



Manufacturing Africa: Strategic Levers for Transformation

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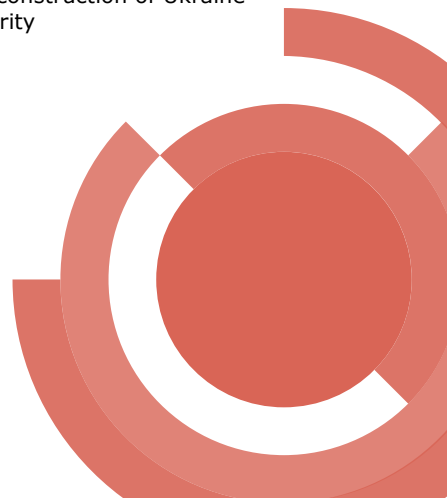


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Key Terminology: Ambition and Risk

Manufacturing Africa's support aims to create and accelerate economic, social, and environmental impact. Throughout this report, we refer to ambition and risk to describe how deals pursue these transformative goals and the difficulty of achieving them.

Ambition is the extent to which businesses pursue deep structural transformation through complex, high-impact deals. It brings together transformation depth, transformation breadth, and scale

Transformation depth is the intensity of a deal's contribution to inclusive economic transformation, independent of size, measured through Manufacturing Africa's IET framework.

Transformation breadth is the number of Manufacturing Africa's five levers a deal activates. It measures how many individual dimensions of impact (jobs, climate, inclusion, multipliers, and IET) a deal engages, rather than how intensely it engages any single lever.

Scale refers to deal size, measured by target Foreign Direct Investment or FDI

Two types of risk must be distinguished:

Closure risk is the probability that a deal does not reach financial close following Manufacturing Africa support.

Growth risk is uncertainty about whether projected impacts will materialise following financial close.¹

¹ As most deals are yet to employ, produce, or export at scale, growth risk is beyond the reach of quantitative analysis and addressed through qualitative research.

Introduction

Background

Manufacturing is a proven engine of structural transformation²: it moves labour and capital from low-value activities into higher-value, higher-productivity ones, creating better jobs and lifting incomes.

Across Africa, promising manufacturing firms struggle to raise capital. Companies lack the advisory support to become investment-ready, and investors, lacking reliable local deal information, perceive the risk as too high. Good deals go unfunded.

In 2025, Africa accounted for just 432 venture capital deals worth \$2.1 billion out of a global venture capital market worth \$425 billion (AVCA Venture Capital inAfrica Report, 2025). This is less than 0.5 per cent of global deal value despite representing a significant share of global population and economic growth potential.

Over the past five years, Manufacturing Africa has provided strategic transaction facilitation and technical assistance to see the closure of deals relating to manufacturing and Agri processing across six sub-Saharan African markets. The current portfolio spans 262 deals, with 55 having reached financial close or post-investment monitoring and a projected \$2.49 billion in Foreign Direct Investment (FDI). These 55 deals are projected to create 46,589 direct jobs and 112,407 indirect jobs – a notable impact on a continent plagued by underemployment and capital constraints.

The programme has achieved this by addressing a persistent market failure: information asymmetry. Promising deals that could create inclusive and sustainable jobs cannot access the capital they need as investors perceive them as excessively risky or relatively less profitable than other ventures that have limited structural transformation impacts.

² The reallocation of resources — labour, land, capital — from low-value activities into higher-value ones, as firms gain the skills, technology and know-how to move up the value chain. We assess contribution, not strict attribution: we identify how MA helped, not what would have happened without it.

What are the strategic levers of economic transformation?

A distinctive feature of Manufacturing Africa's operating model is that its support target deals deemed to best promote broader economic transformation in Africa. Measurement of transformation potential relies on a framework of five indicators referred to as the strategic levers of economic transformation. These five indicators reflect four avenues or 'levers' of economic transformation: employment; sustainable industrialisation; socio-economic inclusion; the creation of value-chains; and the composite measure. The levers are deemed to be activated or non-activated depending on deal characteristics that correspond to each lever's 'activation' – an arbitrary threshold defined in the methodologies section. Potential deals are assessed in terms of these levers, with the idea being that deals with the highest impact potential should be prioritised for support.

The levers, and the avenues of transformation they represent, are summarised as follows:

- ◆ The **Jobs & Livelihoods** lever reflects the most direct route through which manufacturing investment drives development. It captures projected direct and indirect employment created by a deal closing, the quality and reach of work created the livelihoods effects in the surrounding supply chain, and the proportion of locally sourced inputs and services contributing to indirect job creation.
- ◆ The **Climate and Environment** lever captures the extent to which a firm's operations are aligned with or actively contribute to a low-carbon, resource-efficient economy. This ranges from firms whose entire business model is built around environmental impact, such as waste conversion or electric vehicle manufacturing, to firms that embed sustainable practices into otherwise conventional manufacturing operations.
- ◆ The **Gender, Economic and Social Inclusion (GESI)** lever is activated when the benefits of an investment reach those most excluded from formal economic participation, covering women's ownership, leadership, and workforce inclusion as well as Black ownership and management.
- ◆ The **Multiplier Effects and Sector Transformation** lever captures whether a firm's impact extends beyond its own operations to reshape the broader economic environment, including through first-mover advantages, new value chain creation, technology introduction, and cluster and spillover effects.
- ◆ The **Inclusive Economic Transformation (IET)** lever is the composite measure of the framework. It assesses the overall quality and ambition of transformation across all dimensions simultaneously, distinguishing firms where transformation is structural and self-reinforcing from those where transformation effects are limited. As the composite summary of transformation quality, IET is also the basis for FCDO's Payment-by-Results (PbR) framework, which links transformation assessment to programme accountability.

Objectives of this study

This report arises from a need to assess (1) the impact of the programme via these strategic levers of transformation, as well as (2) the optimal strategy for deal selection for support - including the use of the strategic levers of transformation measures to select deals.

In addressing the above, first, this report aims to identify the mechanisms through which each lever drives structural and economic transformation, examining whether and how different levers interact. In doing so, the report tries to establish which deal characteristics or combinations of characteristics are associated with real-world transformation.

Second, the report aims to identify whether broader transformation as measured by the five-lever framework, is related to commercial outcomes i.e. whether activating multiple levers leads to stronger business outcomes (proxied by closure rates and speed to closure). In doing so, the aim has been to make portfolio recommendations that serve to promote the selection of deals that have both high potential impact, and good likelihood of closure.

Third, this report aims to identify evidence (or lack thereof) for a trade-off between impact ambition and the probability of deal closure. This includes identifying the potential trade-offs between impact (depth and breadth as measured by the levers) and closure potential. If such a trade-off exists, it would give rise to the need to overhaul the levers of transformation as a tool for deal selection – i.e. it would undermine the fit-for-purpose of the strategic levers as the underlying framework of a prudent portfolio strategy.

Fourth, this report seeks to translate findings related to the previous objectives into practical recommendations for both investors and development finance institutions (DFIs) to inform their portfolio selection strategies.

Broken down, specific research questions include:

- ◆ What is the best portfolio approach for closure?
- ◆ What is the best portfolio approach for broader economic impact?
- ◆ What are the mechanisms by which the levers can contribute to firm growth?
- ◆ What are some trade-offs to consider between the different levers of impact?
- ◆ What are the trade-offs to consider between transformation and commercial outcomes?
i.e. Is there a penalty for transformation ambition?

Key findings

The report broadly notes four key findings. **First, ambitious deals are slower to close than less-ambitious deals; and the analysis did not produce conclusive evidence for or**

against a penalty for ambition³. Closure-impact profiles are inconclusive with near-identical closure for lower and higher deals by depth of transformation. Ambitious and non-ambitious deals close at near-identical rates (67 per cent vs 63 per cent); greenfield deal closure rates are not notably different from brownfield deal closure rates; nor is there a notable difference between median deal size for closed deals, and median deal size for pipeline (not yet closed) deals.

While there is no evidence for a trade-off based on transformative depth (as measured by the intensity of activation per lever), there is some evidence for a penalty on transformational *breadth*. Deals activating few levers are moderately overrepresented among deals that have reached financial close. Few-lever deals close at a higher rate than multi-lever deals (89 per cent vs 55 per cent) however, this finding should be taken with extreme caution as the sample size of few lever deals is just 18.

The small sample means the report cannot conclude that high-ambition deals are systematically harder to close than lower-ambition ones but reduced statistical power (from the small sample size) also precludes conclusions of the opposite.

What is clear is that ambitious deals are slower to close. Deals that flag the Multiplier Effects lever measure - a good proxy for impact in terms of broader economic transformation goals such as value-chain creation, import substitution and export market support - close more slowly.

Second, there is no evidence that deals from a particular sector or geography are more likely to close. Closure speed does differ by sector, and no sector offers both meaningful volume of available deals and high likelihood of closure. Kenyan deals were found to be the quickest and most reliable route to close. Ethiopian, Nigerian, and Rwandan deals take longer, but overall close rates are similar.

Third, deals with higher projected jobs numbers do not guarantee better transformation outcomes. Projected jobs numbers are closely linked to sectors with low-economic transformation potential. Portfolio selection should therefore balance across volume (Jobs & Livelihoods), job quality and inclusion (GESI). It is recommended that a consistent set of indicators or measures for job quality be incorporated into the existing Jobs & Livelihoods measure.

³ Ambition is measured by the IET lever indicator

Fourth, inclusive transformation flags (GESI – which measures gender and race ownership) decline as deal sizes increase. This illustrates the importance of targeting smaller deals, as women and previously disadvantaged groups tend to be concentrated in MSME ventures.

Supporting the argument for including small deals in a balanced portfolio, the report did not find a statistically significant relationship between deal size (size in terms of value of the deal) and breadth of transformation (number of levers activated). This is indicative evidence that small deals can contribute meaningfully to positive economic transformation across multiple areas beyond inclusion (by promoting the circular economy, job quality improvements, economic multiplier effects, etc.). This is an important finding, as large deal opportunities tend to be rarer – it is worthwhile to confirm that small deals have a place within a balanced portfolio for meaningful impact.

Overall, the report finds that transformational impact appears well reflected by lever impact depth (intensity of transformation by lever), volume (deal size and lever breadth), and market demonstration; the binding constraint on portfolio optimisation is the scarcity of large, ambitious deals, while noting the importance of smaller deals for socio-economic inclusion and continued impact in the face of this scarcity.

Recommendations in brief

For investors: Include ambitious deals such as greenfield, innovative and first-mover projects: there is no evidence these features worsen closure, and indicative evidence that transformation depth and commercial viability move together. Ambitious deals close at the same rate as others, about 67 per cent against 63 per cent, though they may take slightly longer. Do not treat greenfield and brownfield as risk tiers, since closures split roughly 51 to 49 despite greenfield being more complex. Because no sector or country offers both high volume and high closure, diversify and sequence the portfolio so that fast closers, such as Kenya and light industry, fund patience on the scarcer, larger, slower deals. By sector: circular economy is a high-conviction fill (best closure at 58 per cent but thin pipeline); light industry is the efficient core (104 jobs per million dollars (USD\$ million) of FDI); heavy industry and machinery and electrical suit selective large-ticket plays; agri-processing is for volume through its faster, larger deals (biggest pipeline but slow at 30 per cent); and pharma and chemicals suits early positioning (slowest at 28 per cent). By country: Kenya for speed and volume, Nigeria for scale and ticket size, Ethiopia for patient larger deals, and Tanzania and Senegal for early positioning, since they are slower only because their portfolios are younger.

For development finance institutions: Assuming the goal is realised transformation impact, maintain a diversified portfolio and select on project-level transformation characteristics rather

than targeting any single sector, since no sector is best on every dimension: light manufacturing is strong on inclusion and job quality but weakest on climate; circular economy closes best (58 per cent) and leads on climate but not inclusion; agri-processing has the largest pipeline and most jobs but closes slowly (30 per cent) and low-skill; heavy industry and machinery and electrical lead on multiplier and IET but score poorly on GESI; and pharma and chemicals closes slowest (28 per cent) but is strategically crucial for long-term health security.

On deal size, back large deals where they exist (same closure rate, more FDI, more indirect jobs, uniquely stronger multiplier effects, no size penalty) while ring-fencing an allocation to smaller, inclusive deals: the largest are least inclusive, with GESI falling by roughly half across quartiles, and deals below \$8 million are disproportionately women-owned and Black-owned and build the track record that makes later large deals fundable. On greenfield versus brownfield, there is no closure penalty for greenfield, so use deal type deliberately, favouring brownfield where inclusion is the priority. On country, all mature markets reach similar closure rates, so the difference is speed, not whether deals close: Kenya closes fastest but transforms least (only 27 per cent reach four or more levers); Ethiopia and Nigeria lead on multiplier effects; Tanzania and Ethiopia on inclusion; and Tanzania and Senegal warrant longer timeframes because their portfolios are younger. On ambition, high-ambition deals close just as reliably in the long term but are scarce, so impact comes from the volume of viable deals and from each close signalling that a sector is investible, making it worth catching viable but less-ambitious or smaller deals.

Treat inclusion as a deliberate, separate objective, since GESI is the least-activated lever (about 46 per cent) and the only one that does not improve as deals grow larger or more transformational, with small and brownfield deals carrying the strongest inclusion. On jobs, select on quality as well as headline counts: agri-processing maximises raw numbers but lower-skill, while light industry creates fewer, higher-quality jobs and the most per dollar, so weight the direct-to-indirect ratio and quality over counts. Finally, do not neglect hard, high-impact markets such as pharmaceuticals and Tanzania, since a bias toward easy closes quietly penalises exactly the markets where catalytic support adds the most.

Data and Methodology

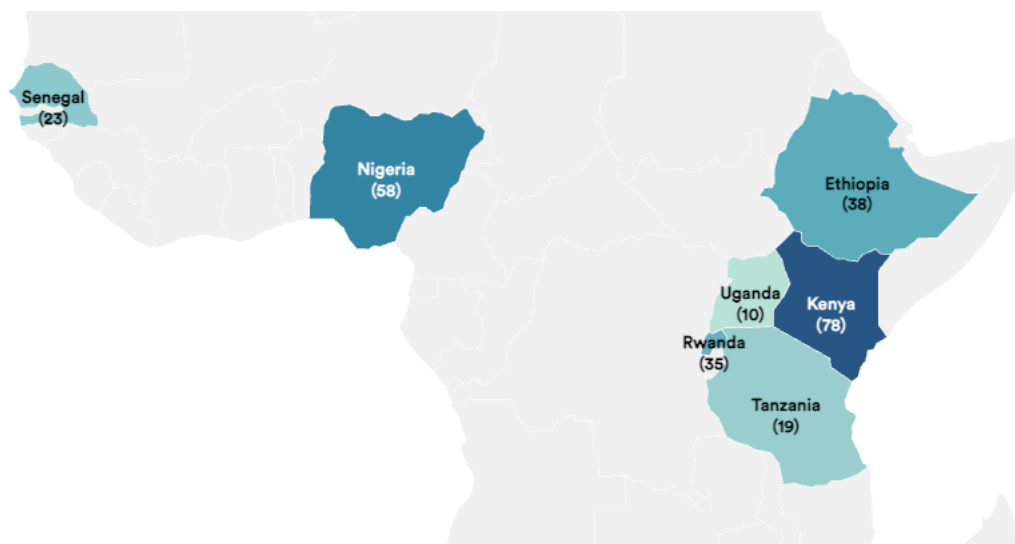
Portfolio description

The dataset of deals examined are concentrated in East Africa. Kenya sees the most observations with 78 deals, followed by Nigeria (58) and Ethiopia (38). Rwanda, Tanzania, and

Senegal account for the remainder. As of 2021, Manufacturing Africa no longer supports deals in Uganda.

Figure 1: Geographic scope

Countries of deals supported by Manufacturing Africa



Notes: Excludes 1 cross-country deal. Uganda, shown above, exited the Manufacturing Africa programme post-Covid.

Source: Author's diagram

Target FDI for deals range \$1m to \$1.4bn across the full pipeline, with most deals falling between \$5m and \$29m. The median pipeline deal size is \$11m. Among the 55 deals that have reached financial close, the median deal size is \$12m with individual deals ranging from under \$1m to \$300m.

The portfolio is balanced across complexity and 17 sectors⁴. Agri-processing deals represent the largest share with 89 deals (34 per cent of the portfolio), followed by Pharmaceuticals with 26 deals (10 per cent of the portfolio), and Machinery & Electrical with 20 deals (8 per cent of the portfolio). The remaining 48 per cent of the portfolio are spread across 14 other sectors.

⁴ To support coherent analysis, the 17 granular sectors are consolidated into six broader sector groups: Agri-processing; Circular Economy; Heavy Industry (comprising cement and building, electronics, iron and steel, machinery and electrical equipment, metals, and vehicles); Light Industry (comprising apparel, leather, packaging, paper and wood, rubber and plastic, and textiles); Pharma and Chemicals (comprising pharmaceuticals and chemicals); and Other (deals not elsewhere classified).

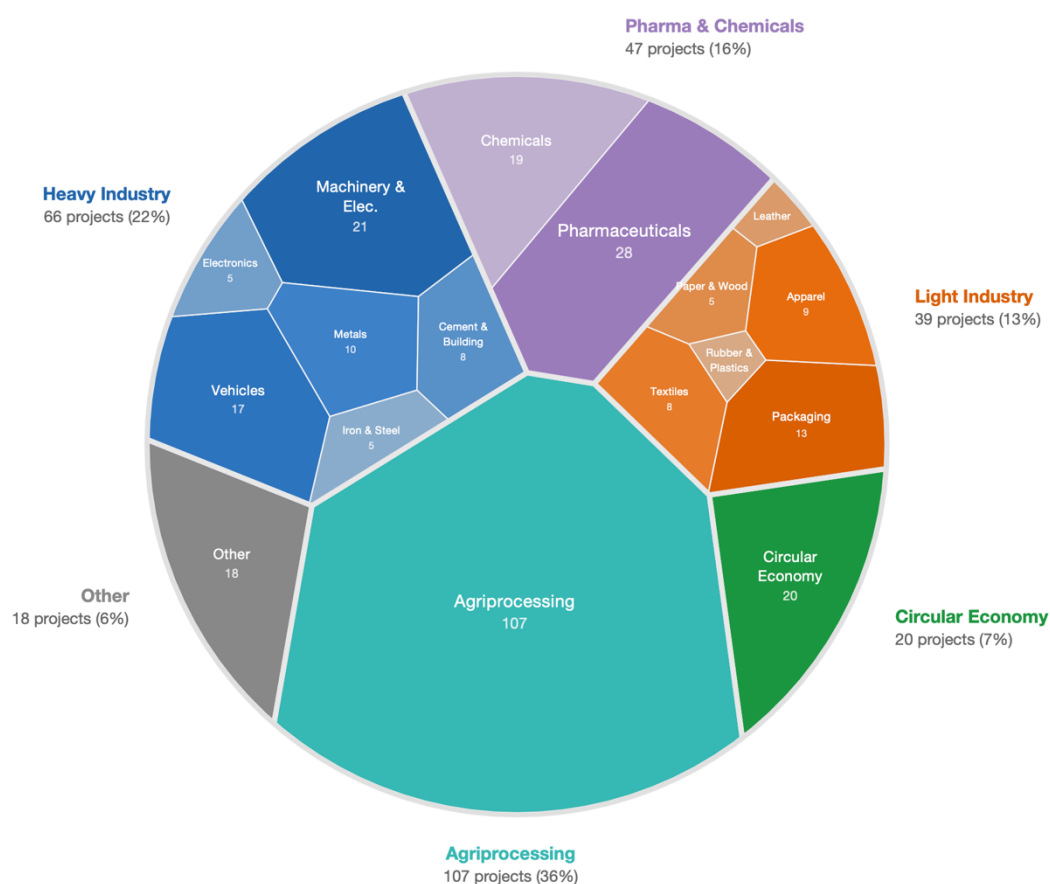
Sector breakdown

Agri processing is the dominant sector across every market, leading with 19 deals in Ethiopia and Kenya followed by Nigeria (18), Rwanda (10), Tanzania (11) and Senegal (8). Beyond this shared foundation, composition diverges. Nigeria has a diverse portfolio, with strong concentrations in Heavy Industry (19).

Kenya's portfolio is the most varied overall. Its profile mixes Heavy Industry (21 deals) and Light Industry (11 deals) alongside its Agri processing base. Ethiopia and Senegal both combine Agri processing with significant Pharmaceuticals' presence (5 and 6 deals respectively). Rwanda's portfolio beyond Agri processing is split across Heavy Industry, Light Industry, Pharmaceuticals and Chemicals. Tanzania's is the most concentrated where Agri processing accounts for 11 of its 19 deals, with Heavy Industry at 4 deals.

Figure 2: Deals by sector

Sectors of deals supported by Manufacturing Africa



Notes: Granular sectors have been grouped into six broader sector groups.

Source: Author's diagram

Methodology: mixed-methods approach

The insights in this report have been gathered by conducting a thorough analysis of lever activation and portfolio characteristics using Manufacturing Africa's deal portfolio data, including selected lever of transformation indicators. These findings were supplemented by interviews with firms, investors and manufacturing Africa staff to fill data gaps.⁵

The quantitative analysis consisted of coding for 'lever activation' deal characteristics and closure data spanning the 262 deals Manufacturing Africa had facilitated at the point of February 2026.

The qualitative strand explains the *mechanisms* behind the portfolio patterns and provides implementation-focused insight into whether the balanced portfolio strategy is fit for purpose. The approach consisted of semi-structured interviews with seven firms across the portfolio, plus MA team input, analysed thematically.

