium Development Goals is instructive: whatever their faults — and they were substantial, including a donor-centric framing and neglect of inequality^[13] — the MDGs' relative parsimony made them legible as a prioritization device. The SDGs' encyclopedic breadth reflects the political economy of their negotiation, in which the inclusion of every constituency's concerns was the price of consensus^[14]. Comprehensiveness was purchased at the cost of strategy.

The second strand concerns the framework's legal character and financing. The SDGs are voluntary and non-binding; the primary accountability mechanism is the Voluntary National Review, a self-assessment presented at the UN High-Level Political Forum. States select what to report, how to measure it, and how

to frame shortfalls. Meanwhile, estimates of the annual financing gap for achieving the goals in developing countries began at roughly USD 2.5 trillion^[2] and widened substantially after the pandemic^[3]. A framework that demands trillions in reallocation, while creating no obligation on any actor to reallocate anything, relies entirely on voluntary convergence between the goals and the interests of states, firms, and financial institutions.

The third strand concerns internal contradiction. SDG 8 targets “sustained, inclusive and sustainable economic growth,” including a specific target of at least 7 per cent annual GDP growth in the least developed countries. Hickel^[6] demonstrated the arithmetic tension between global growth of this kind and the ecological targets of SDGs 12, 13, 14, and 15, and the evidence base on this contradiction has since deepened considerably. Systematic reviews of the empirical decoupling literature — screening over 11,500 studies and analyzing 835 in full — find that while relative decoupling of GDP from resource use and emissions is common, evidence for absolute decoupling at the scale and speed required by climate and ecological targets is scarce^{[15][16]}. The IPCC’s Sixth Assessment Report reflects this state of the debate: it records that many countries have decoupled territorial CO₂ emissions from GDP while fewer have decoupled consumption-based emissions, and it acknowledges — for the first time in an IPCC assessment — the degrowth and post-growth literature that questions the feasibility of reconciling continued global growth with mitigation at the required pace^[17]. Nor does the circular economy resolve the contradiction, despite its prominence in SDG 12 discourse: critical reviews document thermodynamic limits to circularity, pervasive rebound effects, and structural obstacles to implementation, concluding that circularity as currently deployed functions largely as a growth-compatible narrative rather than a demonstrated route to absolute reductions in material throughput^[18]. The framework thus instructs the system to accelerate and to brake simultaneously, without acknowledging the conflict or providing any rule for its resolution — and the empirical basis for believing the conflict can be dissolved by efficiency or circularity has weakened, not strengthened, since 2015.

The fourth strand concerns measurement. Governance by indicators is not a neutral technology: what is measured shapes what is pursued, and the selection of indicators embeds contestable normative judgments while presenting them as technical matters^[7]. Moreover, for many indicators, data are absent or unreliable precisely in the poorest countries where the goals matter most, so that reported “progress” is frequently the output of statistical modeling rather than observation. The indicator apparatus thereby produces an appearance of monitoring that substantially exceeds the reality of knowledge.

Each of these critiques is forceful, but presented as a list they invite a deflationary response: streamline the targets, increase the financing, resolve the contradictions, improve the data. The systems-theoretic reading developed below suggests that this response misunderstands the problem. The difficulty is not that the SDGs are a flawed instance of a sound approach; it is that the approach itself — steering a system by attaching numerical targets and monitoring apparatus to its outputs, while leaving its structure intact — occupies the weakest position in the hierarchy of possible interventions.

3. Analytical framework: Meadows' hierarchy of leverage points

Donella Meadows (1941–2001) was a systems scientist, lead author of *The Limits to Growth*^[9], and one of the most influential translators of system dynamics into public argument. Her essay “Leverage Points: Places to Intervene in a System” (Meadows^[9]) proposes a rank-ordered list of twelve places to intervene in a complex system, ordered by increasing transformative power. In simplified form, and moving from weakest to strongest, the hierarchy runs: (12) constants, parameters, and numbers such as subsidies, taxes, and standards; (11) the sizes of buffers and stocks; (10) the structure of material stocks and flows; (9) the lengths of delays relative to the rate of system change; (8) the strength of negative feedback loops; (7) the gain around positive feedback loops; (6) the structure of information flows — who does and does not have access to information; (5) the rules of the system, including incentives, punishments, and constraints; (4) the power to add, change, or self-organize system structure; (3) the goals of the system; (2) the mindset or paradigm out of which the system — its goals, structure, rules, delays, parameters — arises; and (1) the power to transcend paradigms.

