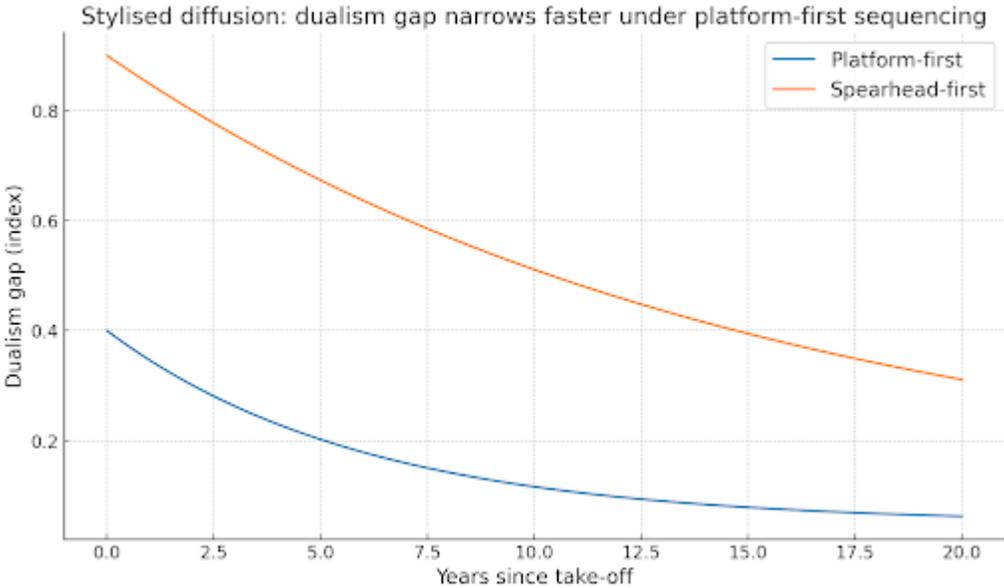


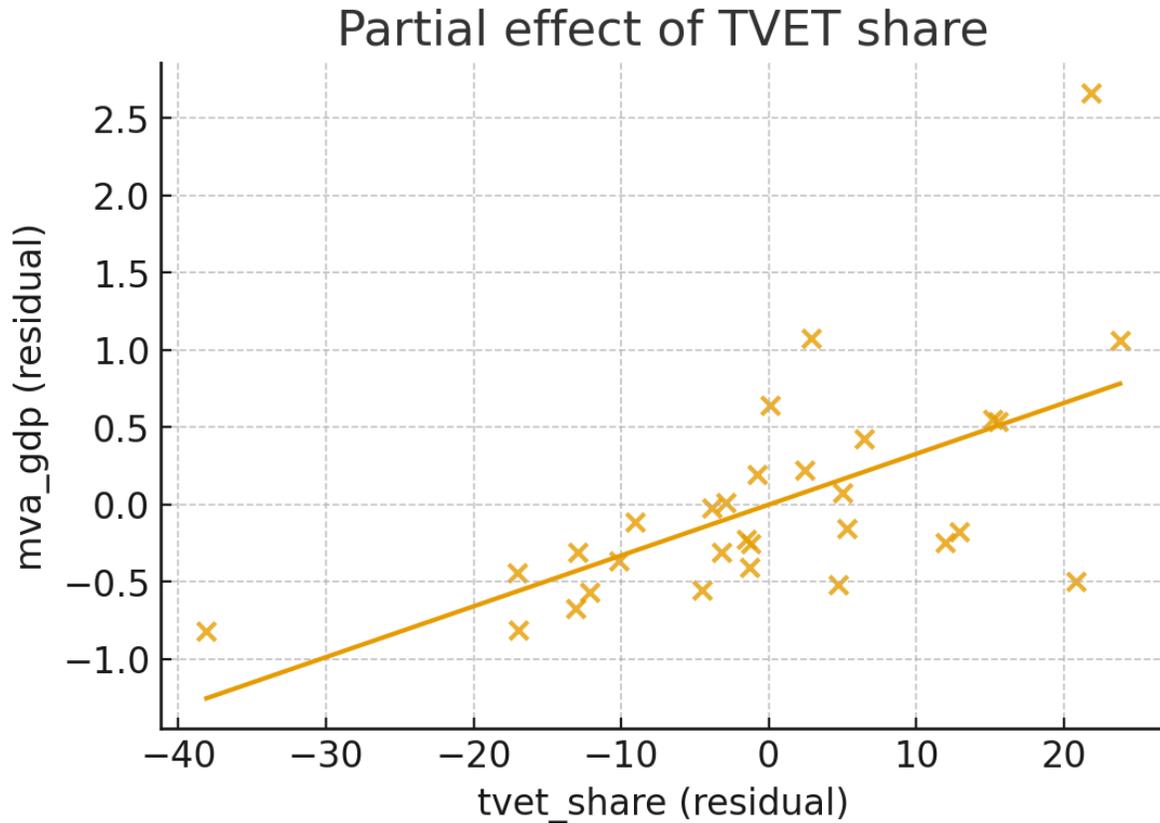
Appendix 1



A platform-based sequencing approach temporarily limits the gap between vanguard sectors and the rest of the economy. However, it comes at the expense of speed.

Appendix 2

Measuring TVET Share against manufacturing value add (MVA) in total GDP



There is academic evidence of TVET contributing to MVA, but often through multiple loops. The supporting infrastructure needed for such pass-throughs to manifest is extremely weak or even non-existent in some contexts.

Appendix 3

Evolution of German development cooperation instruments in Ghana since pre-colonial times

Epoch	German instruments	Ghana context	Industrial cooperation focal points	Risks & mitigants
1828-1917	Mission enterprises; trading houses; skills/press	Colonial economy; commodity exports	Education; crafts; agro-processing	Capital scarcity; political control → community/mission capital and standards
1957-1966	Suppliers' credits; development loans; church aid	State-led industrialisation; Cold War	Power; transport kit; hospitals; training	Debt/politicisation → co-financing and clear conditionality
1966-1979	KfW sovereign loans; OEM tie-ins; Technical Assistance (TA)	Stabilisation; grid expansion	Electrification; municipal services	Operation and Maintenance (O&M) gaps → spares, training and service contracts
1980s-1990s	Governance/TVET TA; decentralisation	Adjustment; fiscal constraint	Institutional reform; sector rehab	Reform fatigue → incremental pilots and donor coordination
2000s-mid-2010s	Public Financial Management (PFM) / Global Financial Governance (GFG);	Growth recovery	SME capability; standards; energy reliability	Skills mismatch → dual-style curricula and assessor systems

	renewables pilots; SME support; TVET pilots			