Interviews explored five areas: Business and programme background; the deal journey and experience of working with MA; lever activation and mechanisms; the role of the external ecosystem (investors, regulators, buyers, infrastructure); and overall reflections on MA's contribution. For each lever, firms were asked about impacts, how a lever manifested or was activated in practice, what outcomes followed, and whether it supported or constrained growth — probing complementarities and trade-offs between levers.

Interview findings should not be relied upon in isolation, but they significantly contribute to a wholistic understanding of what drives or inhibits transformation and growth.⁶ Figures are firm-reported and, in pre-operational cases, prospective.

Measuring lever activation

In our analysis, we use Manufacturing Africa's five levers to understand the potential each deal must bring about durable and meaningful structural change. The foundation of our analysis is IET, complemented by four additional levers that capture specific dimensions of impact. This configuration means IET provides a strong guide on the overall intensity of transformation, while the four additional levers provide signals on breadth.

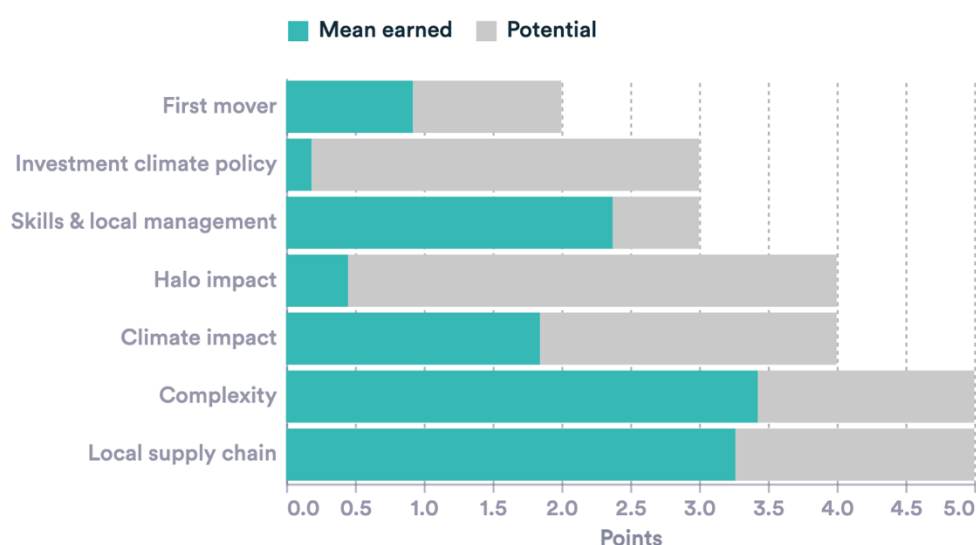
⁵ Eight interviews

⁶ Notable limitations: eight interviews, with three programme countries unrepresented; a small, MA-selected sample skewed toward climate- and circular-economy firms. The strand is illustrative of mechanisms, not statistically representative.

The first lever, IET, serves as a composite measure of the quality and depth of impact. Scored across seven categories: first-mover status, halo and spillover effects, complexity and value-add, use of local supply chains, positive climate impact, investment climate policy change, and skills development and local management, it captures the breadth and depth of a deal's contribution against a 26-point scale. Rather than recording the presence or absence of specific characteristics, IET assesses cumulative quality and ambition. It is also the basis for integration with FCDO's Payment-by-Results (PbR) framework, which links transformation assessment to programme accountability.

Figure 3: Scoring IET activation for the indicator

Potential points in each IET sub-category and the mean achieved by deals



Notes: Two years into the programme, the IET scoring system was updated with a rebalancing of categories. This chart includes scores only under the new system.

Source: Author's diagram

We use IET as our primary indicator of transformation potential for both practical and substantive reasons. Substantively, its scope makes it a strong composite of durable transformation, rather than a measure of any single dimension. Practically, its 26-point scale captures intensity of activation, not just presence, setting it apart from the binary indicators used in the construction of the other levers. It provides finer-grained differentiation to pull deals apart.

The foundation IET provides is extended by four-dimension levers, each of which captures an important aspect of transformation and is measured as follows:

- ♦ **Jobs & Livelihoods** lever activation is measured by the direct and indirect employment created by a deal. The strongest deals on this lever are those where success leads to substantial employment within the deal's operators and in supporting businesses.
- ♦ **Climate & Environment** lever activation Deals' sustainability commitments and climate risk management. The climate and environment score is incorporated through a three-point (10 per cent, 50 per cent, 100 per cent) conformity with the FCDO's International Climate Finance (ICF) framework.
- ♦ **GESI** lever activation: The extent to which a deal advances gender equality and inclusive ownership. It includes the 2X Challenge standard for gender-lens investment and BII BOLD criteria for Black ownership and leadership. Deals that perform strongly are those with underrepresented groups in ownership, workforce and management.
- ♦ **Multiplier Effects** lever activation: How far a deal's transformation extends beyond the firm's immediate context. It captures the breadth of a deal's spillover potential, incorporating new value chains, cluster effects, new technology, and transformative scale likely. Deals that activate this lever are those with the potential to shift the structure of an entire sector.

Table 1: Measuring lever activation

	IET	Jobs & Livelihoods	GESI	Multiplier Effects	Climate & Environment	
What do these levers help measure?	A composite transformation measure of quality and depth of impact.	Direct and indirect employment created by a project	Women’s ownership, leadership, and workforce inclusion alongside Black ownership and management.	How a firm’s impact extends beyond its own operations.	The extent to which a firm’s operations are aligned with or actively contribute to a low-carbon, resource-efficient economy.	
Components	First-mover	Direct jobs	2X Challenge	Spillover Potential	FCDO’s International Climate Finance framework	
	Spillover effects			New value chains		
	Complexity					Cluster effects
	Local supply-chains	Indirect jobs	BOLD BII			
	Climate impact			New technology		
	Climate investment					Transformative Scale
	Skill development					
			IET is Manufacturing Africa’s primary metric for transformative impact, composite of seven sub-scores on a 26-point scale.			The four supporting levers: Jobs & Livelihoods, GESI, Multiplier Effect, and Climate & Environment, each capture distinct aspects of project impact, providing a broad understanding across a wide set of desirable dimensions.

We identify lever activation from 29 deal characteristics coded and supplied by Manufacturing Africa. The data are combined, weighted, and normalised to produce scores on both the intensive and extensive margins: continuous intensity scores reflect the degree of lever activation within a deal; binary activation flags transform these into a simple activated/not-activated indicator. The methodology is described in Box 1.

Box 1. Coding the strategic levers of economic transformation

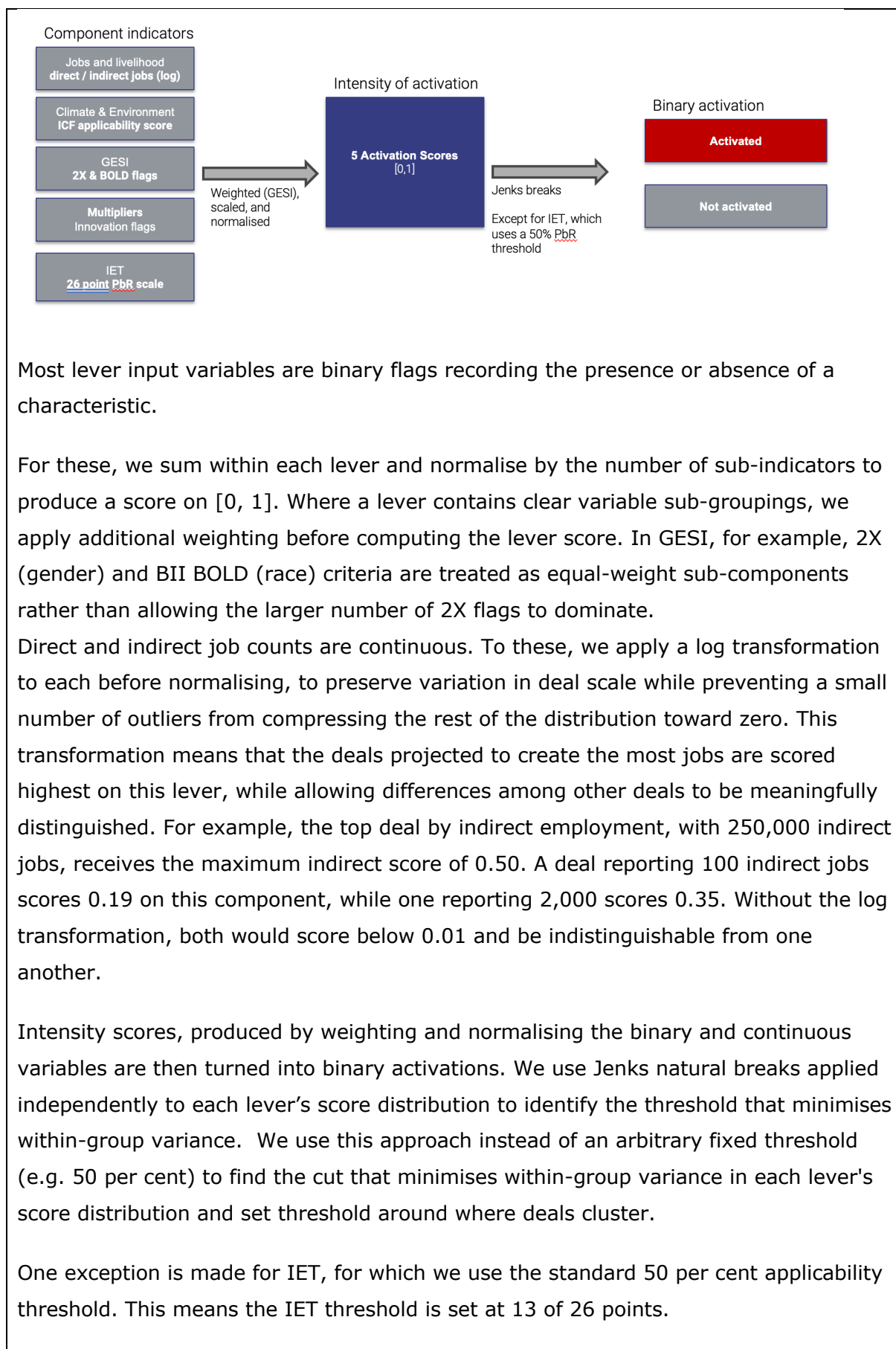
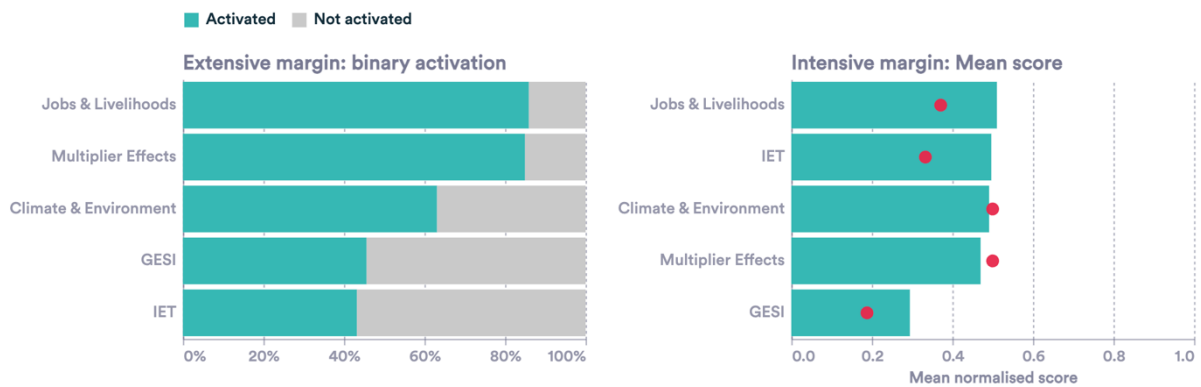


Figure 4: Lever intensity and activation

Binary activation (left) and intensity of activation (right, with thresholds shown)



Notes: Of 203 deals that have entered or concluded support

Source: Author's diagram

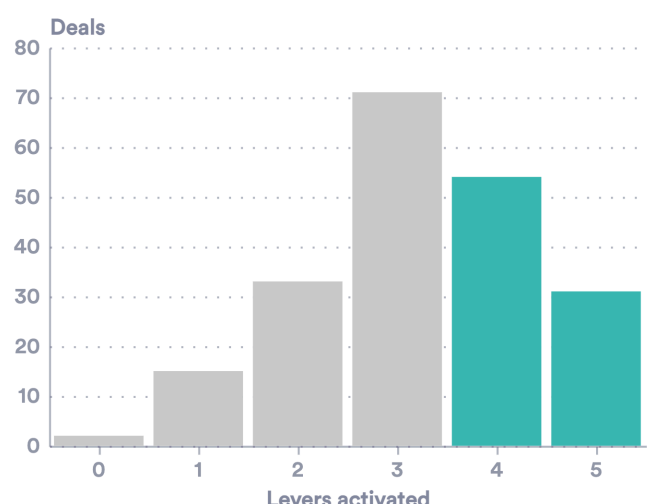
Part 1: Strategic Levers of Economic Transformation

Strategic Levers: Transformation Across the Portfolio

Most deals activate at least 3 levers. The modal deal activates exactly three (34 per cent of the portfolio), the mean sits at 3.23, and three-quarters of deals activate three or more. At the top end, 15 per cent activate all five levers. This lever breadth serves as an additional measure of deal transformation.

Figure 5: Multi-lever activation

Distribution of levers activated



Notes: Of 203 deals that have entered or concluded support.

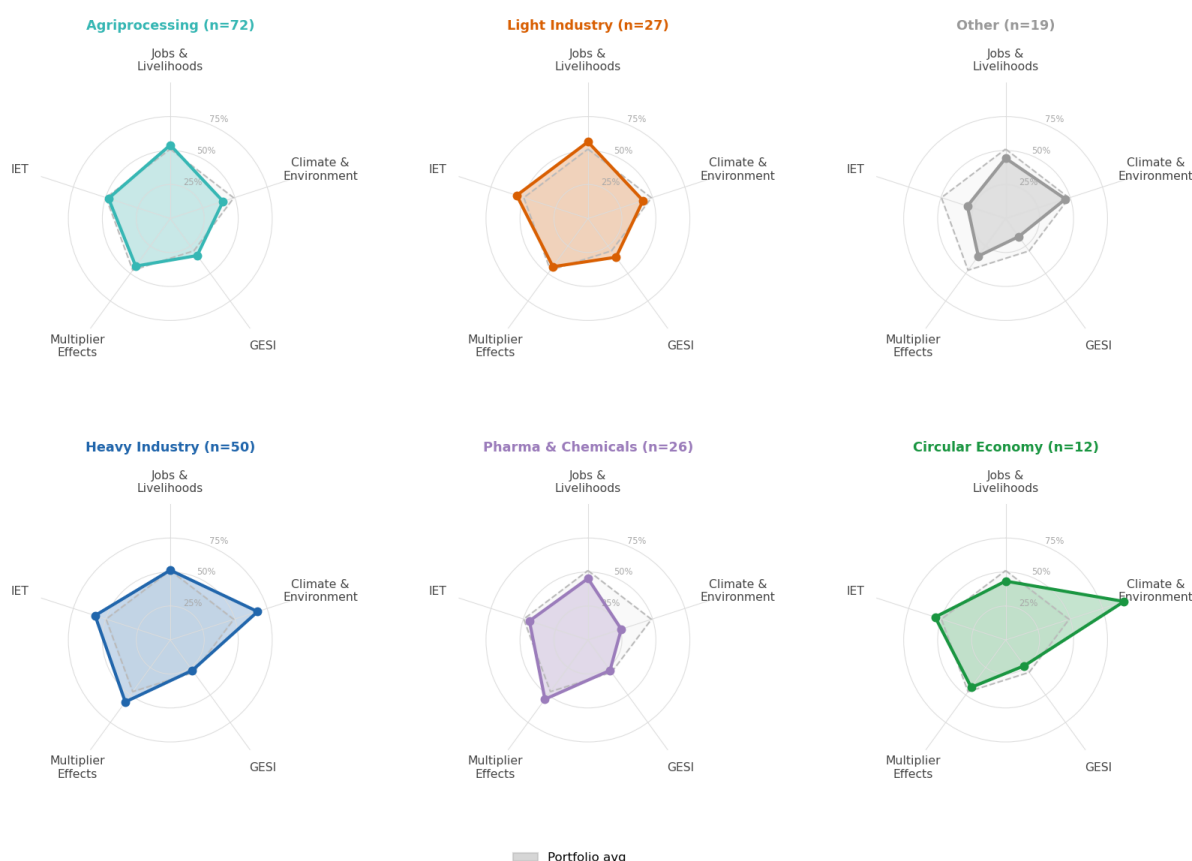
Source: Author's diagram

Multi-lever deals are spread broadly across the portfolio, with the one exception of the Other sector which falls well below the norm. Circular Economy, Heavy Industry, and Light Industry have the highest shares of 4+ lever deals (58 per cent, 56 per cent, and 56 per cent). The Other sector is the clear outlier, where just 16 per cent of its deals reach four levers. By deal size, mean lever counts are flat across the bottom three quartiles (sitting between 3.29 to 3.34) and only a small dip among the very largest deals (2.98). Greenfield and brownfield deals follow a similar pattern: 44 per cent versus 38 per cent reach four or more levers, and the 55 high-breadth deals split almost evenly between the two types.

Lever activation is not uniform across sectors, though variation is modest. For most sector groups, the portfolio average is a close fit. All sectors are within a standard deviation of the mean for 4+ lever activations. In particular, Jobs & Livelihood and Multiplier intensity are consistently strong across all groups, reflecting their near-definitional character for manufacturing investment.

Figure 6: Sector profiles

Lever intensity by sector group



Notes: Of 203 deals that have entered or concluded support.

Source: Author's diagram

Circular Economy deals show the sharpest break from the portfolio mean, with the 'pointiest' sector profile. Despite their perfect climate & environment score, with 100 per cent of deals activating the Climate & Environment flag, the average GESI score is low compared to other sectors.

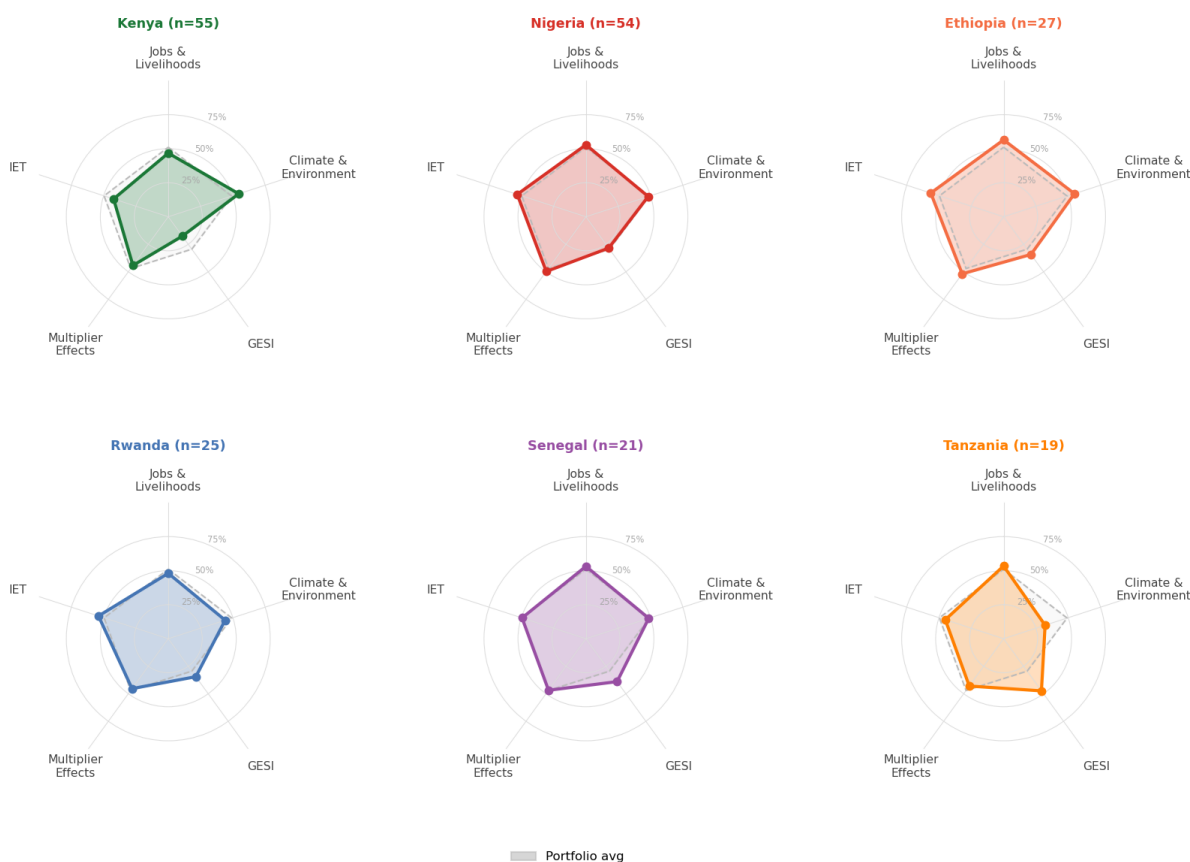
The two industry groups – Heavy Industry and Light Industry - present somewhat different transformation profiles. Heavy Industry shows the strongest Multiplier activation of any sector, and strong IET activation, driven by its concentration of first-mover, export-oriented, and technologically novel deals. Yet it has average GESI activation at 42 per cent. Its transformation is structural and deep, but middling in who it reaches with the third largest deals in the portfolio by median FDI (\$13.5m), but dealing the fourth most jobs of any sector (979 median total).