Two features of the hierarchy matter for present purposes. First, Meadows^[9] observed that political attention distributes itself in inverse proportion to leverage. Parameters — the numbers — are where people care deeply, where negotiation and reporting concentrate, and yet changes at this level rarely alter the behavior of the system, because the system's structure, goals, and paradigm continue to regenerate the outcomes the parameters were adjusted to prevent. Second, the deep leverage points are deep precisely because they are the sources from which everything shallower flows: a system's paradigm gives rise to its goals, its goals to its rules, its rules to its flows and parameters. Intervening downstream while the upstream sources are unchanged produces, at best, temporary and local improvement.

Thinking in Systems is especially important for the diagnosis advanced here because it supplies the paper's account of policy resistance. Meadows^[10] describes policy resistance as the tendency of a system to defeat, dilute, or displace interventions that push against its structure, because actors, incentives,

feedback loops, and delays continue to reproduce the system's implicit purpose. The concept prevents the argument from becoming a simple charge of bad faith. If the SDGs produce selective progress, trade-offs, and absorption without deep institutional change, this is not surprising; it is the expected behavior of a system pushed at low leverage. *Thinking in Systems* also clarifies why information is not transformation. Information flows can be powerful, but only when they reach actors with the authority, incentives, and institutional channels to respond. Information circulated through self-reporting mechanisms among actors whose rules and constraints remain unchanged becomes monitoring, not structural change.

The application of Meadows' hierarchy to sustainability questions is by now an established research program. Abson et al.^[20] proposed leverage points as an agenda for sustainability transformation research, Fischer and Riechers^[21] elaborated the perspective conceptually, and Dorninger et al.^[22] reviewed interventions in European food and energy systems, finding them clustered overwhelmingly at shallow leverage points. More recently, the framework has been operationalized for the SDG regime specifically. Allen and Malekpour^[11], reviewing the transformations literature for the SDGs, conclude that acceleration efforts tend to stall without attention to deeper leverage associated with system goals, beliefs, and paradigms, and emphasize the sequencing of interventions and feedback dynamics needed to reach them. Koloffon Rosas^[12] operationalizes the hierarchy to assess the transformative potential of 35 multi-stakeholder partnerships working on SDG nexuses, finding that partnerships engage mid-range leverage points such as feedback loops and information flows while largely neglecting the deepest points concerning paradigms and system intent.

The present article is positioned relative to this literature in two ways. First, its unit of analysis differs: where existing operationalizations assess implementation vehicles (partnerships, national pathways, sectoral interventions) against the hierarchy, this article assesses the governance architecture of the 2030 Agenda itself — the design-level question of where a global framework of targets, indicators, and voluntary review sits in the hierarchy, and what that position predicts. Second, the existing findings function here as convergent evidence: if the architecture concentrates at low leverage (Section 4) and its principal implementation vehicles independently concentrate at low and mid-range leverage^{[22][12]}, then the system's shallow center of gravity is overdetermined, and the acceleration problem identified by Allen and Malekpour^[11] is not an implementation deficit but a design property. That architectural application is the task of the next section.

4. Mapping the SDG architecture onto the hierarchy

4.1. A framework made of parameters

The most striking feature of the 2030 Agenda, viewed through Meadows' hierarchy, is how completely it is constituted at leverage point 12. The operational content of the framework — the part that governs behavior, reporting, and assessment — consists of numerical targets and indicators: proportions of populations below income thresholds, rates of growth, percentages of protected area, ratios of school completion. The diplomatic energy of the 2012–2015 negotiation period was overwhelmingly devoted to which numbers would be included and how they would be phrased^[14], and the post-2015 institutional energy has been devoted to measuring them. This is precisely the pattern Meadows^[9] described: parameters attract the attention, the negotiation, and the sense of consequence, while possessing the least capacity to change what the system does.

It is important to be precise about the claim. Parameters are not causally inert; a changed tax rate or emission standard alters flows at the margin. But the SDG targets are not even parameters in this operative sense. A tax rate is a parameter *inside* a system, enforced by its rules. An SDG target is a parameter *about* a system — a description of a desired output level, attached to no mechanism that adjusts any actual tax, subsidy, standard, or budget line. The framework thus occupies a position weaker than the weakest rung of Meadows' ladder as she conceived it: it consists of aspirational parameter values without the institutional machinery that makes even parameters bind.