2017-2025	CwA; ECAs; DBG; AHK/JEC finance	Reform momentum; debt distress	Grids (Siemens); roads (Hermes); auto (VW); SME finance (DBG); TVET scale-up	Foreign exchange (FX) / debt stress → blended finance, guarantees and Letter of Credit (LC) tranching

Appendix 4

Archetype/case	Epoch/year	Instrument/vehicle	Core industrial function	Localisation/capability angle	1-line takeaway
Basel Mission (foundation for UTC – Union Trading Company)	1828- 1917	Mission enterprise; trading company	Human capital; trading/logistics discipline	Artisans; printers; clerks; feeding factories; logistics	Proto-industrial scaffolding that endured
Electrification phases (KfW)	1966-1969; 1989	KfW sovereign loans; OEM tie-ins	National grid reach for processing & services	O&M regimes, spares and technician training	Infrastructure as industrial enabler beyond the Accra-Tema area
Siemens-GRIDCo MoU	2020	MoU + TA (planning and automation)	'Software of hardware': grid optimisation and reliability	System planning and automation skills	Reliability upgrade without heavy new gen
Eastern Corridor Lot 1	2021	Euler Hermes-backed Social Loan and German Energy Performance Contracting	Logistics corridor for trade & industry	Civil/fabrication jobs; safety assets; O&M	Sustainability-labelled ECA template for infrastructure
DBG with support from KfW	2021	EUR 46.5m subordinated loan + TA	Long-tenor SME finance for equipment & working capital	Tooling/QA finance for supplier upgrades	Finance-depth flywheel for manufacturing

Volkswagen Ghana	2020	FDI + Auto Policy (moving from Semi Knocked Down [SKD] to Completely Knocked Down [CKD])	Auto assembly anchor and parts ecosystem	Apprenticeships and after-sales; next: components/tooli ng	Anchor → supplier ecosystem & standards
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