Light Industry activates similar levers across all five dimensions. On the extensive margin, levers are activated for 96 per cent of deals on Jobs, 63 per cent Climate & Environment, 70 per cent Multiplier, which is low relative to the rest of the Portfolio and especially Heavy Industry, and 52 per cent IET. 56 per cent of deals reach four of more levers with a mean of 3.3. Despite a smaller median deal size (\$9.8m), it deals nearly twice the median jobs (1,283).

The extent of sectoral variation in transformation should not be overstated. The overall pattern is of broad similarity with most differences between sector pairs statistically indistinguishable. A full 71 per cent of pairwise differences on the extensive-margin (activation or not) and 57 per cent on the intensive-margin (magnitude of activation) are not statistically significant at the 5 per cent confidence threshold. Variation between sectors explains only 14 per cent of total variation: differences between deals within a sector are far greater than between sectors.

Figure 7: Country profiles

Lever intensity by country



Notes: Of 203 deals that have entered or concluded support.

Source: Author's diagram

Country variation is even more limited than sectoral variation. Across 75 pairwise country comparisons (36 country pairs across five levers) 94 per cent are statistically indistinguishable on binary activation and 87 per cent on continuous scores. A deal's country explains at most 17 per cent of the variance in any individual lever (GESI), and under 4 per cent for the Multiplier Effects lever. Where a deal sits geographically tells you relatively little about its transformation profile. There can be transformative deals anywhere.

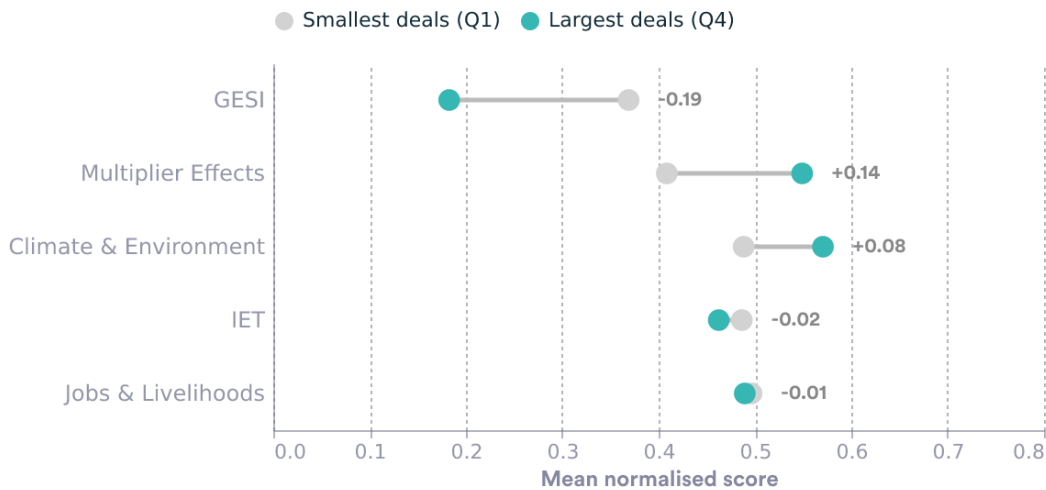
What is associated with lever activation?

Deal size has minimal impact on most lever scores. When comparing the smallest and largest FDI quartiles across all five levers, three dimensions remain consistent: Jobs & Livelihoods, IET, and Climate & Environment exhibit nearly identical mean scores, regardless of whether a deal is below \$5 million or above \$40 million.

However, two exceptions emerge. Multiplier Effects increase with deal scale (+0.14), reflecting the tendency of larger investments to support broader supply chains and export linkages. In contrast, GESI declines significantly as deal size increases (-0.19), with the largest deals scoring less than half as well as the smallest on gender and racial inclusion criteria.

Figure 8: Deal size and lever activation

Mean normalised score for smallest (Q1, <\$5 million)

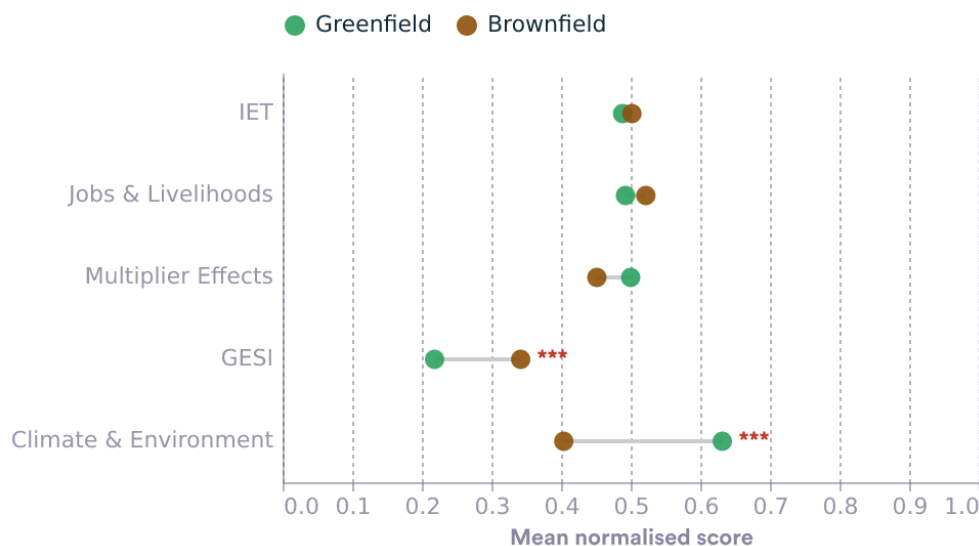


Notes: Of 135 deals that have concluded support.

Source: Author's diagram

Figure 9: Greenfield and Brownfield lever scores

Mean normalised lever score by deal type



Notes: Of 203 deals that have concluded support.

Source: Author's diagram

Greenfield and brownfield deals activate a similar number of levers on average, but their compositions differ slightly. Greenfield deals score higher on Climate & Environment, consistent with new facilities embedding environmental standards and supply-chain linkages from the outset. Brownfield deals score higher on GESI. Jobs & Livelihoods and IET show no significant difference by deal type.

The evidence points to one consistent pattern: most dimensions of transformation are aligned. Deals that score high on IET tend to activate more levers, attract more FDI, and create more jobs. This holds across sectors, deal sizes, and deal types.

The exception is the GESI lever, which does not increase alongside IET, nor does it correlate with deal size, sector, or deal type, meaning inclusion outcomes require separate attention. Without targeted action on inclusion, a portfolio emphasising ambitious, high-IET deals will not yield broader GESI outcomes, even though it strengthens multiplier, climate, and employment outcomes. This highlights the need for distinct strategies or interventions to improve GESI impact.

Sector choice modestly shapes transformation profiles but does not force hard trade-offs. Most pairwise sector differences are statistically indistinguishable, and within-sector variation far exceeds between-sector variation. The sharpest signal is between Pharmaceuticals, which underperform on IET and Climate & Environment despite their economic complexity, and Machinery & Electrical Equipment, which activates levers most comprehensively. Agri processing sits close to the portfolio mean across all dimensions. Country differences are even flatter.

The greenfield/brownfield balance serves as a natural hedge. Greenfield deals bring stronger climate and multiplier profiles. Brownfield deals bring stronger inclusion scores. Total lever breadth is identical across the two types. Mixing both preserves balance across dimensions that may pull in opposite directions.

These findings narrow the scope of the portfolio strategy question. If pursuing deeper transformation does not come at the cost of breadth, except on inclusion, the remaining test is whether it comes at the cost of closure. The next section turns to that question.

IET and complementarities between levers

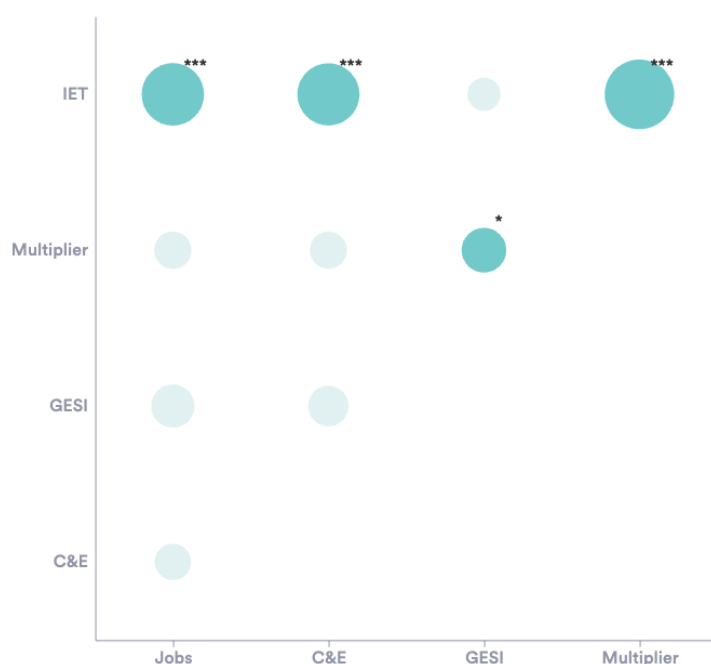
Activation of IET is driven by high complexity deals with deep supply chain integration. Deals have been scored across 7 categories by Manufacturing Africa with a potential maximum of 26 points. The most points are available in complexity and local supply chain. The average deal achieved 12 points, of which supply chain impacts (3.12 points), complexity (3.24), and skills and local management (2.44) contributed the most. Two categories, halo impact and

investment climate policy change, score near zero on average, contributing little to the distribution. Following PbR activation rules, the activation threshold is set at 13 points - half of the total available - a bar which 44 per cent of A4+ deals meet.

For most dimensions of transformation, activation of other levers is a strong predictor. IET correlates significantly with Jobs ($p=0.29$), CLIMATE & ENVIRONMENT ($p=0.29$), and Multiplier Effects ($p=0.37$), while the Jobs & Livelihoods, Climate & Environment and Multiplier Effects lever activation show no significant pairwise correlations with each other. GESI lever activation is the clear exception. It shows no significant correlation with any lever except a weak association with Multiplier Effects ($p=0.14$). The result confirms that inclusion outcomes are structurally independent of other transformation dimensions.

Figure 10: Lever score correlations

Spearman correlations between normalised lever scores (intensive margin)



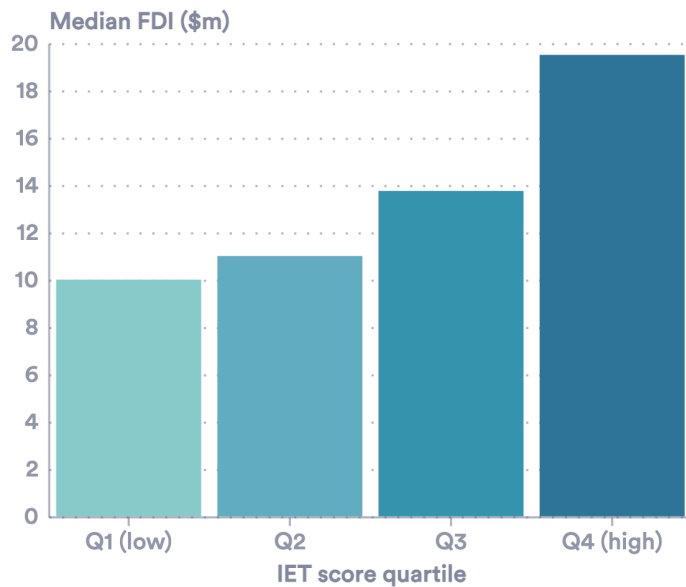
Notes: Of 203 deals that have entered or concluded support. Statistically significant correlations indicated with * ($p < 0.05$) and *** ($p < 0.001$)

Source: Author's diagram

Deals that score high on IET in the PbR system, tend to be larger, deal higher-employment, and activate other levers more intensely. IET is activated in 43 per cent of deals, aligned with PbR eligibility and defined as coverage of more than 50 per cent of our available points.

Figure 11: IET Scores Distribution and Deal size

Median FDI by IET Score.



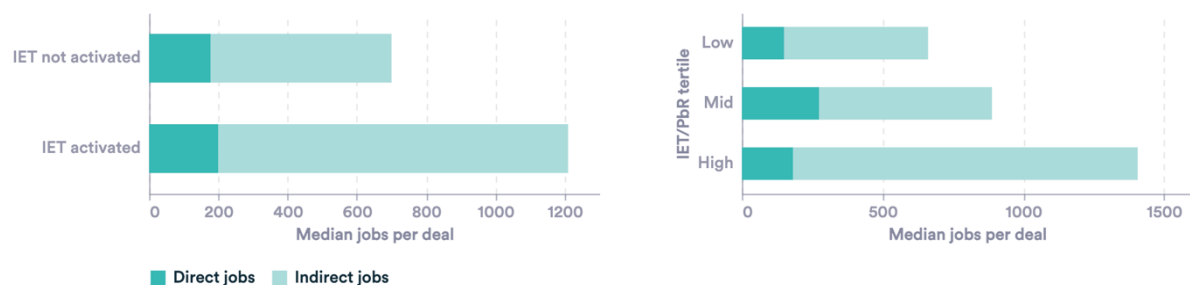
Notes: Of 135 deals that have concluded support.

Source: Author's diagram

Deeper transformation is associated with larger deals. Among IET-active deals, median FDI is \$15m. Breaking this down further, the relationship is inconsistent across quartiles. Deals in the lowest IET quartile have a median FDI of \$14m, dipping to \$10m in Q2, then rising to \$13m in Q3 and \$17.5 among the highest scoring quarter.

Figure 12: IET Activation and Jobs

Jobs by IET Activation and Score

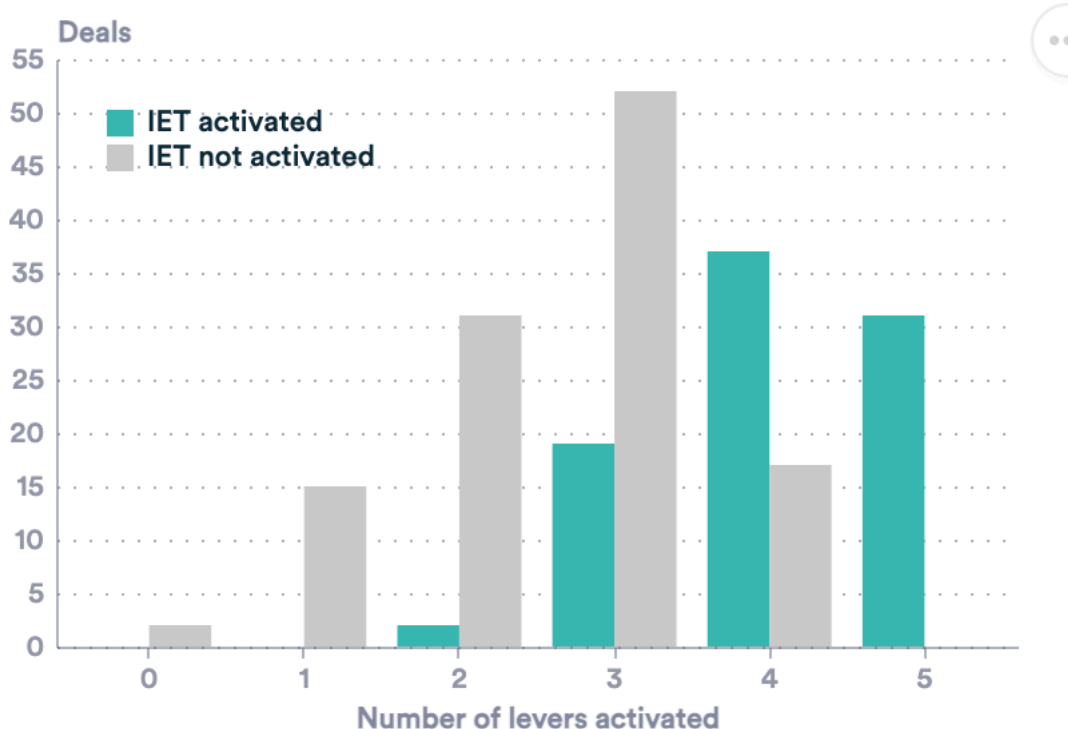


Notes: Of 203 deals that have entered or concluded support.

Source: Author's diagram

Figure 13: PbR lever activation

Intensity and lever count



Notes: Of 203 deals that have entered or concluded support.

Source: Author's diagram

IET-active deals also deal stronger employment outcomes. Median direct jobs are higher among IET-active deals (200 vs 178), and the gap is more pronounced for indirect employment (1,010 projected indirect jobs for active vs 522 for inactive).

Breaking this down by transformation depth, projected indirect jobs more than double from low to high IET tertiles. Low-IET deals deal a median of 514 indirect jobs, rising to 614 in the middle tier and 1,357 among the highest scoring. Direct jobs show a different pattern, rising from 150 to 219 among high-IET deals.

More transformational deals also activate other levers more intensely across almost all dimensions. IET-active deals show higher activation on Jobs & Livelihoods (92 per cent vs 81 per cent), Climate & Environment (78 per cent vs 52 per cent), and Multiplier Effects (93 per cent vs 77 per cent), and carry a substantially higher mean lever count (4.1 vs 2.6). The one exception is the GESI lever, where activation rates are near-identical between IET-active and IET-inactive deals (46 per cent vs 45 per cent). GESI is the only lever that does not co-move with IET.

The GESI lever gap represents the clearest trade-off in the PbR portfolio. High-IET deals are not systematically more inclusive by gender or race criteria. This is a dimension where pursuing deeper transformation does not deliver broader impact. Racial and gender equity appears to be largely independent of other levers.

The most transformative deals by IET scores attract 31 per cent more investment at the median than the least transformative (from \$11.4m to \$15m). The distribution is also more skewed at the top. In the highest and lowest IET tertile, mean FDI (\$76.5m and \$65.7m) are five to six times their medians, driven by a small number of high transformation deals that pull the distribution. In the mid tertile, the mean and median sit closer together. The most transformative deals are not uniformly large; they span all sizes but disproportionately attract the portfolio's largest single investments.

Table 2: Deal size by transformation depth

Median and mean FDI by IET score tertile

IET group	Median FDI	Mean FDI	N
Low tertile	\$11.4m	\$65.7m	78
Mid tertile	\$13.0m	\$26m	60
High tertile	\$15.0m	\$76.5m	66

Notes: Of 203 deals that have entered or concluded support.

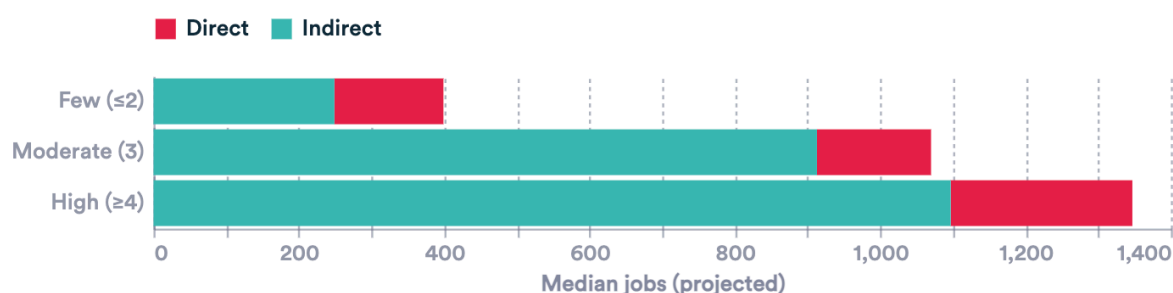
Source: Author's diagram

Companies activating four or more impact levers generate a median of 1,519 total jobs, more than double the 576 jobs from companies with two or fewer levers. The difference comes from indirect employment. High-lever companies produce a median of 1,097 indirect jobs compared to 249 for low-lever companies, a 4x gap. Direct job creation stays in a narrow band across all three categories, which suggests the multiplier effect, not headcount alone, drives the separation.

From interviews there is some evidence that multiple-lever activation can contribute to better growth and traction outcomes. On the other hand, there is also evidence against this in some cases lever activation is deep, genuine, and well-evidenced, yet it nearly failed due to capital constraints, suggesting that lever depth is not sufficient condition for sustainable growth when the broader financing environment is unfavourable to the asset class.

Figure 14: Direct and indirect jobs created by intensity of levers activation

Job creation by number of levers activated



Notes: Of 203 deals that have entered or concluded support.

Source: Author's diagram

Adding value in the face of infrastructure and service delivery gaps

Across those interviewed, IET lever activation is seen to be most notable in deals that address public sector structural failures. Specifically, by providing capital to business models seeking to address a local problem with underutilised, available resources to meet unmet demand.

This has included (within the sample portfolio) converting waste into tradable commodities or food products, formalising previously unstructured input markets, integrating dispersed supply chains through modern processing infrastructure, and enabling access to productive assets for MSMEs. In each case, firms operate not by displacing existing systems, but by building where systems are incomplete, thereby generating both commercial returns and broader economic value.

In the same vein, the interviews indicate that business models targeting structural economic gaps as commercial opportunities can sometimes support firm growth through three primary mechanisms.

1. **First, they generate durable and self-reinforcing demand** by serving previously excluded or underserved market segments, where customer success feeds back into increased demand and validates the underlying business model.
2. **Second, they create structurally low-cost input bases by incorporating informal, unpriced, or inefficiently utilised resources into formal production systems**, which enhances competitiveness and supports resilience, even under financial stress.
3. **Third, they strengthen the investor proposition by embedding clear social and economic impact within the business model**, enabling access to concessional

finance and expanding the pool of potential investors, particularly where commercial returns alone may not yet be sufficient.