4.2. Information flows without empowered recipients

The strongest element of the SDG architecture, in leverage terms, is its information apparatus: the global indicator framework, the annual progress reports, the Voluntary National Reviews. This is intervention at leverage point 6, and Meadows^[2] regarded new information flows as genuinely powerful — her illustrative example was the disclosure requirement of the US Toxics Release Inventory, which reduced emissions not by prohibiting anything but by making pollution publicly visible to communities positioned to react.

The SDG information system fails Meadows' own test in two respects. First, the information loop is largely self-referential: states report on themselves, select their own emphases, and face an audience — the High-Level Political Forum — with no power to sanction, and evidence suggests VNRs function

substantially as performance and diplomatic signaling rather than accountability^[8]. Second, the actors to whom the information flows are, in the main, the same governments and international institutions whose incentives are set by the unchanged rules of the system. Information becomes leverage when it reaches actors who can and will act on it; information circulated among actors whose constraints are untouched becomes reporting. The measurement mirage identified in Section 2 is thus not an implementation weakness but a category error — the mistaking of leverage point 6 activity, and degraded activity at that, for transformation.

4.3. Rules untouched, goals reinscribed

Ascending the hierarchy, the diagnosis darkens. The rules of the global economic system — trade law, investment treaties, intellectual property regimes, sovereign debt architecture, the fiscal rules that structure national budgets — are the domain of leverage point 5, and the 2030 Agenda leaves them essentially untouched. Where the SDGs gesture at rules (as in SDG 17's calls for a “universal, rules-based, open, non-discriminatory and equitable multilateral trading system”), they endorse the existing ones. No target requires the amendment of any treaty, the restructuring of any institution's voting rights, or the alteration of any enforcement mechanism. The framework demands outcomes that current rules systematically fail to produce, while affirming those rules.

At leverage point 3 — the goals of the system — the SDGs do something stronger than omission: they entrench. SDG 8 establishes “sustained... economic growth” as an explicit objective of the framework, with target 8.1 specifying at least 7 per cent annual GDP growth for the least developed countries. In Meadows' terms, the goal of the contemporary global economic system — the state variable it is structured to maximize — is aggregate output growth. A transformative intervention at leverage point 3 would change that goal; the SDGs instead write it into the transformation agenda itself. The contradiction documented by Hickel^[6] and reinforced by the decoupling evidence reviewed in Section 2 is therefore not an unfortunate drafting inconsistency but a signature of the framework's position in the hierarchy: it could not challenge the system goal, because it was negotiated within, and ratified by, the system whose goal it is.

At leverage point 2, the paradigm — growth-based, extractive development as the meaning of progress — is the ground on which the entire Agenda stands. Here the historical irony is acute. Meadows' own career began with the demonstration, in *The Limits to Growth*^[19], that a system structured around exponential material growth on a finite planet tends toward overshoot and collapse, and that avoiding

this outcome requires deliberate change in the system's dominant feedback structure and goals rather than incremental parameter adjustment. Fifty years later, the international community's flagship sustainability framework rests on the paradigm her work called into question, and pursues sustainability through the parameter adjustments her framework identified as the weakest available instrument.

The mapping, in summary: the SDGs are dense at leverage points 12 and 6, thin or absent at 5 and 4, and actively conservative at 3 and 2. Table 1 summarizes the distribution. A systems-theoretic observer, shown this distribution in 2015 and asked to predict the framework's transformative effect, would have predicted approximately what the empirical record now shows.

SDG feature	Meadows leverage point	Transformative capacity	Why it matters
169 targets and desired output levels	12. Parameters	Low	The SDGs specify desired states but do not alter operative taxes, subsidies, standards, budgets, or legal obligations.
Global indicator framework and progress reports	6. Information flows	Potentially medium, but weakly coupled	Information becomes leverage only when linked to actors who can and must respond.
Voluntary National Reviews	6. Information flows	Weak	Self-reporting creates visibility and diplomatic performance, but not sanction or redistribution.
Trade, debt, investment, and intellectual-property regimes	5. Rules	High, but largely untouched	These binding rules shape the flows that generate SDG outcomes, yet the SDGs do not substantially rewrite them.
Representation in global economic rule-making	4. Self-organization	High, but weakly addressed	A deep framework would redistribute the power to make and revise rules.
SDG 8 and aggregate output growth	3. System goal	High, but conservative	The growth objective remains inside the transformation agenda rather than being displaced by provisioning within limits.
Growth-based development paradigm	2. Paradigm	Deep, but largely unchallenged	The SDGs translate sustainability into the language of continued development-as-growth rather than naming the paradigm as the anomaly.

Table 1. Mapping the SDG architecture onto Meadows' leverage points

5. Policy resistance: reading the empirical record through systems theory

Meadows^[10] describes policy resistance as the characteristic behavior of a system pushed at low leverage: the system's feedback structure compensates, and effort produces displacement rather than change. Three well-documented features of the SDG record fit this description closely.

A clarification of attribution is warranted before proceeding, because the empirical studies cited in this section document patterns without themselves framing those patterns in systems-theoretic terms. Nilsson, Griggs, and Visbeck^[23] and Pradhan et al.^[24] map and quantify interactions among goals; Biermann et al.^[8] synthesize evidence on the SDGs' political effects; UN DESA^[4] reports progress trends. None of these sources advances the claim that their findings constitute policy resistance. That interpretation — that the observed pattern of trade-offs, selective progress, and absorption is the behavioral signature systems theory predicts for low-leverage intervention — is the theoretical contribution, and the falsifiable claim, of this article, made on the basis of Meadows'^[10] foundational account. The empirical literature supplies the pattern; Meadows supplies the mechanism; the fit between them is the argument.

First, trade-offs and burden-shifting between goals. The literature on SDG interactions^{[23][24]} finds systematic negative interactions between goals — most prominently between SDG 8 and the ecological goals, and between consumption-related targets and virtually everything else. Progress achieved on one indicator by pushing harder within the existing structure tends to appear as regress elsewhere, because the underlying stocks and flows are shared. This is compensating feedback in textbook form.

Second, the pattern of selective progress. Goals and targets aligned with what the system already does — growth, infrastructure, connectivity, formal enrollment — show the most progress; goals requiring the system to do what it is not structured to do — reduce inequality, decouple absolutely, transform consumption — show the least^[4]. A framework of pure aspiration acts, in effect, as a filter that passes through the system's pre-existing momentum and labels it achievement.

Third, absorption. Biermann et al.^[8], synthesizing evidence across governance levels, conclude that the SDGs' effects have been largely discursive — changing how actors talk — with limited normative and institutional effects on legislation, budgets, or organizational structure. In systems terms, the intervention has been metabolized: the system has incorporated the goals as vocabulary while its rules,

incentive structures, and resource flows continue substantially unaltered. Corporate SDG reporting, in which firms map existing activities onto the 17 icons, is the clearest illustration of absorption at the level of the firm. The partnership evidence points the same way: even the multi-stakeholder partnerships positioned as the Agenda's flagship implementation mechanism concentrate on mid-range leverage and rarely engage system intent or paradigm^[12].

None of this requires bad faith on the part of any actor. That is the point of the systems reading: policy resistance is a structural property, not a moral failure. A framework that intervenes at shallow leverage points will be resisted, displaced, and absorbed by the deeper structure it leaves intact, regardless of the sincerity of its signatories.

6. The discursive defense, and why it concedes the argument

The strongest defense of the SDGs accepts that they are unenforceable and holds that this criticism misunderstands their nature. On this view, the SDGs are governance through goals^[25]: a normative framework intended to orient discourse, shape expectations, legitimate advocacy, and diffuse a shared vocabulary of development, with behavioral change following indirectly. This defense takes at least three forms. First, the SDGs may operate as a norm cascade, making poverty, inequality, climate action, gender equality, and biodiversity protection part of a shared global vocabulary. Second, they may operate as a coordination device, allowing states, firms, universities, civil-society organizations, and funders to align activities around common categories. Third, they may operate as mobilizing discourse, giving advocates and bureaucratic entrepreneurs a language through which to claim resources and legitimacy. These effects are real and should not be dismissed. The question is whether they are strong enough, in Meadows' terms, to alter system behavior rather than stabilize it.

Meadows' framework takes this defense more seriously than most critics do — and shows why it fails on its own terms. Meadows^[9] insisted that paradigm change, the deepest leverage of all, typically begins with words: with pointing at anomalies, repeating a new frame, and working with actors open to it. If the SDGs functioned as a paradigm intervention — if they named the growth paradigm as the anomaly and kept pointing at it — they would merit classification at leverage point 2 despite their lack of enforcement, and the critique developed here would substantially weaken.