Jobs & Livelihoods

The Jobs & Livelihood lever is the most widely activated (85 per cent of deals), reflecting the expectation that virtually all deals create a substantial number of jobs. Job prospects are dominated by indirect employment, averaging 2,100 with a maximum of 35,000 through supply chain, ecosystem, and spillover effects. For seven-in-ten deals indirect employment exceeds the direct, averaging 2,900. To weight between the two, and adjust for clear outliers, the direct and indirect scores are individually logged and normalised. The lever activates at a normalised threshold of 0.42, a bar cleared by 85 per cent of deals⁷.

Job quantity: employment

Among all 262 pipeline deals, the median projected direct employment is 182 jobs per deal, rising slightly to 200 among closed deals. Indirect employment has a pipeline median of 1,000 jobs per deal. Direct jobs range from 5 to 22,000 per deal across all deals, with indirect employment estimated using deal-aware multipliers reaching considerably higher.

Among the 55 deals that have reached financial close, MA-supported firms are projected to create 46,589 direct and 112,407 indirect jobs. Indirect employment dominates: the median closed deal deals 200 direct jobs and 825 indirect jobs per deal, with individual deals ranging from 30 to 15,000 direct jobs and considerably wider variation in indirect employment.⁸

The sectoral and geographic distribution of projected jobs among closed deals reveals where employment impact is concentrated. Agri processing dominates indirect employment, with a median of 1,626 projected indirect jobs per closed deal — reflecting the deep supply chain and smallholder linkages characteristic of the sector. Direct employment among closed deals is less concentrated, with Light Manufacturing standing out at medians of 510 direct jobs per deal. By country, Nigeria leads on direct employment with a median of 500 direct jobs per closed deal, well above the portfolio median of 200. Ethiopia leads on indirect employment at a median of 3,306 projected indirect jobs per closed deal, reflecting the scale of its Agri processing and food system investments. Kenya, despite leading the portfolio on deal volume, lags on indirect job creation with a median of 537 indirect jobs per closed deal.

⁷ This in effect means each direct job is weighted much higher than each indirect job. Because indirect job projections are much larger than direct ones (mean 3,262 vs. 751; median 694 vs. 191), the log compression means an additional indirect job contributes much less to the lever score.

⁸ All figures should be treated as projections, employment typically lags financial close and in most cases is not yet fully realised

Job quality improvements

Broadly speaking, job quality has been improved across the portfolio by the following mechanisms:

- ◆ Income increases
- ◆ Upskilling and training schemes incorporated into the business model
- ◆ The formalisation of labour (including the formalisation of payment methods and “banking” previously unbanked workers, creating a financial footprint for rural workers)
- ◆ Pipeline creation for skilled labour and the mitigation of “brain drain”

Formalisation of labour: quantity and quality of jobs improvement

The informal sector dominates labour-absorption across the continent, leaving workers in low-skilled, low-paying jobs that often fail to translate into sustainable livelihood improvements that ensure social security and income stability. Achieving ‘decent work’, thus, does not only rely on increasing the number of direct and indirect jobs created, but also on social impact factors that allow workers to receive consistent, reliable payment; and see their working conditions improve. Some firms across the portfolio, including one in cocoa farming and processing industry, have set up payment platforms or have incorporated payment-to-account of their suppliers, unbanked rural informal workers and creating reliable sources of income and payment year-round.

Income multipliers

The most direct channel is wage impacts at the base of the supply chain. One interviewed firm has approximately quadrupled earnings for approximately 1,200 women in Ethiopia – a group facing compounded economic exclusion in a sector invisible to formal labour-market measurement. The founder describes individual cases in which increased earnings enabled women to take on dependants, make household investments and move out of precarity. While these outcomes are anecdotal and not directly scalable in statistical terms, they illustrate the human impact these income additions have.

Pipelines for skilled jobseekers

Brain drain remains a structural challenge across African economies. Evidence across the portfolio indicates that successful deals can support job creation in sectors requiring skilled labour within local markets. For example, a bio-food processing firm in Senegal established an early partnership with the country’s main national university, creating a pipeline for technicians required for its bioconversion processes; its workforce, including PhD-qualified researchers, is sourced entirely locally.

Jobs & Livelihoods lever activation and growth: possible mechanisms

- ◆ **Formalisation of supply-chain labour as a source of input-supply stability:**
Interviews revealed that where firms depend on resource flows from informal workers – often women and notably waste pickers, smallholder farmers and micro-distributors –

the deliberate regularisation of those relationships reduces input uncertainty and lowers the risk premium that investors attach to the business.

- ♦ **Livelihood impact (in the face of infrastructure failures) as the firm's primary value proposition:** Africa faces persistent constraints from inadequate infrastructure, including unreliable electricity, weak waste management systems, and poor road networks. Around 600 million people in sub-Saharan Africa still lack access to electricity.⁹ These conditions raise operating costs for MSMEs, limit formalisation, and restrict firm expansion. Evidence across the portfolio suggests that where firms offer products that directly enhance customer livelihoods, firm growth and improvements in customer livelihoods tend to be jointly determined and mutually reinforcing.
- ♦ **Livelihood support as a retention and productivity tool:** Interviews reveal that incorporating livelihood support into service packages can function as a retention and productivity tool.

Trade-offs between Jobs & Livelihoods lever activation and business growth

A repeated trade-off between Jobs & Livelihoods lever activation and profitability noted from interviews perceived risk associated with higher running costs because of good-job creation. This often leads to facing a choice between workforce contraction or capital scarcity.

Interview evidence indicates that particularly firms in capital-intensive sectors face pressure to prioritise early profitability over employment expansion. In some cases, this has coincided with Manufacturing Africa supported firms choosing workforce contraction or delayed hiring despite otherwise viable business models.

Climate & Environment

Climate & Environment's representation in the lever framework has its foundation in ICF applicability, supplemented by layered qualitative and narrative detail drawn from deal records. The ICF score takes one of four values (0.1, 0.5, 0.9, or 1), measuring conformity with FCDO's International Climate Finance framework. No deal records zero applicability, and the portfolio distributes as follows: 37 per cent at low, 35 per cent at medium, 4 per cent at high conformity, and 24 per cent at full conformity. Activation requires reaching the medium tier, which 63 per cent of deals meet. The base provided by ICF scores is then expanded on through a three-layer

⁹ International Energy Agency (IEA) (2025) *Financing Electricity Access in Africa*. Paris: IEA. Available at: <https://www.iea.org/reports/financing-electricity-access-in-africa>

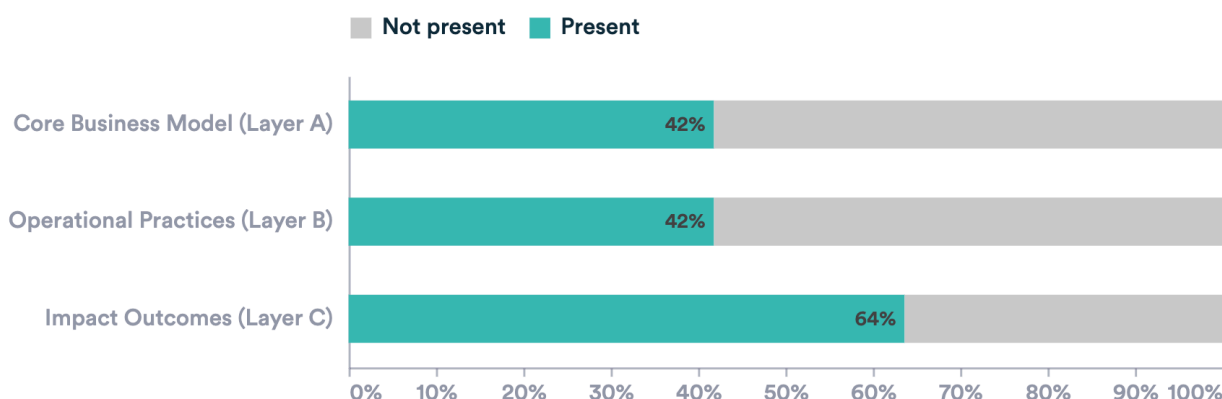
framework distinguishing integration into core business models, embedding of sustainable operational practice, and the realisation of measurable environmental outcomes.

Across the 55 deals that have reached financial close, nearly two-thirds (63 per cent) activate the Climate & Environment lever. Going beyond this headline figure, we can identify three layers of environmental impact:

1. Integration into the core business model, (Layer A)
2. Embedding of sustainable practise, (Layer B)
3. The realisation of measurable environmental outcomes aside from business models. (Layer C)

Figure 15: Three forms of environmental activation

Proportion of financially closed deals with environmental integration into core business models, operations, and outcomes



Notes: Of 55 deals that have reached financial close.

Source: Author's diagram

Environmental integration into business models (Layer A)

For many MA-supported deals, particularly those in circular economy or electric vehicle sectors, environmental impacts are a core feature. This deep integration is associated with deep and broad environmental impacts: all the 23 closed deals (42 per cent) that integrate environmental sustainability into their core business score highly according to ICF scores and bring about documented environmental impact outcomes (Layer C).

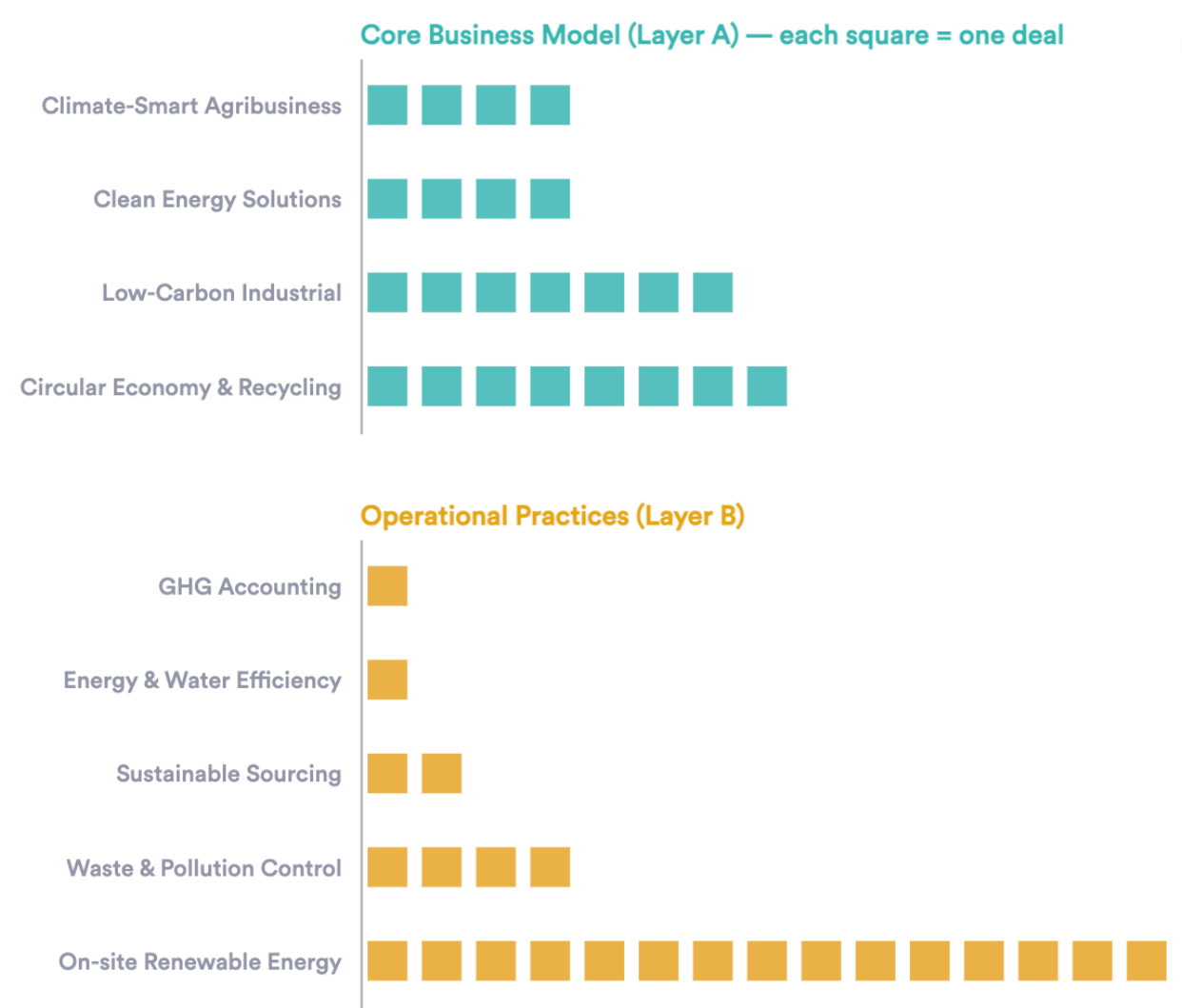
These 23 deals are found across five groups: electric vehicles, circular economy and recycling, clean energy manufacturing, climate-smart agribusiness, and low-carbon industrial production.

Electric vehicle (EV) deals form an important portion of the portfolio's environmentally centered deals. For example, a Kenyan EV firm is preparing to produce the first indigenously developed

two- and three-wheel electric vehicle in East Africa another is producing the first locally designed an manufactured motorcycle frames; and a Rwandan EV truck manufacturer transferring technology from the UK and providing affordable rural transport solutions.

Circular economy deals span plastic recycling, e-waste, organic waste bioconversion, and construction material from recycled inputs. These deals are often first movers without national or regional precedent.

Figure 16: Business and operational integration



Notes: Of 55 deals that have reached financial close.
 Source: Author’s diagram

Environmental integration into operational practices (Layer B)

Many deals embed environmental practises into their operations, regardless of their sector. Of the 55 deals that have reached financial close, 23 embed environmental practices into how they operate rather than (or in addition to) what they produce. These integrations include:

1. **On-site renewable energy.** Many firms plan the installation of captive solar energy, often on rooftops, to power manufacturing or processing operations. For example, a Ugandan coffee processor has installed a smart-technology solar plant to power its production facility.
2. **Efficient resource (re)use.** Other deals have employed innovative operational practices to reduce resource use. A Kenyan apparel manufacturer, with \$39m in FDI is a clear example: it has deployed certified chemicals, water recycling, sludge upcycling, solar and biomass energy, and automation specifically to reduce water consumption. Similarly, a Tanzanian cashew processor uses cashew nut shells as its own energy source for production and supplies surplus energy to a cement company, simultaneously reducing its GHG emissions, its fuel costs, and its waste disposal needs.
3. **Sustainable and certified input sourcing.** Other firms bring about environmental impacts through their careful selection of inputs. Business rationales are both demand side – for example, an Ethiopian bamboo manufacturer is pursuing FSC certification to meet European and Middle Eastern buyers’ needs – and supply side –for example, Ethiopian plastic waste-to-fuel company is recycling plastic waste because of its availability.

Environmental impacts (Layer C)

Beyond business model design and operational practice, firms in the Manufacturing Africa portfolio also demonstrate significant measurable environmental outcomes captured in stakeholder engagement.

Deals contribute to Climate & Environment via:

- ◆ Plastic waste diversion
- ◆ The production of alternative fuels (to traditional fossil fuels)
- ◆ The use of renewable energy in production processes
- ◆ Making renewable energy powered products affordable and accessible to consumers
- ◆ Reducing food spoilage and waste
- ◆ In the case of agri-businesses related to cocoa farming: taking away incentives to participate in deforestation with the monitoring of suppliers
- ◆ Emission offsetting activity

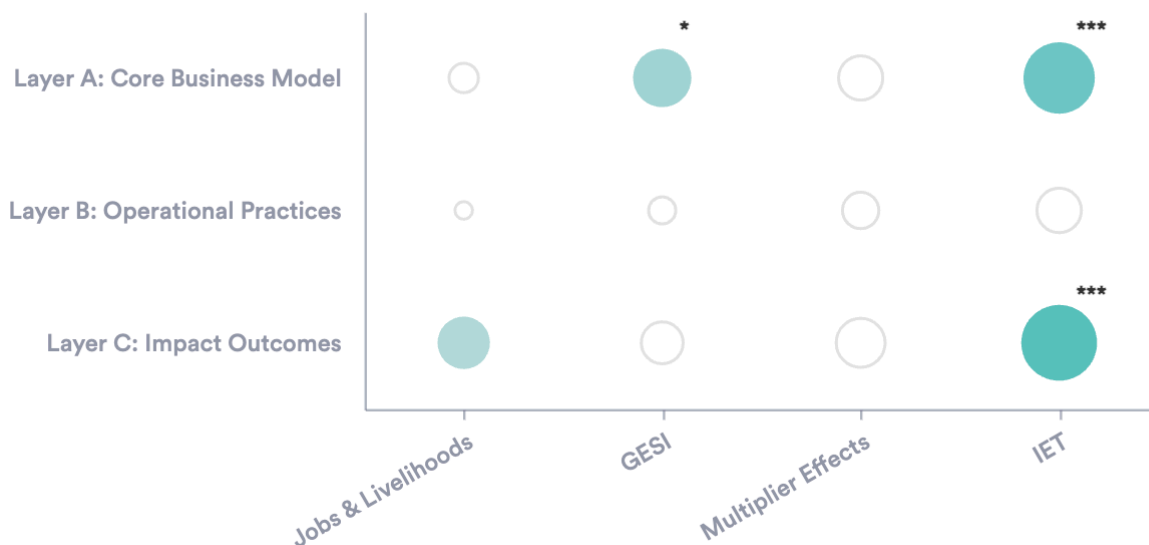
Environmental firm growth complementarities

Both quantitative analysis of Manufacturing Africa's portfolio and interviews with firms reveal broad complementarities between environmental impacts and other aspects of transformation. Sustainable business practices are not just bringing environmental benefits but are also promoting firm growth.

Quantitatively, the business benefits of environmental integration can be seen through an investigation of the three environmental layers and other levers. Deals where environment is the core business model (Layer A) score significantly higher on the IET lever (correlation coefficient of 0.44, $p=0.001$ within the financially closed deal portfolio). Similarly, these deals with environmental core business models score higher according to GESI ($r=+0.29$, $p=0.034$); 22 per cent of Layer A (core business model) deals have products that specifically benefit women, compared with 3 per cent of other closed deals. Similarly, 39 per cent of Layer A deals have significant female representation in their supply chains, compared with 19 per cent of non-Layer A deals.

Figure 17: Environmental integration correlations

Correlations between environmental integration and other levers among financially closed deals



Notes: Of 55 deals that have reached financial close. Statistically significant correlations indicated with * ($p<0.1$) and *** ($p<0.01$)

Source: Author's diagram

Across the portfolio, environmental performance is demonstrably connected to improved commercial outcomes, via the mechanisms of improving product competitiveness and access to a broader pool of finance.

Climate & Environment spillovers into economic transformation

Climate & Environment activating business models are not merely reducing the negative climate externalities of existing economic activity but are contributing to broader structural change towards environmentally friendly outcomes. Key areas of impact include providing private good substitutes for failing public infrastructure (especially electricity, fuel and waste disposal), as well as food security and health and safety concerns. There is also evidence that the firms promoted have seen changes to local business perceptions of alternative fuels, encouraging more firms to reduce their emissions.

GESI

The constructed GESI lever indicator combines two distinct inclusion frameworks into a composite indicator, constructed using twelve binary indicators across two classifications: the 2X Challenge for gender and BII BOLD for Black ownership and management. Eight gender-related indicators capture women's participation in management, ownership, the workforce, and customer base, while four indicators capture Black ownership and leadership. The activation threshold is set at 0.25, requiring that, on average, at least a quarter of the criteria are met within each framework. Overall, 46 per cent of deals in the analysed sample meet this threshold, representing the lowest activation rate among the five levers. Across the portfolio, 77 per cent of deals meet at least one 2X gender criterion and 67 per cent meet at least one BOLD criterion, although many individual criteria are infrequently observed. Only 15 per cent of firms are women-founded and 33 per cent are Black-founded.

These shares are broadly consistent with country patterns observed in World Bank Enterprise Survey data:

- ♦ The share of surveyed firms corresponding to Manufacturing Africa's active country portfolios that report *any* female ownership ranges from 13.2 per cent in Tanzania to 37.8 per cent in Rwanda, with most countries clustering between 18 per cent and 36 per cent.
- ♦ Majority female ownership remains significantly lower, ranging from 8.4 per cent in Nigeria to 27.2 per cent in Rwanda, and typically well below 15 per cent in most markets.

In this context, the share of women-founded firms in the Manufacturing Africa portfolio (15 per cent) is aligned with, and in some cases slightly greater than observed country-level benchmarks for female ownership.

Three features of GESI lever activation stand out.

1. GESI lever activation does not co-move with any other transformation lever.

Deals scoring highly on IET activate the Jobs & Livelihoods, Climate & Environment and Multiplier Effects lever indicators far more often than IET-inactive deals (89 per cent, 77 per cent and 89 per cent versus 76 per cent, 40 per cent and 67 per cent respectively), but GESI activation is near-identical between IET-active and IET-inactive deals (47 per cent versus 48 per cent). A portfolio that pursues deeper transformation as conventionally measured by IET will therefore not, of its own accord, yield broader GESI outcomes.

2. GESI lever activation declines with deal size. The largest deals score less than half as well as the smallest on gender and racial-inclusion criteria, a drop of 0.24 on the normalised scale. GESI is the only lever on which large deals systematically underperform. Multiplier, by contrast, rises with scale by 0.13.

3. GESI lever activation is higher in brownfield than greenfield deals. Established operations appear to bring workforce and community relationships that translate into inclusion outcomes more readily than newly constituted greenfield facilities. Sectorally, Complex Manufacturing has the second-lowest GESI activation at 27 per cent, despite the sector's strength on Multiplier Effects and IET lever activation. Machinery and Electrical Equipment activate GESI more evenly, alongside all other levers. The clearest orthogonality pattern is visible in precisely the sectors that are otherwise most transformational.