But the content of the framework forecloses that reading. A discursive intervention that reaffirms the existing paradigm is not a lever for paradigm change; it is paradigm maintenance. The SDGs' vocabulary

embeds growth as objective (SDG 8), endorses the existing rule structure (SDG 17), and frames sustainability as compatible with — indeed, delivered by — the continuation of present arrangements. Their discursive effect, on the evidence, has been to provide the existing system with an idiom of transformation: the 17 icons appear in corporate reports, ministry strategies, and university branding attached to activities that would have occurred regardless. The circular economy discourse that has flourished under SDG 12 illustrates the same dynamic at the level of narrative: an appealing vocabulary of closed loops and decoupled growth that, on critical examination, depoliticizes the question of material throughput and keeps systemic alternatives off the agenda^[18]. Discourse is indeed powerful; that is precisely why a discourse that stabilizes the paradigm matters. The defense thus concedes the decisive premise — that the SDGs' operative channel is talk rather than rules or resources — while overlooking that the talk in question runs in the paradigm-conserving direction.

A second version of the defense argues from gradualism: shallow interventions accumulate and cascade upward into deeper change. This remains possible in principle; systems do sometimes change through the accumulation of new language, coalitions, and expectations, and the transformations literature identifies mechanisms — tipping dynamics, coalition-building, sequenced interventions — by which momentum at lower leverage can create conditions for deeper change^[11]. But three decades of global goal-setting frameworks — the development decades, the MDGs, now the SDGs — provide a demanding empirical test. The record shows successive frameworks growing more comprehensive in parameters and more elaborate in indicators without corresponding movement in the rules, goals, or paradigm of the global economy. If parameter-level intervention reliably cascaded upward, the cascade should by now be observable. What is observable instead is the institutionalization of goal-setting itself as a substitute for structural negotiation. The more careful conclusion is therefore not that discourse is powerless, but that SDG discourse has not been coupled to the rule changes, resource shifts, and redistribution of rule-making power required for discourse to become deep leverage. Whether the institutional developments of 2024–2025 constitute the beginning of such coupling is the question taken up next.

7. Deep leverage after 2015: design criteria and the Pact for the Future

7.1. What deep-leverage intervention would entail

The purpose of this article is diagnostic, but the diagnosis implies a direction. A global framework operating at Meadows' deeper leverage points would differ from the SDGs in identifiable ways. At the level of rules (leverage point 5), it would take as its primary objects the binding structures the SDGs avoid: trade and investment law, debt architecture, tax cooperation, intellectual property regimes — the domains where obligations exist and are enforced, and where the developmental and ecological consequences of current arrangements are generated. At the level of self-organization (leverage point 4), it would redistribute the capacity to make and change rules, addressing the representation of developing countries in international financial institutions rather than aspiring to outcomes those institutions' current governance makes unlikely. At the level of goals (leverage point 3), it would replace aggregate output growth with objectives defined over the variables that matter — provisioning within planetary boundaries, as elaborated in doughnut-economics and post-growth scholarship^{[6][26]} — and would accept the distributional confrontation this entails rather than dissolving it in the solvent of “sustained, inclusive and sustainable” growth. At the level of paradigm (leverage point 2), it would do what Meadows^[9] said paradigm challengers must do: name the anomaly explicitly, rather than encode its denial in a target. These are not policy details to be appended to a goal framework; they are minimum design criteria for a successor framework that claims to be transformative.

7.2. The Pact for the Future as a partial test case

An earlier version of this argument could treat the deep leverage points as simply absent from multilateral practice. Since September 2024 that is no longer accurate, and the analysis must engage the change. The Pact for the Future, adopted at the Summit of the Future^[27], contains — under the heading “Transforming Global Governance” — what the UN describes as its most detailed agreement to date on reform of the international financial architecture: strengthened voice and representation of developing countries in international financial institutions; a review of the sovereign debt architecture to be conducted by the IMF with the UN, the G20, and other actors; commitments on rechanneling special drawing rights and expanding multilateral development bank financing; engagement toward a UN

framework convention on international tax cooperation; and a commitment to develop measures of progress that go beyond gross domestic product. The Sevilla Commitment adopted at the Fourth International Conference on Financing for Development in 2005^[28] extends the financing strand. In the vocabulary of this article, the Pact addresses itself to leverage point 5 (debt, tax, and financing rules), leverage point 4 (who participates in economic rule-making), and — through the beyond-GDP workstream — gestures toward leverage point 3.

Two readings of this development are available, and both matter for the argument. The first is that the Pact corroborates the diagnosis. A decade into the 2030 Agenda, member states found it necessary to negotiate a separate instrument aimed precisely at the rules, representation, and metrics the SDGs left untouched. The Pact is, in effect, an institutional acknowledgment that the goal framework could not deliver its own preconditions — that targets without rule change had reached their limit. The second reading is a challenge: if multilateralism is now engaging deep leverage points, the claim that global governance is confined to the shallow end no longer holds.

The response to the challenge is that the Pact must be assessed by the same test this article applies to the SDGs: not what it names, but what it operates. Examined at that level, the Pact's deep-leverage content remains largely procedural and hortatory. It commissions a review of the debt architecture rather than restructuring it, and assigns the review's lead to the IMF — the institution whose governance the reform agenda targets. It commits states to “engage constructively” toward a tax convention rather than to conclude one, and to “explore options” on taxing high-net-worth individuals. Its beyond-GDP commitment establishes a process to develop complementary indicators, not a displacement of growth as the operative objective of economic policy — leverage point 12 activity in the service of a leverage point 3 aspiration. Meadows' framework nonetheless assigns real significance to this moment: naming the deep leverage points is, on her account of paradigm change, the necessary first act, and the Pact names debt architecture, rule-making power, and the limits of GDP in a consensus UN document for the first time at this level of detail. The Pact therefore does not refute the analysis; it relocates the test. If its follow-up processes produce binding changes in debt, tax, and voting rules, the systems-theoretic prediction of absorption will have been falsified in the most welcome way. If, instead, the review concludes, the convention stalls, and beyond-GDP yields dashboards, the Pact will have replicated at the level of rules what the SDGs performed at the level of goals: the conversion of structural demands into process. The framework predicts the second outcome absent sustained political confrontation; it would prefer to be wrong.

Whether a genuinely deep framework is politically attainable remains a fair question, and the honest answer is that nothing resembling one commands consensus at present. But this observation supports rather than undermines the argument. The SDGs are consensual precisely because they are shallow; their political feasibility and their transformative impotence are the same property viewed from different angles. The choice facing global governance is not between the SDGs and an equally consensual deep alternative, but between the comfort of consensus at low leverage and the conflict inherent in high leverage. Systems theory cannot resolve that political choice; it can only prevent the first option from being mistaken for transformation.

8. Conclusion

The Sustainable Development Goals demand systemic change and are structurally incapable of producing it on their own. Filtered through Meadows' hierarchy of leverage points, this is not a paradox but a prediction: the framework is built largely of aspirational parameters and weakly coupled information flows, while the system's rules are left intact and its goal and paradigm are written into the Agenda itself through the commitment to sustained growth. The empirical record of trade-offs, selective progress, absorption, and predominantly discursive effects — documented by the SDG-interactions literature and by synthesis studies of the goals' political impact^{[8][23][24]} — bears the signature of policy resistance in Meadows'^[10] sense: the expected behavior of a system pushed at low leverage. The defense of the SDGs as normative and discursive governance is strongest when it treats discourse as a possible route to paradigm change, but it fails where the discourse in question conserves rather than challenges the paradigm from which the system's behavior arises.

The conclusion is not that global goals are worthless, nor that the aspirations of the 2030 Agenda should be abandoned. Goal frameworks of this design should be recognized for what they are — instruments for organizing attention and vocabulary within an unchanged system — and should not be permitted to substitute for the harder work of intervention at depth: changing rules, redistributing rule-making power, and confronting the growth paradigm directly. The Pact for the Future indicates that member states have begun, at least, to name the deeper leverage points; the coming years will show whether naming becomes operation, and this article's framework specifies what the difference would look like. Donella Meadows^[9] closed her leverage-points essay with the reminder that the higher the leverage point, the more the system resists changing it. The SDGs encountered little of that resistance because

they rarely reached that high. The task for the successor to the 2030 Agenda, if it is to be more than a third generation of aspirational parameters, is to begin where the resistance begins.

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