GESI lever activation - impact mechanisms

Firms with high scoring gender workforce share and gender management shares have at least two broader structural impacts illustrated by stakeholder engagement and desk-study findings: (1) financial-market inclusion; and (2) the changing of social norms.

- 1. Reducing financial barriers for women:** Gender disparities in the workforce remain pervasive across Manufacturing Africa's target destinations, albeit to varying degrees. Across the board, African women often face greater obstacles to obtaining loans and financial support to access productive resources relative to men (ISS, 2026). As such, one observed impact pathway to activating positive GESI outcomes is reducing financial barriers facing women in accessing productive assets.
- 2. Changing societal narratives:** The issue of gender inequality is not only reflected in systemic financial barriers but is also deeply embedded in the social fabric, where female-dominated activities are often under-valued. Shifting societal narratives around women employment is imperative to achieving improved GESI outcomes, which forms the basis of the second observed impact pathway.

Indicative evidence for GESI activation and growth links

The interviews provide evidence that gender inclusion might sometimes positively impact firm commercial success via access to niche finance sources as the underlying mechanism.

Gender inclusion appears to increase access to a category of impact-oriented investors and development finance instruments that would otherwise be unavailable. This access has in several cases been directly consequential for the trajectory of the firm.

No evidence in support of GESI activation constraining firm growth is supported by the portfolio data and strategic engagements

Multiplier Effects and Sector Transformation

The Multiplier Effects lever indicator is activated in 82 per cent of closed Manufacturing Africa deals, second only to Jobs & Livelihoods. The lever is constructed from six binary criteria – deal scale above USD 20m, export focus, import substitution, new-value-chain creation, cluster effects and new-technology or new-approach introduction – and the average deal meets 2.8 of them. Two criteria are near-universal in the portfolio: 80 per cent of deals are classified as export-focused and 79 per cent as import-substituting. At the other end of the distribution, new-value-chain creation activates in only 10 per cent of deals, underscoring how rare genuine new-market creation is relative to entry into or expansion within existing value chains.

Multiplier Effects is the only lever which sees activation rise with deal size (by 0.13 across quartiles). This pattern reflects the structural tendency of larger investments to anchor broader supply-chain and export linkages. Activation is also higher in greenfield deals, which by design introduce new production capacity, new supply-chain relationships and new technology.

By sector, Multiplier Effects lever activation is most pronounced in Complex Manufacturing, which combines first-mover, export-oriented and technologically novel deals at disproportionate rates. Machinery and Electrical Equipment activates the Multiplier Effects lever in 92 per cent of its deals and also records the highest IET activation of any sector (46 per cent) and the highest closure rate (80 per cent) – making it the most comprehensively transformational sector in the portfolio. Pharmaceuticals is a notable outlier: despite high economic complexity, the sector underperforms on Multiplier Effects lever activation because of weak local supply-chain integration.

From stakeholder engagement it is found that Multiplier Effects lever activation was achieved through two observed mechanisms of change:

- ◆ **local value chain creation** and
- ◆ **innovation and technological diffusion.**

Despite the different country contexts and varied operations, the following inputs (firm activities) were featured as drivers of those spillover effects: leveraging first-mover advantages and developing technology-based partnerships.

Creating local value chains and export orientation: By nature of its manufacturing-concentrated activities, the Heavy Industry sector demonstrates the strongest activation rate of the Multiplier Effects lever, mainly driven by its first-mover advantages, export-orientation, and technological advancements.

Innovation and Technological Diffusion: Technological adoption can induce Multiplier Effects flag indicator activation through generating inter-sectoral benefits through shared infrastructure, upskilling labour, and generating knowledge-spillover effects to neighboring regions. Yet, upgrading manufacturing equipment and technology for African firms in Sub-Saharan Africa is reported to be 35-39 per cent more costly relative to the United States ([World Bank, 2024](#)). Those high costs also apply to technologies utilised in the agriculture sector, posing constraints to upgrading productivity and competitiveness.

Evidence for Multiplier Effects lever activation promoting firm growth

The interviews provide evidence that first-mover status and demonstrated innovation can contribute to firm growth. The primary mechanisms through which this operates are **improved access to investment** and **the ability to attract strategic partners who add value beyond capital**.

- ◆ **Investment access through demonstrated scale:** Interview responses confirm that rapid expansion in production or operational capacity, is associated with improved access to follow-on financing (as to be expected). Evidence from portfolio firms suggests that visible scaling can strengthen investor confidence and support successive fundraising rounds.
- ◆ **Strategic partnership attraction:** Early-mover positioning seems to be associated with the ability to attract partnerships with larger, established firms. These partnerships often emerge where firms provide access to infrastructure or capabilities that partners would not efficiently develop independently, particularly within broader value chains.

In addition, the evidence points to a third possible reinforcing mechanism, namely scale, **innovation and technological adaptation** in linking Multiplier Effects lever activating firms to firm growth outcomes. **Firms that adapt technologies to local conditions, retain intellectual property, and develop context-specific solutions reduce dependence on**

imported inputs and strengthen operational efficiency, while also signalling adaptive capacity to investors.

Linking Multiplier Effects lever activation to firm growth challenges

Multiplier effect lever activation does not typically constrain firm growth in a direct sense. First-mover positioning and novel business models are, in isolation, commercially advantageous. However, two structural constraints emerge from the evidence that shape how this lever should be interpreted.

The first constraint is the **fragility of first-mover advantage**. Multiplier Effects potential across the portfolio is evident but contingent on firm survival. Evidence from portfolio cases shows that early-stage firms operating in challenging capital environments or volatile external conditions face delays, restructuring, or prolonged scale-up timelines. In such cases, the capacity to generate sector-level spillovers remains, but only if firms achieve sufficient operational scale. The broader implication is that multiplier effects are conditional on sustained firm-level support. Without adequate capital and time horizons, firms may not persist long enough to realise the spillovers implied by their models.

The second constraint is that the Multiplier Effects lever activation is forward-looking and difficult to verify in the short term. Several firms position their models around demonstration effects, such as proving the viability of new production systems or value chains in underdeveloped markets. While these models have the potential to catalyse new segments of economic activity, the realisation of such effects depends on firms reaching full commercial or industrial scale. At earlier stages, investors are effectively backing anticipated multiplier effects that have not yet materialised. This introduces uncertainty around both timing and magnitude of impact.

The structural implication is that the Multiplier Effects lever generates most of its value after firms cross a threshold of operational scale.

Part 2: Risk, Ambition, and Closure

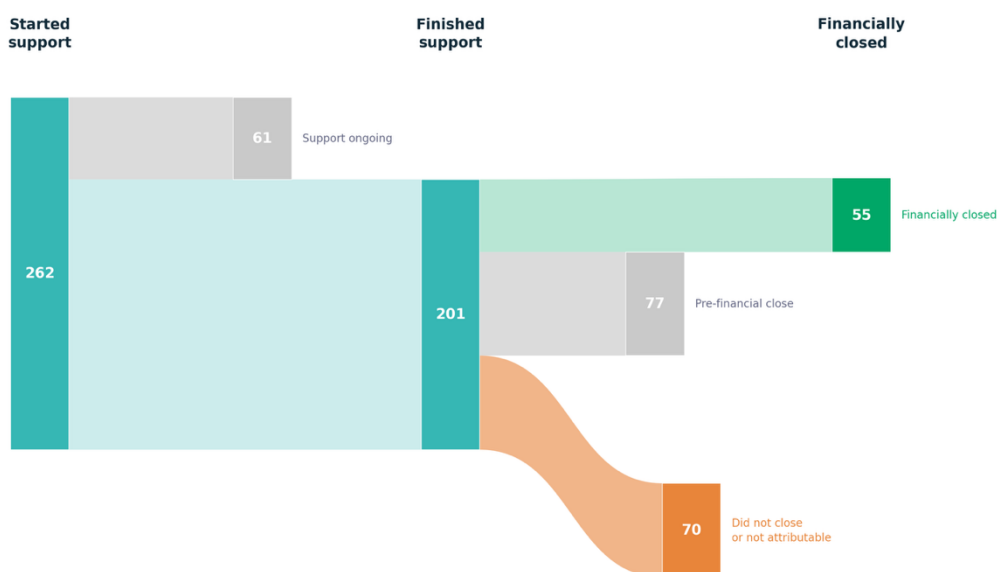
Risk, Ambition and Closure

To assess the current portfolio strategy against deal risk, closure and exit rates for deals that have concluded Manufacturing Africa’s programme of support are analysed¹⁰. As of March 2026, 55 deals have already reached financial close. 27 per cent have reached financial close, 77 remain in pre-financial close stages, and 70 did not close or are not attributable. A further 61 deals have support ongoing.

Descriptive statistics: deals reaching financial closure

Figure 18: Deal stages

Progression of deals into different stages



Notes: Of all deals across the full pipeline

Source: Author’s diagram

¹⁰ This addresses one form of risk: closure risk but cannot reveal downstream businesses risk: threats to impact following business close.

Deal value

Among the 55 deals that have reached financial close, the median deal size is \$12m with individual deals ranging from under \$1m to \$300m. Kenya leads on total FDI at \$807m, followed by Nigeria (\$473m) and Ethiopia (\$404m).

Total closed FDI is concentrated in a small number of very large deals. The five largest transactions alone account for a disproportionate share of the \$2.49bn total. This means portfolio-level FDI figures should be read with awareness that they reflect a skewed distribution rather than a broad base of similarly sized closures.

Median deal size varies considerably by country. Kenya and Nigeria tend to see similar sized deals close both with a roughly \$15m deal median. Rwanda sees the smallest median deal size at \$5m.

The largest closed deals span across countries in the portfolio. The three largest single transactions are in Nigeria, Ethiopia, and Senegal respectively.¹¹ This suggests that very large deal closure is not confined to one geographic area.

Among closed deals, the largest deals are in Pharmaceuticals and Chemicals.

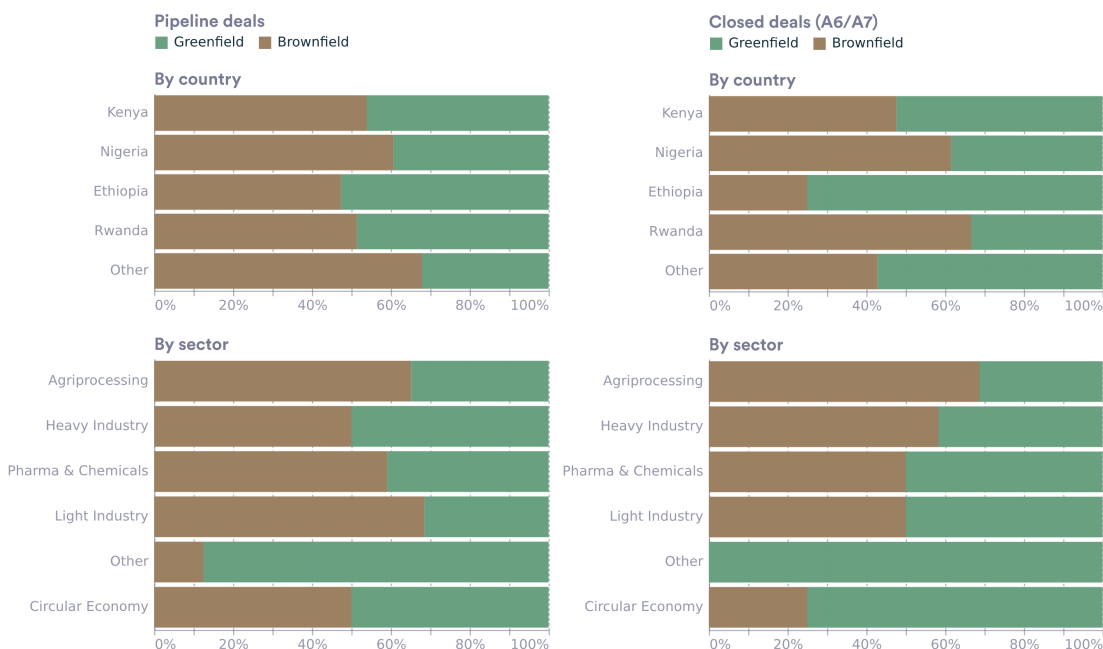
Pharmaceuticals and chemicals have the highest median FDI among closed deals at \$117m and \$51.8m respectively; this is well above their pipeline medians of \$95m and \$11m.

For Agri-processing, smaller deals closed more than larger ones. Agri-processing, by contrast, closes at a median of just \$3.3m, below its pipeline median of \$10m.

¹¹ The five largest closed deals include one in Nigeria (\$300m), one in Ethiopia (\$265m), and one in Senegal (\$229m)

*Deal type by greenfield/brownfield***Figure 19: Brownfield and greenfield deals for 262 pipeline and 55 closed deals**

Brownfield and greenfield breakdown overall, by country, and by sector



Source: Manufacturing Africa data

Notes: Excludes 4 deals (1.4 per cent) not classified as greenfield nor brownfield

Greenfield deals have had slightly greater success at securing deal closure. The portfolio splits 57 per cent brownfield and 43 per cent greenfield across the full pipeline, but closed deals are nearly even at 49 per cent brownfield and 51 per cent greenfield.

This is counter to the expectation that Brownfield investments are generally perceived as lower risk; while Greenfield investments are associated with higher investment risk profiles given their industry novelty, innovator or first mover status within a particular business environment.

However, this trend is driven by Ethiopian greenfield success – other countries follow the expected pattern. Closed Ethiopian deals are 75 per cent greenfield, whereas just 53 per cent of deals still in the pipeline are greenfield. **This might be because...**

Kenya sees a largely even portfolio split, while 6 per cent more Kenyan closures are greenfield than the Kenyan pipeline deals are greenfield.

Nigeria and Rwanda are in line with expectation, with a of lower perceived risk resulting in deal closure with a 62 per cent and 67 per cent of closures consisting of brownfield deals; while than in the pipeline brownfield deals make up 59 per cent and 51 per cent, respectively.

The difference across the Rwandan pipeline to closure may indicate that Rwanda is a particularly risk sensitive environment.

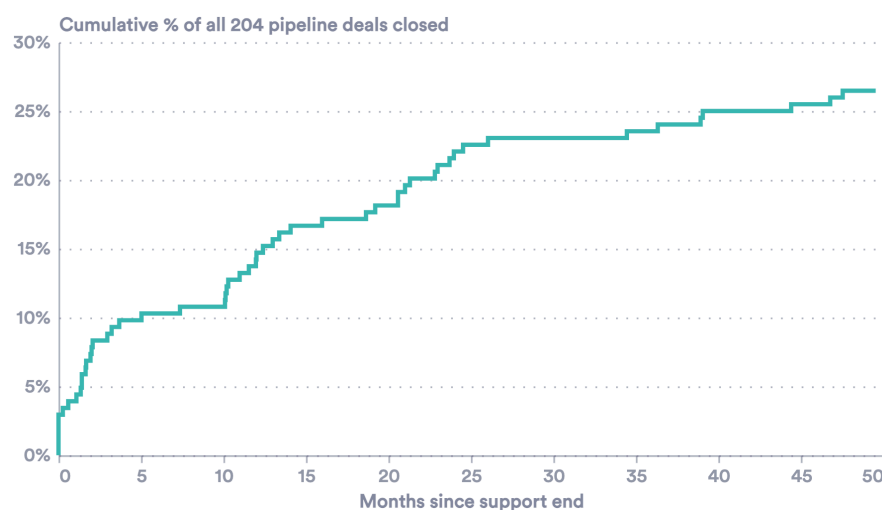
Among sectors, agriculture and heavy industry show favour towards low-risk, brownfield deals; while **circular economy and light industry see a greater share of closures classified as greenfield.**

- ♦ Agri-processing remains consistently brownfield across both pipeline and closed deals, at 65 per cent and 69 per cent respectively
- ♦ Heavy Industry moves in the same direction, falling from 50 per cent greenfield in the pipeline to 42 per cent at close.
- ♦ Circular Economy moves against this trend, shifting from 50 per cent greenfield in the pipeline to 75 per cent at close, suggesting that the most innovative environmental business models are among the stronger closers in this sector.
- ♦ Light Industry shows a similar though less pronounced shift, rising from 31 per cent to 50 per cent greenfield at close.

Time-adjusted financial closure assessment

Figure 20: Closure rates over time

Mean normalised lever score by deal type



Notes: Of 204 deals that have concluded support, including those that have exited (stage AX)

Source: Author's diagram

The quantitative analysis in this section considers cumulative closure over the months since the support-end date. This allows consistent comparison across deals regardless of when they entered the programme. Deals that have yet to finish support are excluded: a deal that has not yet concluded support is by definition pre-financial close and cannot appear as a closure event. The overall closure rate among concluded deals is 26.5 per cent. We also consider closure rates of mature deals, a line we draw a 24 months while accepting that some deals will take longer to close. Among the subset of deals where at least 24 months have elapsed since support ended, the rate rises to 35.6 per cent.

Country differences

Among the four countries that constitute the largest portion of Manufacturing Africa's portfolio, closure rates in the mature cohort are broadly similar: Nigeria (44 per cent), Kenya (39 per cent), Ethiopia (36 per cent), and Rwanda (29 per cent)¹². More notable is the different tempos at which deals have reached these rates. Among all concluded deals, 20 per cent of Kenyan deals had reached financial close within 10 months of support ending — 16 months sooner than

¹² Senegal and Tanzania deals also form an important part of the portfolio but their concluded-support deal counts, 15 and 10 respectively, with 4 closures between them are too small to support any inference. Closure rates for Senegalese and Tanzanian deals should be a future target for analysis, as more exit support and approach financial close.

Nigerian deals, 14 months sooner than Ethiopian deals, and 34 months sooner than Rwandan deals. Some of this reflects portfolio age: Kenya has the most mature portfolio, with a median support start in late 2022, while Nigeria and Ethiopia are roughly a year behind and Rwanda's pipeline is younger still.

Figure 21: Country closure rates

Aligned to support end

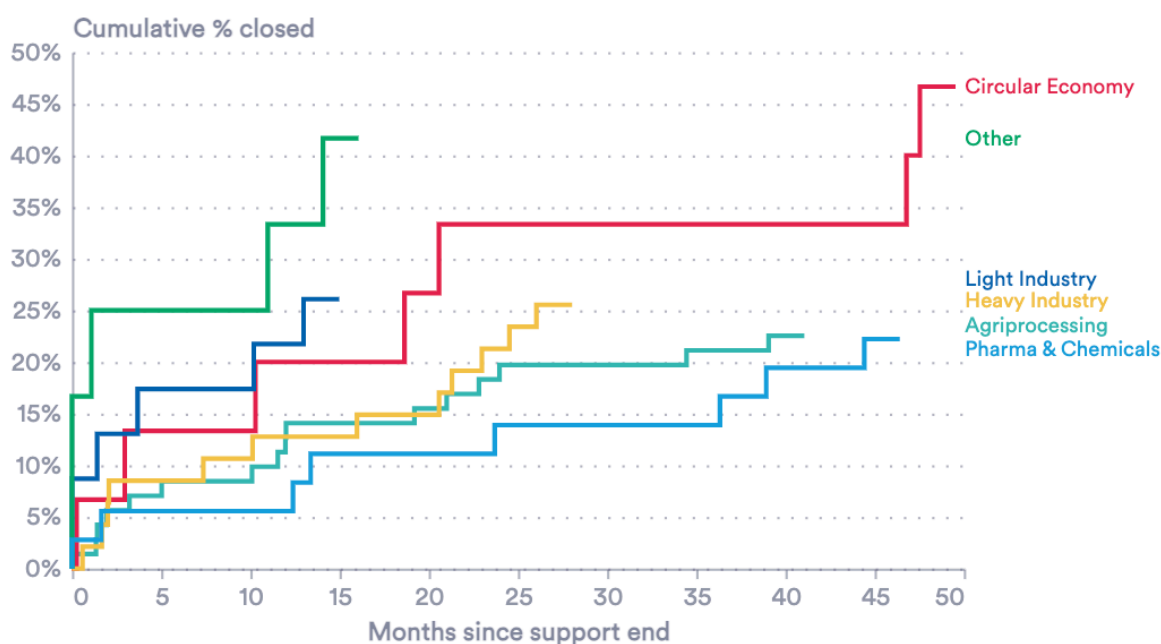


Notes: Of 204 deals that have concluded support, including those that have exited (stage AX).

Source: Author's diagram

Figure 22: Sector closure rates

Aligned to support end



Notes: Of 204 deals that have concluded support, including those that have exited (stage AX).

Source: Author's diagram

Turning to sector groups, Circular Economy deals stand out. Seven of 12 Circular Economy in the mature deal cohort deals have closed, well above the 28–40 per cent range seen across other sector groups. Agriprocessing (30 per cent) and Pharma & Chemicals (28 per cent) have the lowest closure rates among the major sectors. Light Industry (36 per cent) and Heavy Industry (40 per cent) sit in between. These differences are interesting but should be read as descriptions of what has happened in this portfolio rather than signals about which sectors are inherently easier or harder to close; the sector groups are small and the patterns fragile (see below).

Box 2. What closure patterns can and can't reveal

The country and sector figures above are descriptions of closures in Manufacturing Africa's portfolio over the past 5 years. They are not reliable guides to the underlying tendency of deal types to close.

The portfolio's closures are clearly economically significant, representing hundreds of millions of dollars of FDI and thousands of direct jobs, but statistical significance is harder to establish. The sectoral and country closure patterns observed would be

consistent with large true differences the underlying probability of a deal closing in each country or no difference at all.

The differing closure rates by characteristics including country and sector are descriptions of closure so far but not statistically supported findings about population differences. To make those claims we would need more closure events, disaggregated into subgroups small enough to be analytically useful.

This limitation is easiest to see by country. With 204 deals we can ask: how wide a range of country closure rates would we expect to see *just from chance* even if every country had an identical underlying tendency to close?

Using the actual country deal counts and a common closure rate of 26.5 per cent, a spread of at least 10 percentage points between the highest and lowest country rates would arise by chance alone 77 per cent of the time.¹³

Deal Ambition and Closure

First-mover/innovator status does not harm deal closure prospects

Greenfield and brownfield deals close at near-identical rates after two years (34 per cent and 38 per cent respectively, $p=0.778$). An ambition-closure trade-off is therefore not visible by deal-type, as if it were; we would expect to see a higher closure rate among brownfield deals. Practically speaking, Greenfield investment is structurally more complex to close than brownfield expansion (requiring new land, organisation, and administrative approval) and this may weigh in favour of concentrating on brownfield investment if one is concerned with deal facilitation effort (man-hours from spent on technical support for deal facilitation).

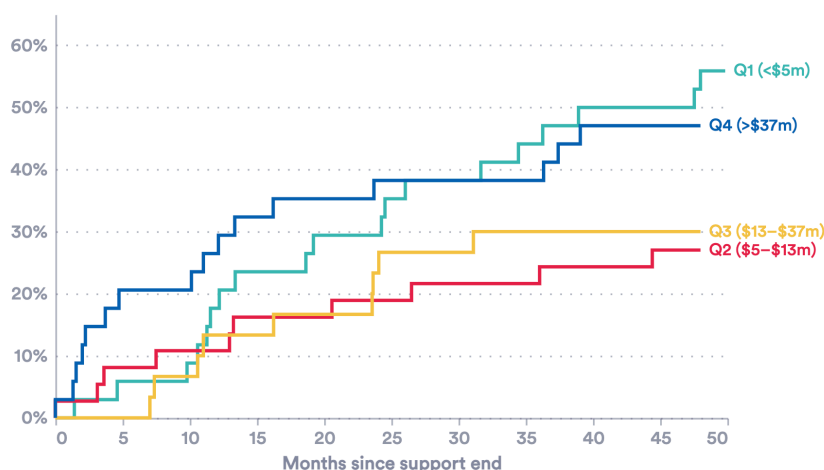
There is no evidence for a trade-off between deal closure and deal ambition by size.

¹³ Formally: we ran 100,000 draws from independent binomial distributions with $n = 72$ (Kenya), 43 (Nigeria), 26 (Ethiopia), 27 (Rwanda) and an identical closure chance of $p = 26.5$ per cent. In each draw, the range between the highest and lowest simulated country rate is recorded. 84 per cent of simulations produce a range at least as wide as 9 points. Individual 95 per cent expected ranges: Kenya 17–38 per cent, Nigeria 14–40 per cent, Ethiopia 12–42 per cent, Rwanda 11–44 per cent.

The deals projected to receive the most and least FDI have closed at the highest rates. The smallest quarter of deals (Q1, <\$5m) and large deals (Q4, >\$30m) have closed at 56 per cent and 47 per cent respectively, while mid-size deals (\$5–\$30m) close at only 27–30 per cent. There is no evidence that larger deals suffer from a deferred closure penalty, as might be expected if the ambition-risk trade-off held true.

Figure 23: Closure rates by FDI

Aligned to support end



Notes: Of 204 deals that have concluded support, including those that have exited (stage AX).

Source: Author's diagram

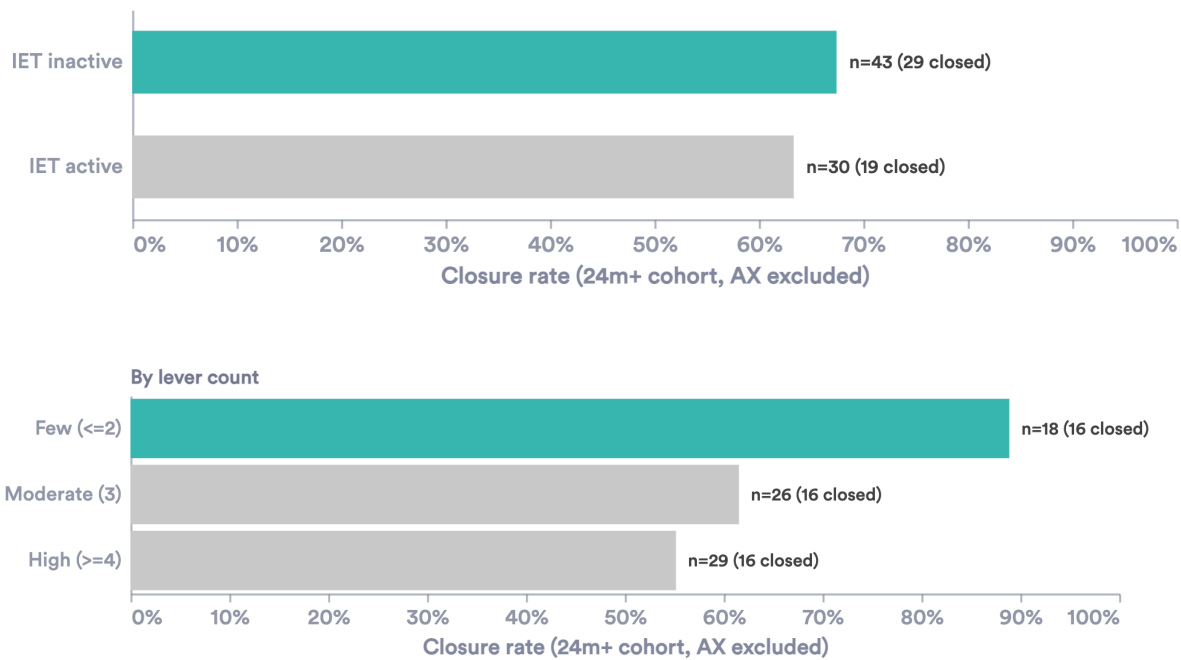
Intensity and breadth of transformation lever activation and closure: no impact on closure

Intensity and breadth of transformation lever activation appears to have little bearing on closure.¹⁴ After two years, PbR eligible deals have closed at a near identical rate to PbR ineligible (20). While most (60 per cent) financially closed deals have not satisfied at least half of PbR criteria, this tracks the overall portfolio division closely.

¹⁴ A lack of transformation characteristics, including lever indicators and PbR scores, for deals that have exited without financial close makes closure rates difficult to assess against ambition. We have only the impact data to consider affirmative signals — a deal financially closing — not negative signals — a deal failing. To partially address this constraint, we focus on deals where at least 24 months have elapsed since support ended. Deals that remain open after two years account for a diminishing share of eventual closures, meaning that the two-year window provides a reasonable approximation of which deals are likely to close and which are not, while accepting that some deals may take longer.

Figure 24: Closure by transformation depth and lever count

Closure rates among 73 deals with at least two years elapsed since support ended



Notes: Does not include deals that exited the programme and did not close.

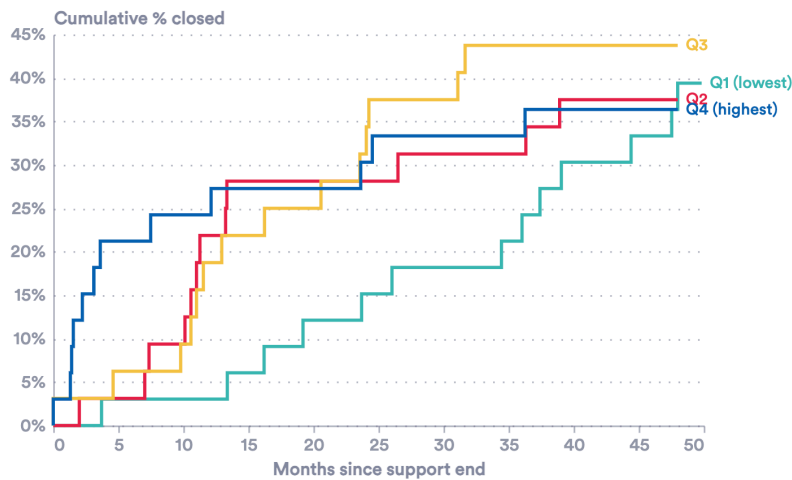
Source: Author's diagram

Few-lever deals have been mildly overrepresented in the set of deals that have reached financial close. Across the set of deals over two years since support-end, just 18 deals activate fewer than two of the five levers but 16 of these have reached financial close. These 16 deals have tended to activate just the Jobs & Livelihood, and Multiplier levers. This is mildly suggestive of a closure-penalty to breadth of impact, if not the depth of transformation as measured by the 26-point IET system.

Job creation ambition shows no meaningful relationship with closure. The four quartile curves follow almost identical paths across the full-time horizon and eventual closure rates vary little, ranging only from 36–47 per cent and easily within the range of variation expected by chance. The portfolio's most ambitious deals on job creation are not closing at a systematically different rate from less ambitious ones.

Figure 25: Closure rates by job projections

Including both direct and indirect employment

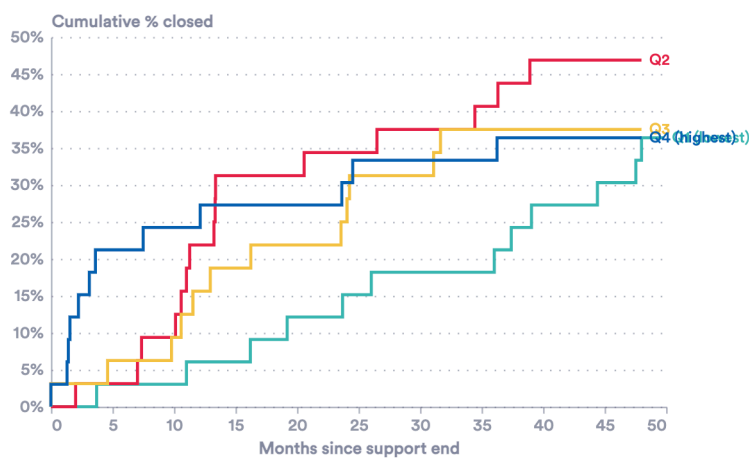


Notes: Of 204 deals that have concluded support, including those that have exited (stage AX). Direct and indirect employment are combined into a single score following the construction of the Jobs & Livelihood lever and split into four quartiles shown above.

Source: Author's diagram

Box 3. Does accounting for job quality impact closure conclusions?

A limitation of this analysis, and the underlying data, is the absence of job quality information. As a partial window into varying job quality, we can weight jobs in deals classified as complex manufacturing higher than those in simpler operations, on the basis that these roles carry greater skill content and wage premia.



Closure rates with adjusted job scores

Doubling the weight of direct jobs in complex manufacturing deals, then recalculating the jobs lever score using the standard log-normalised formula, has little effect on the closure picture. After weighting in favour of jobs in advanced manufacturing jobs, the second quartile closure rate increases but all other gaps are compressed. Formally, the correlation between the quality-adjusted score and closure is statistically insignificant in both cases.

Whichever way job ambition is measured, it does not appear to carry a significant closure cost.

Discussion: portfolio strategy and financial close

Risk, ambition and closure

Closure rates do not systematically decline with deal size, transformation depth or job intensity, so the data supports continuing to back high-ambition projects, because no closure penalty is detectable. Projects activating fewer levers make up a larger share of closures, at 89 per cent against 55 per cent for high-lever deals, but this does not mean targeting simpler deals: the strategic implication is to understand why high-lever deals take longer, not to avoid them. Manufacturing Africa also delivers similar levels of technical assistance regardless of deal size, so backing bigger deals carries no additional operational cost to the programme.

Several caveats temper these conclusions. With only 55 closure events, the analysis is limited in what it can detect: where it finds no difference, this does not prove that no difference exists. FDI and jobs figures are projections, so whether ambition translates into actual growth remains to be established. The pipeline of large deals is thin; Kenya's entire venture capital market, at \$335 million in 2025, is comparable to a single large Manufacturing Africa-supported deal. And the portfolio is not a random sample: patterns reflect Manufacturing Africa-selected projects only, not the broader investment population.

Transformation depth and commercial viability move together

Transformation depth does not come at a cost to closure. IET-active and inactive deals close at near-identical rates, 67 per cent against 63 per cent. Few-lever deals close at a higher rate, 89 per cent, than high-lever deals, 55 per cent, which might seem to suggest that simpler deals are easier to close, but the numbers are too small to draw firm conclusions. Targeting high-transformation deals does not mean waiting longer to close: the data shows no closure penalty for backing more ambitious projects, and depth of impact can be pursued without sacrificing speed or reliability. The one exception is inclusion. Almost every dimension of transformation is

aligned with closure, except GESI, which does not improve as a by-product of pursuing more ambitious deals. Without action, a portfolio of high-ambition projects will be strong on jobs, climate and multiplier effects but weak on gender and racial inclusion, so deliberate, targeted support is required.

Ambition affects speed, not success

Where complexity shows up is in how long a deal takes to close, not whether it closes. Among the 55 closed projects, four of five complexity flags are associated with longer close times, and multiplier-effect projects linked to greater job quality take longest of all. The trade-off is closure duration, not closure probability.

Closure by country

By country, Kenya closes fastest: 20 per cent of Kenyan deals closed within 10 months of support ending, some 16 months ahead of Nigeria, making Kenya the most reliable route to a quick close. But all four main markets reach similar closure rates once deals have had enough time to mature. Among deals 24 or more months since support ended, closure rates run at 44 per cent in Nigeria, 39 per cent in Kenya, 36 per cent in Ethiopia, 29 per cent in both Rwanda and Senegal, and 0 per cent in Tanzania, whose portfolio is the youngest and whose deals have not yet matured. The difference between countries is therefore more about how quickly deals close than whether they close at all, which means country choice should not be driven by closure rates alone. Tanzania and Senegal look slow largely because their portfolios are younger; this does not make the markets less viable, but it does mean investors and programmes should expect longer timeframes there. The trade-off is that Kenya, which closes fastest, has the weakest transformation profile of any main market, with just 27 per cent of Kenyan deals reaching four or more levers. Choosing the easiest market to close in does not mean choosing the most transformative one, and programmes optimising for speed of closure may underinvest in the deals with the greatest long-term impact potential.

Closure by sector

By sector, circular economy closes at the highest rate, at 7 of 12 deals, standing out as one of the strongest closers on the strength of innovative environmental business models; these deals combine high closure rates with strong environmental credentials and may become increasingly attractive as climate commitments grow. Agri-processing creates the most indirect jobs through supply-chain and ecosystem effects but closes more slowly than most other sectors, so programmes concentrating on it should expect a longer wait for closure outcomes. Among deals 24 or more months since support ended, closure rates run at 58 per cent for circular economy, 40 per cent for heavy industry, 36 per cent for light industry, 30 per cent for agri-processing and 28 per cent for pharma and chemicals. The trade-off is clear: circular economy closes at the

highest rate but has the smallest number of deals, while agri-processing has the most deals but one of the lowest closure rates. A portfolio concentrating on the highest-closing sectors would quickly exhaust the available pipeline, while one optimising for volume would be dominated by slow-closing agri-processing. No single sector offers both high volume and high closure.

Closure by deal type

Closed deals split almost evenly, at 51 per cent greenfield and 49 per cent brownfield, despite greenfield being structurally more complex. Greenfield investments involve building something entirely new yet reach financial close at the same rate as deals expanding something that already exists. This is largely driven by Ethiopian greenfield success, which accounts for 75 per cent of that country's closed deals, while Nigeria and Rwanda see brownfield deals dominate closures, at 62 per cent and 67 per cent respectively; circular economy stands out, shifting from 50 per cent of the pipeline to 75 per cent at close. Backing greenfield deals does not mean accepting a higher risk of failure: Manufacturing Africa's support helps these more complex deals reach close at the same rate as simpler ones, which is itself evidence of the difference the programme's support makes. The trade-off is that greenfield deals are harder to find and take more effort to structure, so a strategy concentrating on greenfield would be limited by how many strong opportunities exist.

Part 3: Recap and Recommendations

Optimising Strategic Lever Activation

Jobs & Livelihoods

Jobs & Livelihoods is the most widely activated lever, but the analysis shows that job numbers and job quality point toward different kinds of deal. For direct jobs, light industry, covering apparel, textiles and leather, paper, and rubber and plastic, leads, with a median of 300 direct jobs per deal across all projects and 510 among closed deals. For indirect jobs, agri-processing leads, with a median of 1,688 jobs per deal across all projects and 1,262 among closed deals. Pharma and chemicals is the weakest performer on the combined score. The most useful efficiency measure is jobs per dollar invested: light industry delivers 104 direct jobs per million dollars (USD\$ million) of FDI, the highest of any broad sector, while agri-processing delivers 33 indirect jobs per million dollars (USD\$ million), making light industry markedly more capital-efficient even though it scores lower than heavy industry on IET.

On deal size, larger deals of \$20 million and above create the most direct jobs among closed deals, mid-sized deals of \$8 million to \$20 million lead on indirect jobs, and small deals below \$8 million create the fewest; but small deals are disproportionately women-owned and Black-owned, so forgoing them compromises inclusion goals. Country differences in job creation are driven largely by sector mix and deal size rather than by country characteristics, which makes it difficult to justify targeting any particular country on jobs grounds alone. Greenfield deals create more direct jobs and brownfield deals more indirect jobs across the full pipeline, but among closed deals the difference disappears, so deal type is not a meaningful factor for promoting Jobs & Livelihoods lever activation.

Whether business models that promise the most jobs, usually agri-processing, should be targeted for support depends on quality as well as quantity. Job quality is often difficult to measure from outside the business, which is why the study does not recommend selecting firms on expected job numbers alone. Interviews identified several ways firms improve job quality: wage improvements; better working conditions and access to additional benefits; upskilling and training; formalisation of previously informal work; banking of informal workers; and the development of skilled-labour pipelines. Firms pursuing job quality can and do grow, through three mechanisms: supply-chain stability, where formalising relationships with informal workers

reduces supply disruption and lowers the risk premium investors attach to the business; a customer growth loop, where improving the livelihoods of customers who are themselves small business owners increases repayment reliability and deepens product engagement; and worker retention, where embedding support services into the offer keeps workers longer and maintains productivity. The trade-off is that firms creating large numbers of formal, quality jobs face higher running costs, and some monitored firms have had to reduce their workforce or delay hiring, not because their model failed but because investors pushed for early profitability before the firm had reached sustaining scale.

Promoting Jobs & Livelihoods

The best jobs-and-livelihoods outcomes do not come from a single deal type. Agri-processing maximises raw numbers, light industry maximises quality and efficiency per dollar, and small deals protect inclusion. The strongest strategy balances volume against job quality and inclusion rather than optimising for any one. Two trade-offs recur: maximising total jobs points toward agri-processing but neglects job quality, and avoiding smaller deals below \$8 million to chase job numbers would compromise GESI, because small deals are more likely to be women-owned or Black-owned.

Climate & Environment

Some 63 per cent of closed deals activate the Climate & Environment lever, and environmental integration takes three forms. In the first, the product or service is itself the environmental solution and environment is the core business model; these deals score significantly higher on IET and are far more likely to have products specifically benefiting women, at 22 per cent against 3 per cent of other deals. In the second, sustainability is embedded into how the firm operates regardless of what it makes, present in 42 per cent of closed deals. In the third and most common, the firm produces documented, measurable environmental outcomes, present in nearly two-thirds of closed deals; deals with full International Climate Finance conformity close at 38 per cent, above the portfolio average of 26.5 per cent.

Climate & Environment and competitiveness: Infrastructure failures across the sample raise consumer costs, and customers adopt environmental products primarily for cost efficiency and reliability rather than climate intent; this is how commercial and environmental outcomes reinforce each other, because scaling up automatically amplifies climate impact without requiring it to be the primary motivation for purchase.

Climate & Environment and access to finance: high International Climate Finance conformity scores strengthen investor propositions and open eligibility for development finance grant funding, and firms that embed environmental credentials into their model rather than treating them as a reporting requirement access a broader and more favourable pool of capital.

Climate & Environment and interaction with other levers: core-environmental deals activate IET and GESI (note, this does not mean circular economy sector deals activate GESI, but just that these activations co-move across deals) more strongly than others, but Climate and Environment shows no significant correlation with Multiplier Effects, which means deals with strong environmental profiles are not systematically generating broader sector spillovers or export linkages; environmental impact and scaled economic transformation are largely independent in this portfolio.

Promoting Climate & Environment

On which deals to prioritise for Climate & Environment activation outcomes, circular economy is the strongest sector both overall and among closed deals, while light industry, agri-processing and pharma and chemicals score worst; larger deals of \$20 million and above score highest, with the implication to focus on deals above \$8 million; Ethiopia and Kenya lead across all projects and Nigeria and Kenya among closed deals; and greenfield outperforms brownfield. Each of these carries a trade-off in the opposite direction: agri-processing and light industry are the strongest jobs sectors, circular economy scores lowest on GESI, larger deals trade off against inclusion, and brownfield is stronger on GESI. Tanzania's and Rwanda's weaker climate scores may reflect younger portfolios, so preferring particular markets risks reinforcing what is merely an artefact of portfolio age.

Two trade-offs to consider: because Climate & Environment and Multiplier Effects do not correlate, backing the most environmentally ambitious deals does not mean backing the deals with the broadest economic transformation impact. And the market for core-environmental business models is small, so concentrating on them would quickly exhaust viable opportunities.

GESI

GESI activates in 46 per cent of the portfolio, the lowest of all five levers. Only 15 per cent of portfolio firms are women-founded and 33 per cent are Black-founded. Three patterns stand out.

1. First, GESI is decoupled from all other levers: it shows no significant correlation with IET, Jobs, Climate or Multiplier, and IET-active deals activate GESI at 47 per cent, almost identical to the 48 per cent for IET-inactive deals, so pursuing deeper transformation does not deliver better inclusion.
2. Second, GESI declines with deal size: the largest deals score less than half as well as the smallest on inclusion criteria, a fall of 0.24 across quartiles, so the bigger the deal, the less likely it is to be inclusive.
3. Third, GESI is higher in brownfield than greenfield, because established operations bring existing workforce relationships and community ties that translate into inclusion more

readily than newly built greenfield facilities, which start from scratch on workforce composition. Complex manufacturing, the strongest sector on Multiplier and IET, has the second-lowest GESI activation at 27 per cent, so the most structurally transformative sector is also one of the least inclusive, which could point to a core trade-off.

Interviews identified three mechanisms by which inclusion supports growth. On finance access, GESI activation opens access to impact-oriented investors and development finance instruments that prioritise gender and racial inclusion. On market design, where the customer base or input supply chain is predominantly female, and women make up a large share of African micro-business owners, aligning the core commercial model with deliberate inclusion generates GESI outcomes that also serve business growth, because the firm grows as its female customers or suppliers succeed. On societal narrative shift, commercialising inputs traditionally produced by women shifts local perceptions of that work's economic value, deepening supplier participation and strengthening the input supply chain as a commercial by-product.

Promoting GESI transformation

On which deals to prioritise for inclusion, light industry and agri-processing score highest across all projects and circular economy highest among closed deals, circular economy scores worst in the pipeline, indicating that many high-GESI deals in other sectors are not closing. Small deals below \$8 million are disproportionately women-owned and Black-owned and should not be excluded.

On country, Tanzania and Senegal lead across all projects and Ethiopia and Tanzania among closed deals; Tanzanian projects with high GESI scores are also closing, and Ethiopia scores well because, having been financially isolated for many years, many of its projects are locally owned. Brownfield models should be favoured where inclusion is the priority.

An important recommendation is to treat GESI as a deliberate, standalone objective. Inclusion does not arise from deeper transformation and declines with deal size, so it must be built into business models from the start. Smaller, brownfield deals, and markets such as Tanzania and Ethiopia, offer the strongest inclusion entry points, while large, complex deals need targeted inclusion design rather than being written off. The core trade-off is that inclusion and scaled economic transformation pull in opposite directions: the deals with the strongest multiplier effects and deepest IET scores are among the least inclusive, creating a genuine strategic choice between backing smaller, more inclusive deals that are less likely to generate broad economic spillovers, and backing larger, more transformative deals that are less likely to reach women-owned and minority-owned businesses.

Multiplier Effects

Multiplier Effects activates in 82 per cent of projects, second only to the Jobs & Livelihoods lever, with the average deal meeting 2.8 of 6 criteria; two criteria are near-universal, export focus at 80 per cent and import substitution at 81 per cent. It is the only lever that rises with deal size, by 0.13 across quartiles.

Multiplier activation follows two pathways: local value-chain creation and export orientation, which build domestic capacity that anchors regional supply chains and positions firms for export; and innovation and technological diffusion, which leverages first-mover advantages and technology-based partnerships to introduce approaches that spread beyond the firm. On which deals to prioritise, heavy industry and pharma and chemicals lead on spillovers, with machinery and electrical the standout, while circular economy is weakest; large deals of \$20 million and above lead; Ethiopia and Nigeria lead on country; and greenfield outperforms brownfield. The trade-offs are that circular economy, the weakest multiplier sector, is the strongest on climate and closure; large, complex deals are rare, slower to close and worst on GESI; the strongest multiplier countries are not the fastest to close; and greenfield is harder to source while brownfield is stronger on inclusion.

Interviews identified three mechanisms. On investment access, demonstrated scale-up in production or operational capacity validates the business model and strengthens investor confidence for successive funding rounds, and visible market leadership attracts follow-on financing. On strategic partnerships, first-mover positioning attracts partners who add value beyond capital, particularly where firms offer infrastructure or capabilities that partners would not efficiently build independently, and retaining intellectual property rights to adapted technologies captures value that would otherwise be exported. On policy influence, firms that reach sufficient operational scale and engage closely with municipal authorities can become reference points for sector policy, creating durable structural advantages beyond their own operations.

Promoting Multiplier Effects transformation

If Multiplier Effects lever activation optimisation is the desired outcome, the data points toward backing larger deals, because larger investments are structurally more likely to anchor supply chains and generate spillovers beyond the firm.

Machinery and electrical equipment stand out, with 92 per cent multiplier activation, the highest IET activation of any sector, and the highest closure rate in the portfolio at 80 per cent, giving it the strongest overall profile of any sector group.

New value-chain creation is the rarest and most genuinely transformative criterion, and where it does activate, deals tend to score higher on IET and project stronger indirect employment, suggesting that genuine market creation goes hand in hand with deeper transformation, but such deals are rare and hard to find.

Three trade-offs to note: Bigger deals are harder to find and slower to close, and while the data points toward larger deals for multiplier effects, the pipeline of large, complex manufacturing investments is thin and mid-size deals close faster. Multiplier effects are conditional on survival, because first-mover advantage is fragile and firms that do not reach operational scale cannot realise sector-level spillovers; early-stage firms with strong multiplier potential may never realise it if capital constraints prevent them from getting there. And new value-chain creation is rare, activating in only 10 per cent of deals, so most multiplier activation reflects near-universal export orientation and import substitution rather than distinctive transformative potential.

Promoting overall transformation and IET

Across the portfolio and confirmed in interviews, the firms scoring highest on the IET indicator were those treating structural failures in local economies, such as unmanaged waste, fragmented supply chains and transport links, and poor access to electricity, as their core commercial opportunity rather than as add-on impact. Durable demand arises where serving previously excluded or underserved market segments generates self-reinforcing demand, with customer success feeding back into increased orders and validating the model, creating commercially resilient growth that does not depend on subsidy.

Furthermore, IET is also associated with incorporating waste-products or underutilised, abundant resources. Low-cost input base arises where incorporating informal, unpriced or inefficiently utilised resources into formal production creates structurally low-cost inputs, enhancing competitiveness and supporting resilience even under financial stress.

Three trade-offs worth noting:

1. IET depth does not guarantee firm survival beyond closure, because some firms with deep, well-evidenced IET activation have nearly failed under capital constraints, and the most transformative deals still need patient, risk-tolerant capital to reach the scale at which their potential is realised.
2. GESI/inclusion does not follow other types of transformation automatically, and a portfolio may be strong on jobs, climate and multiplier effects but will not deliver on gender and racial inclusion without separate, targeted action.

3. High-IET deals are harder to find, because only 43 per cent of the portfolio activates IET and the deals that score most strongly, being complex, supply-chain integrated and skills-intensive, are not abundant, so the pipeline constrains how far a strategy of concentrating on high-IET deals can go.

Recommendations for Investment and Support

For investors

Include ambitious deals (greenfield, innovative, first-mover, etc.) in your portfolio, there is no evidence that these features are determinants of worse closure outcomes in comparison to other deal types. Instead, there is indicative evidence that transformation depth and commercial viability move together, not against each other.

While ambitious deals still close at the same rate, though they may take slightly longer to reach closure. Highly transformative deals close at virtually the same rate as those that do not, about 67 per cent against 63 per cent.

Greenfield and brownfield should not be conflated for risk tiers, since closed deals split almost evenly despite greenfield being structurally more complex. Greenfield and brownfield deals split roughly evenly among closures, about 51 to 49.

As no sector or country offers both high volume and high closure, investors should diversify and sequence the portfolio so that fast closers, such as Kenya and light industry, fund patience on the scarcer, larger, slower deals.

- ◆ At sector level, circular economy closes best, at 58 per cent, but has a thin pipeline, so it is a high-conviction fill rather than a volume play; light industry offers the most output per dollar, at 104 jobs per million dollars (USD\$ million) of FDI, making it a core efficient allocation; heavy industry and machinery and electrical carry the largest FDI and the strongest scale and multiplier effects but are scarcer and slower, suiting selective large-ticket plays; agri-processing has the biggest pipeline and so the most chances to deploy, but is slow to close, at 30 per cent, and least capital-efficient, so it is best used for volume by picking the faster, larger deals within it; and pharma and chemicals is slowest to close, at 28 per cent, suiting early positioning and longer holds.
- ◆ At country level, Kenya is best for speed and deployment volume, Nigeria for scale and ticket size given strong FDI and a large market, Ethiopia for patient, larger deals given strong multiplier and scale but longer timelines, and Tanzania and Senegal for early

positioning and longer holds, since they are slower only because their portfolios are younger.

For development finance institutions

Assuming the goal of development finance institutions is realised transformation impacts, a diversified portfolio strategy is recommended.

Do not try to target one particular sector. Sector diversity should be maintained, because transformation trade-offs run across sectors and no single sector is best on every dimension.

- ◆ Light manufacturing sectors are strong for both inclusion and job quality but score worst for climate and environment outcomes.
- ◆ Circular economy closes best, at 58 per cent, and leads on climate but does not address gender inclusion well; and the diversity of the sector means that it is hard to make general assumptions on multiplier impacts
- ◆ Agri-processing is the largest pipeline and is projected to create the most jobs but closes slowly, at 30 per cent. However, the jobs created are primarily low-skill and have limited broader transformation potential.
- ◆ Heavy industry and machinery and electrical offer the strongest multiplier and IET profiles but again do poorly in terms of GESI activation. Pharma and chemicals close slowest, at 28 per cent; however, the nurture of this strategic sector has enormous transformative potential and is crucial for long-term health security.

The strategic implication is therefore to keep a diversified sector base and select deals on project-level transformation characteristics rather than concentrating on any single best sector.

Deal selection on the basis of size. Large deals should be backed where possible, but smaller deals should be kept deliberately in the mix. Larger deals close at the same rate as smaller ones, attract more FDI, create more indirect jobs and uniquely strengthen Multiplier Effects lever activation, with no closure penalty for size; but large deals are rare, and the largest are the least inclusive, with GESI falling by roughly half from the smallest to the largest quartile. Smaller deals below \$8 million are disproportionately women-owned and Black-owned and build the track record that makes later large deals fundable. The recommendation is therefore to pursue large deals where they exist while ring-fencing a deliberate allocation to smaller, inclusive deals, to protect inclusion and pipeline-building.

Deal selection: greenfield v. brownfield. There is no closure penalty for greenfield, so it should be backed where impact warrants, and greenfield should not be screened out as higher-risk. Closed deals split almost evenly, at 51 per cent greenfield and 49 per cent brownfield,

despite greenfield being structurally more complex, likely because Manufacturing Africa's support reduces information asymmetry. Greenfield carries stronger climate and economic multiplier potential, while brownfield is more gender- and socially inclusive, tending to draw on an existing local workforce. Deal type should therefore be used deliberately, favouring brownfield where inclusion is the priority, rather than driving selection on its own.

Deal selection by country: some close faster than others, none should be neglected. All the mature markets ultimately reach similar closure rates; the real difference is speed, not whether deals close. Kenya closes fastest but has the weakest transformation profile, with only 27 per cent of deals reaching four or more levers; Ethiopia and Nigeria are strongest on multiplier effects; Tanzania and Ethiopia offer the best inclusion opportunities; and Tanzania and Senegal look slow only because their portfolios are younger, so they warrant longer timeframes rather than being judged on early closure.

Deal selection by ambition (size/volume/scale of transformation): ambitious deals are great, but do not neglect less-ambitious deals where ambitious deals are rarer. While high ambition deals close just as reliably as simple ones in the long-term, they are scarce. Impact is generated by the volume of viable deals and by each close signalling to the market that a given sector is investible – therefore to maximise reach, it is still important to catch viable but less-ambitious or smaller deals.

Inclusion should be targeted deliberately and separately to the other levers: because GESI is the least-activated lever, at about 46 per cent, and the only one that does not improve as deals get larger or more transformational by way of the other three levers. Interestingly, it seems that small and brownfield deals carrying the strongest inclusion. This further motivates the above point: do not concentrate on large, ambitious deals as this will come at the expense of gender transformation and socio-economic inclusion.

Regarding deals selected on the basis of job-creation: selection should be based on both job quality and headline counts – relying on the latter alone is a mistake. For example, while agri-processing maximises raw job numbers, these jobs are lower-skill; light industry creates fewer jobs but the most per dollar and of higher quality. As an additional benefit of considering job quality: interviews linked job quality through formalisation, retention and upskilling, to firm stability and growth. Institutions should therefore weight the direct-to-indirect job ratio and job quality over headline counts.

Finally, avoid entirely neglecting hard, high-impact markets (e.g. pharmaceuticals, Tanzania): faster-closing markets tend to have weaker transformation profiles, and slower markets often look slow only because their portfolios are younger, so country and sector choice

should be matched to objective and time horizon, since a bias toward easy closes quietly penalises exactly the markets where catalytic support adds the most.

Part 4: Internal Feedback for Manufacturing Africa

Programme-Specific Review

Programme feedback

Manufacturing Africa's mandate addresses a structural market failure: firms with genuine transformation potential across African manufacturing markets cannot access capital because investors perceive them as excessively risky, and because the information and analytical infrastructure needed to make credible investment cases is costly and scarce. The interview evidence suggests that Manufacturing Africa's support is viewed as essential.

Information asymmetry and uncertainty

In the markets of interest (Ethiopia, Kenya, Nigeria, Tanzania, Rwanda and Uganda) investors are not simply weighing known odds but navigating contexts where the relevant evidence base is often thin, creating uncertainty.¹⁵ Interviews established that Manufacturing Africa's core contribution, as described by firms across the interview sample, is the reduction of this uncertainty.

- ♦ **Case 1:** For one agri-food investor operating across Ethiopia and Kenya, the association of Manufacturing Africa's work with Manufacturing Africa's brand provided a level of confidence that two to four hundred thousand dollars of programme-supported analytical work could substitute for capital expenditure of a magnitude that would otherwise have been required to demonstrate viability independently.
- ♦ **Case 2:** For a Nigerian solar refrigeration firm, access to two rounds of McKinsey-supported market assessment and financial modelling at the Series A and Series B stages was described as inseparable from the firm's ability to attract investment, given

¹⁵ A distinction is important here between risk and uncertainty. Risk, in the technical sense, refers to situations where the probability of an outcome is known or can be estimated from prior experience. Uncertainty refers to situations where no such probability distribution exists where outcomes are genuinely unknown because there is no precedent, insufficient data, or too many unquantifiable variables.

that the calibre of analytical work produced would not have been accessible to a cash-constrained early-stage company without programme support.

The absence of alternatives

One of the most important findings from across the interview sample, firms were consistent in reporting that Manufacturing Africa's support had few or no credible alternatives for the services and support received.

The costs of commissioning comparable analytical work from management consultancies on a commercial basis would be prohibitive for the early-stage, capital-constrained firms that Manufacturing Africa typically supports.

Network

The network access provided by Manufacturing Africa also emerged as a consistent theme. The programme's connections across FCDO, development finance institutions, and the impact investment community provided firms with introductions that would have taken considerably longer — or may not have occurred at all — through independent outreach. The value of this network function is not simply in the introductions made but in the implicit endorsement that Manufacturing Africa's selection and continued support confer on a firm in markets where investor confidence is fragile.

The levers as a measurement tool: are the levers fit for purpose?

If the concern is firm growth and commercial viability

The five transformation levers were not designed as indicators of commercial performance, and the limitations of this report confirms that they cannot reliably serve that function.

Lever activation describes the presence and intensity of transformation-relevant characteristics at the point of investment assessment. It does not measure revenue growth, profitability, market share, or the sustainability of the business model under commercial conditions.

This is why the quantitative analysis in this report cannot demonstrate that high lever activation causes stronger firm growth, because the data to test this — realised revenue and employment trajectories post-closure, compared across lever profiles — are not available. However, successful stakeholder engagement illustrates that it is possible to collect this information for at least some sub-set of firms going forward.

The implication for programme design is clear: if one wishes to understand whether supported firms are growing, becoming more profitable, and attracting further investment on their own

terms, this requires direct measurement of firm-level commercial outcomes over time. Revenue trajectories, investor rounds raised following Manufacturing Africa support, workforce growth, and export volumes are the relevant indicators. The levers as measures of transformation do not provide, and are not intended to provide, this information.

If the concern is economic transformation and contributions to structural change in the economy

The levers are well-suited to measuring exactly what they were designed to measure. They capture whether a deal creates substantial employment, including in the informal sector; whether it integrates environmental sustainability into its business model or operations; whether it advances gender inclusion and Black ownership; whether it creates spillover effects and sector-level change; and whether it is cumulatively ambitious and deep in its transformation potential.

The limitation is not in the levers themselves but in the absence of post-closure data to test whether the transformation potential identified at the point of investment is realised. A deal that scores highly on IET at the assessment stage may or may not have demonstrated those transformation effects five years after closure. At present, the programme cannot answer this question because the data infrastructure to track realised outcomes against initial lever assessments does not exist. This is a data gap, not a design flaw in the lever framework.

Balancing both concerns

The practical recommendation is not to choose between these two purposes but to ensure that the data collection infrastructure serves both. The lever framework should continue to function as the programme's primary tool for assessing transformation ambition at the point of investment, because it is well-designed for this purpose. Alongside this, the programme should invest in systematic post-closure tracking of firm-level commercial outcomes — revenue, employment, investment attracted, and export performance — at defined intervals following financial close. This would allow the programme to test, over time, whether high lever activation at the point of assessment corresponds to stronger commercial and transformation outcomes in practice, and to refine the framework accordingly.

While a challenge to collect, with post-closure data the programme would be able to validate whether the transformation characteristics it selects for translate into the durable structural change it exists to promote.

Appendix 1: Foreword to Case Studies

Introduction

The following case studies aim to assess how firms supported by Manufacturing Africa (MA) generate positive impact across the five levers of strategic transformation using quantitative and qualitative firm-level analysis. Focusing on firm progress, the case study approach addresses whether, and how, Manufacturing Africa's levers accelerate or constrain business growth. This exercise feeds into a broader assessment of the viability of Manufacturing Africa's balanced portfolio strategy, highlighting possible trade-offs between transformation ambition and closure risk.

The five levers of transformation, Jobs & Livelihoods, GESI, Climate & Environment, Multiplier Effects and IET, are assessed as distinct case studies to track individual impact pathways, while acknowledging cross-lever complementarities, where observed. The IET lever serves as the primary measure of durable transformation, providing evidence on the overall intensity and quality of impact.

The draft proceeds as follows. Section 2 introduces the deal methodology, justifying the approach used for conducting this assessment. Section 3 offers five impact case studies, each focusing on one of the five strategic levers. In each section, specific mechanisms of change are identified and supported by firm-level analyses to assess alignment between business growth prospects and impact across environmental, social, and economic objectives.

Methodology

The *Manufacturing Africa: Strategic Levers* assessment follows a mixed-methods approach. It combines a quantitative analysis of 262 deals spanning Manufacturing Africa's portfolio (of which, 55 have reached financial closure and 61 continue to receive on-going support) with a qualitative analysis of firm interviews. The case study serves as a bridge between quantitative findings and qualitative insights, bringing them together under a coherent narrative of change. It draws on a sample of seven structured interviews with founders and senior representatives of firms across three countries: Ethiopia, Nigeria and Senegal. The selected firms provide meaningful variation across the ambition-risk spectrum, reflecting both breadth and depth of transformation, as well as varying closure status (most of the firms have reached financial closure). Combined with the quantitative analysis, the sample is, thus, well-positioned to probe the relationship between impact ambition and closure. Outcomes from the case studies are aligned with observed portfolio patterns across the report.

To carry out the case study assessments, a *Theory of Change (ToC)* is utilised to map out the logical sequence of the firm progress from inputs (firm activity) to the impacts across each of the five levers. A ToC is a well-documented development tool, aligning with the FCDO and Department of International Development (DFID) Framework of monitoring progress. It identifies mechanisms of change, or '*Impact Pathways*', to track the route of change towards achieving a specific impact (environmental, economic or societal change). It focuses on bringing out the outcome-to-impact firm progression. As such, the analysis takes Manufacturing Africa's support as a catalyst, rather than a central input, to activate individual impact pathways. A preliminary logic model analysis was carried out to inform the identified impact pathways across each of the five levers. While the impacts are identified ex-ante based on the five levers, the approach acknowledges that sectoral differences and country-specific contexts influence the pathway through which those impacts are achieved. This is due to differences in inputs and outputs across the surveyed firms. It is worth noting that the impact pathways identified are not exhaustive and are primarily driven by the firm-level analysis.

Sample Firms against Portfolio Benchmarks

All interviewed firms activate at least three of the five levers. Out of the sample, two firms activate exactly three levers (Jobs & Livelihoods, GESI and Climate & Environment), aligning with the portfolio mean of 3.23 levers. One firm activates four levers, considering Climate & Environment as a secondary impact. The remaining four firms demonstrate the highest breadth of lever activation across the sample, activating all five levers. Compared to the portfolio's mean, this sample distribution appears skewed towards higher lever activation in terms of breadth, which reflects the firm's high transformation ambition. Mapped against closure data, it can be observed that among the seven firms interviewed, most have reached a stage of financial closure, with only two firms in the A4 stage (close out process of support). Both firms operate in Senegal in the agri-processing sector and activate four-or-more of the levers.

The sectors represented across the sample reflect the portfolio's broader sectoral composition: dominated by the agri-processing industry (4 out of the 7 interviewed firms), followed by heavy industry (2) and the circular economy (1).

Among the firms reaching financial closure, deal sizes range between USD 5.2 million and USD 55 million. All of which are greenfield investments, except for a USD 16 million brownfield investment in the Heavy Industry in Nigeria. Similarly, the two deals not yet closed received investments of USD 3.4 million (Greenfield investment) and USD 24 million (Brownfield investment). In line with the quantitative data, the sample does not point to distinctive trade-offs between ambition-closure and the greenfield-brownfield division.

Projected employment figures, both direct and indirect, vary considerably across the sample, reflecting different country contexts and sector sizes. Combined, the total jobs created by the sample firms amount to 3833 direct jobs and 37943 indirect jobs, with the largest contributor to job creation being a Nigerian EV mobility firm.

Appendix 2: Levers of Transformation Interview Case Studies

Case Study 1: Jobs & Livelihoods

The quantitative data highlights Jobs & Livelihoods as the most activated lever among the deal deals (86 per cent), featuring strongly across all sector profiles. Livelihood standards are not only concerned with the quantity of employment opportunities generated (direct and indirect), but also with their quality and distribution. Improving job quality entails wage improvements, good working conditions, and securing worker benefits.

Impact Pathway: Formalisation of Labour → Income stability → Jobs & Livelihoods Lever Improvement

The Jobs & Livelihoods lever was activated across all interviewed firms. The primary mechanism of change reported was through the **formalisation of labour** and consequently, income stability. Despite the different country contexts, from waste management in Ethiopia to clean power solutions in Nigeria, similar inputs, or firm activities, were featured in driving positive outcomes across livelihoods: structured local sourcing, vocational training programmes and accessible financial models.

The informal sector dominates labour-absorption across the African continent, leaving workers trapped in low-skilled, low-paying jobs that often fail to translate into sustainable livelihood improvements that ensure social security and income stability ([ISS](#), 2025). Achieving 'decent work', thus, does not only rely on increasing the number of direct and indirect jobs created, but also on improved working conditions, workplace security, and revenue stability, *interalia*.

For example, an Ethiopian enterprise, operating with a circular economy business model, reported substantial improvements in employment both in terms of quantity and quality. Having reached financial closure, this firm possesses an above average job creation portfolio compared to the median of deals reaching closure. It generated 5 times more indirect jobs than the median projected indirect employment figure (825 jobs) and created 175 new direct jobs, sitting just under the median projected direct employment rate (200). Its deal size amounts to

USD 5.2 million, sitting within the interquartile range of the full pipeline; yet, well-below the median deal size for deals reaching financial close (USD 12 million).

Beyond improving the quantity of jobs, this firm contributed to improving job quality through targeted training and ad-hoc support to its input suppliers, mainly in the informal sector. This activity generated a four-fold increase in income for its female-dominated input suppliers, directly contributing to more stable income streams and welfare improvements. Anecdotally, the firm reported that this income improvement enabled female workers to support dependants with their additional income and make household investments. This impact is particularly significant in the context of Ethiopian labour force disparities, where women are predominantly responsible for providing care services to dependants, with little to no financial support.

A similar impact was observed in the heavy industry (machinery and electrical equipment sectors) in Nigeria. This solar-powered cooling systems firm generates a dual impact across jobs and livelihood improvements by targeting two sets of beneficiary groups: its employees and customer base. By sourcing most of its inputs locally, it supports job creation across its local assembly, distribution, and services network. As such, it generated 600 indirect jobs and 503 new direct jobs, largely aligning with Nigeria's direct employment profile for closed deals (500 jobs per deal).

Furthermore, the firm's commercial model generates positive secondary impacts on livelihood improvements among its customer base, which consists mainly of female informal vendors and micro-entrepreneurs. Informal vendors and micro-entrepreneurs often face constraints to accessing productive assets due to their unstable work streams, making it difficult to expand their commercial activities. Through offering a flexible pay-as-you-go financial model, the firm promotes the financial inclusion of informal workers and off-grid entrepreneurs. In contexts characterised by unreliable grid electricity and frequent power outages, as is the case in Nigeria, the product offered by this firm, combined with its flexible payment system, provides its beneficiaries with business credibility due to reduced food spoilage, hence, supporting the growth and stability of their revenue streams.

Activating those impacts were catalysed by Manufacturing Africa's technical support through the initial stages of strengthening investor readiness, market assessment advisory through expert technical assistance, and providing financial input on model valuation. Those means of support facilitated firm activities, such as roll-out of training programmes and offering a viable, flexible payment system, to generate positive livelihood outcomes for their targeted beneficiaries.

Case Study 2: GESI

In contrast to Jobs & Livelihoods, the GESI lever holds the lowest activation rate amongst all five levers, with an activation rate of 46 per cent across the full deal pipeline.

As the quantitative evidence shows, improvements in GESI outcomes is largely orthogonal to all other levers and does not co-move with IET, indicating that inclusion outcomes require a set of deliberate, affirmative action by firms in order to materialise (see Case Study 2). In the absence of such targeted action, ambitious high-IET deals will not translate into broader positive GESI outcomes, despite showing strong improvements across all other levers (multiplier effects, environment, and livelihood).

Impact Pathways: Reducing financial barriers → GESI Improvement

Gender disparities in the workforce remain pervasive across Manufacturing Africa's target destinations, albeit to varying degrees. Across the board, African women often face greater obstacles to obtaining loans and financial support to access productive resources relative to men (ISS, 2026). As such, one observed impact pathway to activating positive GESI outcomes is reducing financial barriers facing women in accessing productive assets.

For example, a solar-powered cooling systems firm operating in the heavy industry (machinery and electrical sector) in Nigeria adopts a business model founded on the participation of women micro-entrepreneurs. Women entrepreneurs in Nigeria make up 40 per cent of all entrepreneurs, yet only half of them operate in the formal sector with access to financial services compared to men ([OECD](#), 2025). Acknowledging the financial constraints facing its target beneficiary group, it provided an asset-financing model based on a flexible pay-as-you-go system, designed to target the financial barriers facing women entrepreneurs in accessing formal credit and productive assets. Furthermore, it delivers female-targeted technical training programmes focused on onboarding new female entrepreneurs. This activity is particularly meaningful as it contributes to the upskilling of women labourers and equipping them with the technical and financial support to strengthen and formalise their revenue streams and overall standards of living. Overall, this supports its primary objective of facilitating the participation of women micro-entrepreneurs in the labour market.

Changing societal narratives → GESI Improvements

The issue of gender inequality is not only reflected in systemic financial barriers but is also deeply embedded in the social fabric, where female-dominated activities are often undervalued. Shifting societal narratives around women employment is imperative to achieving improved GESI outcomes, which forms the basis of the second observed impact pathway.

For example, a Senegal-based agribusiness activates the GESI lever and fosters women empowerment through its local sourcing model, where over half of its suppliers are women. The firm's founder highlighted that commercialising and adding value to inputs traditionally produced by women shifted local perceptions of their practice as holding greater economic value. This created a movement of change, where the firm's activities and greater dependence on women suppliers re-shaped societal narratives regarding the work's economic significance. The increased participation of women herders in the formal production chain enabled them to better manage their household expenditures, manage production, and better support their dependents. In addition, the firm delivers targeted training programmes that predominantly engage women, setting them on 'mini-farm' pathways to upgrade production. While this firm shows evidence of both depth and breadth of lever activation across four levers, it is yet to reach a stage of financial closure. Its pattern of lever activation, however, has clearly boosted its business growth prospects by attracting gender-smart investment opportunities; that would otherwise be unavailable.

Although the two impact pathways highlight a different mechanism of change, removing financial barriers and challenging societal narratives, they are often considered complementary. Removing financial constraints facing women entrepreneurs can challenge and shift societal narratives around the economic value of female-led entrepreneurial activities, vice versa. Nevertheless, underpinning both streams is an affirmative action/input that was directed by the firm to induce positive transformative change. Across both cases, an alignment between the core revenue-generating activity and the labour composition being predominantly female-dominated (i.e. the customer base or input suppliers) is observed, which lends itself to positive GESI outcomes, given the activation of intentional, inclusion-driven action.

MA's technical support catalysed the firms' positive outcomes on the GESI lever and access to gender-related finance by strengthening investment readiness, providing strategy clarification, confirmation of market dynamics across local production pathways, and preparation for fundraising rounds tied to new deals and initiatives.

Case Study 3: Climate & Environment

Among deals reaching financial closure, the Climate & Environment lever is activated by nearly two-thirds of deals (63 per cent). It features most strongly across Circular Economy deals (12 deals), with a 100 per cent activation rate, followed by Heavy Industry, Light Industry, Agriprocessing and Pharma & Chemicals.

The following section identifies the impact pathways, or mechanisms of change, taken by firms to achieve positive climate and environmental outcomes.

Impact Pathway:

Core environmental business model → shifting local perceptions towards sustainable alternatives → Climate & Environment lever activation improvement

The Climate & Environment lever was activated across all interviewed firms, with only one firm noting it as a secondary impact. The sample's sectoral focus aligns with the broader patterns identified in the quantitative analysis, spanning Circular Economy, Heavy Industry and Agri-processing in Nigeria, Senegal and Ethiopia. Despite their varied operational activities, they all point to a primary impact pathway, where their core environmental business models translate into increased market uptake of sustainable solutions, motivated by a) a shift in local perceptions towards climate-resilient solutions, b) long-run cost-efficiency, or c) more reliable resource streams. Despite differing country contexts, common firm activities that drive positive outcomes across climate and environment include decarbonisation and recycling models, provision of clean energy alternatives, and strengthening local value chains.

Among the entire sample of interviewed firms, three firms, notably, operate following a core environmental business model, where the main revenue-generating activity revolves around a climate-smart design across waste-management, agri-processing and EV sectors. Across the reviewed cases, firm activities facilitate a shift in local perceptions towards sustainable solutions, and hence, driving an increase in market uptake. The perception shift was notably motivated by a dual-driver: increased awareness of the value of adopting climate-aware alternatives and long-run cost efficiency.

A prominent challenge facing African industrial businesses is the underdeveloped organic waste management systems. Transforming municipal waste, 57 per cent of which is organic, into productive, sustainable assets is particularly challenging due to limited availability of local and technical support ([UNEP CCC, 2026](#)). In addition, out of approximately 70 million tonnes of plastic waste generated per year the majority (80 per cent) end up in informal waste streams and only 4 per cent are recycled (ibid).

Against this background, firm-level analysis provides a more optimistic picture. Specifically, interviewed firms across Senegal, Ethiopia and Nigeria adopt a climate-focused core business model, combining significant emission reductions with commercial viability.

One such example is an agriprocessing (bioconversion) firm in Senegal, which operates with a circular economy model that converts organic waste from unmanaged landfills, where over 90 per cent of waste resides, into high-nutritional animal feed proteins and fertilizers. With a 90 per cent ICF applicability rate, this deal sits among the 4 per cent of deals across Manufacturing

Africa's portfolio that meet high conformity criteria. This model generates measurable climate benefits, such as avoiding a significant 3.7 tonnes of CO₂ emissions per tonne of upcycled organic waste and 11 tonnes of CO₂ emissions per tonne of protein produced, when compared to conventional soy-based alternatives. The firm's circular economy model creates a market demand for lower cost and high nutritional animal feed alternatives to farmers and herders, which encourages uptake of more sustainable options. The dual outcome of reduced costs and higher nutritional value reduces reliance on carbon-intensive alternatives by encouraging a market shift towards locally sourced animal feed. While the firm has not reached financial close, it reported to have raised approximately 40-50 per cent of its target industrialisation funding required for production at scale. As its operations scale up, it is expected to amplify the reduction of its CO₂ emissions.

Similarly, a circular economy enterprise operating in Ethiopia has developed a waste-to-materials production model across plastic diversion and construction inputs. With a 100 per cent ICF applicability rate, this deal is among the 24 per cent of deals across Manufacturing Africa's portfolio that meet full-conformity criteria. Its model prioritises the decarbonisation of cement manufacturing through substituting coal for organic waste, avoiding close to one million kilograms of CO₂ emission to date. Additionally, firm operations extend to plastic recycling, having recycled about 500 thousand kilograms of plastic to date, with the capacity to remove up to 4 tonnes of plastic waste per 70 sqm building. As a result, the firm not only provides products that are approximately 5 times less polluting, but also of a more durable quality compared to carbon-intensive manufactured cement. This balance generated a notable shift in awareness among Ethiopian manufacturers, municipalities and large industries on the dual benefits of waste-based fuels for reducing emissions and input costs, incentivising a market shift towards more sustainable alternatives and towards seeing waste as an income generator rather than a burden.

Unlike the Ethiopian and Senegalese circular waste-to-materials models, a Nigerian firm operating in the heavy industry (machinery and electrical sector) developed its core business model around low-carbon, solar-powered industrial solutions as a direct response to the country's unstable power supply. With a 100 per cent ICF applicability rate, the firm's solar-powered systems deliver significantly higher energy efficiency (up to 55 per cent) compared to traditional grid-powered alternatives. It also reports emission reductions by displacing diesel generators, as well reducing food waste through improved cold chain infrastructure. The key driver behind increased uptake of their products among micro-entrepreneurs and small business owners is long-run cost efficiency and energy reliability rather than a clear climate intent, as noted during the stakeholder interview. Combined with a flexible asset-financing model to reduce upfront costs and generate suitable payment plans for off-grid customers, the firm

ensures long-run reduction in energy costs, longer product life cycle and lower operation costs due to more reliable cold chain during power outages.

Regardless of the primary driver behind shifts in consumer perceptions and market demand for clean energy powered solutions—being long-run cost efficiency or awareness of climate impacts—both generate the same outcome towards positive climate and environmental sustainability impacts. All three firms represent strong cases of the impacts generated by core environmental business models through direct emissions reduction and increased market acceptance of alternative sustainable solutions.

The firms' ability to design their core business models around climate and sustainability and turn structural constraints into a commercial opportunity was supported by Manufacturing Africa's technical assistance. This assistance included developing market studies, advancing a pricing strategy for product and model valuation, as well as facilitating long-term and credible partnerships with local municipalities to enable access to landfill concessions.

Case Study 4: Multiplier Effects

The Multiplier Effects lever, like Jobs & Livelihoods, features strongly and consistently across all sectoral groupings. This is a reflection of its near-definitional character for manufacturing investments. A significant 85 per cent of deals across the full pipeline activate Multiplier Effects by meeting at least two of its sub-criteria, such as market creation potential or trade orientation. Although the quantitative analysis finds minimal impact of deal size on most lever scores, Multiplier Effects is notably the only lever that tends to increase as deal scale increases. This reflects the tendency of larger investments to support broader supply chains and export linkages.

Impact Pathways

The Multiplier Effects lever was directly activated by the majority of interviewed firms (5 out of 7 firms) across the Heavy Industry and Agri-processing sectors. The deal scale for this sample ranges from USD 3.4 million (Agriprocessing; greenfield; in Senegal) to USD 55 million (Heavy Industry; greenfield; in Nigeria). Multiplier Effects were achieved through two observed mechanisms of change: i) local value chain creation and ii) innovation and technological diffusion. Despite the different country contexts and varied operations, the following inputs (firm activities) were featured as drivers of those spillover effects: leveraging first-mover advantages and developing technology-based partnerships.

Impact pathway 1: Creating local value chains → export-orientation → Multiplier Effects

By nature of its manufacturing-concentrated activities, the Heavy Industry sector demonstrates the strongest activation rate of Multiplier Effects, mainly driven by its first-mover advantages, export-orientation, and technological advancements.

For example, an EV mobility platform operating in the Heavy Industry (vehicles) based in Nigeria and West Africa activates this impact pathway through the development of local assembly chains. Over the span of 10 years, the company successfully transitioned from a small-scale mobility platform into a large-scale EV operator across various cities in West Africa, with a fully developed local assembly capacity, generating 3,600 vehicles per month. Building domestic assembly capacity for EVs and battery charging infrastructure has been central to building capacity and preparedness for exportation to neighboring regional markets and achieving Multiplier Effects beyond the firm's immediate operations. In addition, through its locally assembled EV vehicles, the firm is set to replace imported vehicles. Its first-mover advantage and exponential business growth trajectory, combined with close engagements with municipal authorities and partners, positioned the firm as a reference point for EV policy in Nigeria and across West Africa. Compared to the portfolio median deal size (USD 12 million) among deals reaching financial close, the firm's large investment deal (USD 55 million) and its growth prospects align with the broader observed trend of increasing Multiplier Effects as deal size increases.

Impact Pathway 2: Innovation and Technological Diffusion → Multiplier Effects

Technological adoption can induce multiplier effects through generating inter-sectoral benefits through shared infrastructure, upskilling labour, and generating knowledge-spillover effects to neighboring regions. Yet, upgrading manufacturing equipment and technology for African firms in Sub-Saharan Africa is reported to be 35-39 per cent more costly relative to the United States ([World Bank, 2024](#)). Those high costs also apply to technologies utilised in the agriculture sector, posing constraints to upgrading productivity and competitiveness.

An agri-processing (bioconversion) firm in Senegal illustrates how multiplier effects can be activated through localisation of innovation and technological diffusion. The firm sought to reduce market dependency on imported inputs from South America and Eastern Europe through developing a vertical farm for domestic production of alternative animal feed protein and fertilisers. Through investing in R&D and fostering academic partnerships with an entomology research lab, it was able to replicate the optimal climatic conditions for the inputs in its local country context. This contributed to facilitating its import substitution potential and enhancing its innovation footprint. In addition, it partnered with a Chinese technological firm to co-develop equipment for enhancing production, adapted to the local conditions and labour force capabilities, while enabling the firm to obtain the rights to the adapted technology design. This

equipment contributed to enhanced productivity and reduced costs of production. Although the firm has not yet reached financial closure, the depths of its lever activation across multiplier effects, Climate & Environment and Jobs & Livelihoods points to its high transformative ambition. As its industrial operations scale, it is set to generate additional spillover effects through broader technological diffusion nationally and into West African markets. Its position as first-mover in its national and regional market, combined with its demonstrated innovation trajectory, further amplifies its business growth prospects.

The two cases, sitting at opposite ends of the deal size range, reflect the wide-ranging support provided by Manufacturing Africa to support different business sizes and models towards achieving Multiplier Effects. The main catalysts included objective commercial advice, obtaining decision-grade data and analysis for strategy building, and fostering credibility and reach to access regional and global markets via a local strategy firm. In addition, Manufacturing Africa's technical assistance offered investor mapping and facilitated introductions with international partners, which later acted as a steppingstone for technological transfers and facilitating export strategies.

Case Study: Inclusive Economic Transformation (IET)

Inclusive Economic Transformation is best understood not as a single outcome but as the result of business models that integrate value creation and structural transformation. Firms that successfully activate this lever do so by embedding transformation into their commercial logic, generating impacts that are self-reinforcing and extend beyond the firm to the wider economy.

IET lever is activated in 43 per cent of Manufacturing Africa portfolio deals, reflecting its role as a high bar for transformation depth under the Payment-by-Results framework. Deals that meet this threshold are characterised by stronger supply chain integration, higher economic complexity, and greater local value addition.

While IET is difficult to observe directly at the firm level given its lever combination nature and long-term manifestation, interviews provide indicative evidence of broader system-level effects.

The primary impact pathway through which IET (wholistic transformation is realised is as follows:

Impact Pathway: Structural gap identification → value addition through integrated business models → multi-lever activation → system-level transformation

Interview evidence indicates that the IET composite indicator is most strongly activated in firms that treat structural failures in local economies as commercial opportunities. These firms do not add impact as a secondary feature but embed transformation within their core business model.

Across diverse sectors and countries, firms consistently identify gaps in infrastructure, service delivery, or market organisation, such as unmanaged waste, fragmented agricultural supply chains, unreliable energy systems, or lack of access to finance, and build business models that convert these constraints into sources of value. This generates impact simultaneously across multiple levers, including employment creation, environmental benefits, inclusion, and spillover effects.

An overarching finding is that firms generate impact across multiple levers by addressing structural gaps in public infrastructure and service delivery, converting underutilised resources and unmet demand into commercially viable activity.

Across the portfolio, business models are consistently premised on identifying inefficiencies or absences in existing systems, such as unmanaged waste streams, limited access to electricity, limited access to productive infrastructure (capital related to traditional manufactures), or barriers to finance, and introducing processes, technologies, or financing models that capture value currently lost within these systems.

This has included (within the portfolio) converting waste into tradable commodities or food products, formalising previously unstructured input markets, integrating dispersed supply chains through modern processing infrastructure, and enabling access to productive assets for MSMEs. In each case, firms operate not by displacing existing systems, but by building where systems are incomplete, thereby generating both commercial returns and broader economic value.

In the same vein, the interviews indicate that business models targeting structural economic gaps as commercial opportunities can sometimes support firm growth through three primary mechanisms.

1. First, they generate durable and self-reinforcing demand by serving previously excluded or underserved market segments, where customer success feeds back into increased demand and validates the underlying business model.
2. Second, they create structurally low-cost input bases by incorporating informal, unpriced, or inefficiently utilised resources into formal production systems, which enhances competitiveness and supports resilience, even under financial stress.
3. Third, they strengthen the investor proposition by embedding clear social and economic impact within the business model, enabling access to concessional finance and expanding the pool of potential investors, particularly where commercial returns alone may not yet be sufficient.

Examples of this established in interviews:

- ♦ **Case 1:** Several firms use waste as core inputs, currently disposed of in unmanaged landfills; its value-addition process converts this waste into internationally traded commodities.
- ♦ **Case 2:** A firm where the business model is premised on the deep structural inefficiency of Ethiopian and Kenyan agricultural supply chains and the opportunity to introduce modern integrated processing infrastructure that captures value currently lost to fragmentation and poor logistics as a result of poor roads or lack of reliable rail.
- ♦ **Case 4:** A firm that addresses the capital gap in the Nigerian informal economy by making capital affordable to micro-entrepreneurs through asset financing, converting underserved demand into a structured commercial market.
- ♦ **Case 5:** A firm that converts the gap between transport demand and formal employment (where unemployment is rife) into a structured platform for micro-entrepreneur income generation, using technology to reduce the friction and risk associated with vehicle financing for low-income riders.