Conceptual Linkages: Growth, Trade, FDI, and Oil-Related Emissions

GDP Growth

GDP growth reflects expansion in domestic demand (consumption, investment, government spending) and net exports. It is both a driver and an outcome of external competitiveness and capital formation.

Export Growth

Export growth tracks external demand and price/volume competitiveness. It transmits global cycles to the domestic economy and influences industrial utilization, employment, and income.

FDI Share of Fixed Investment

Inward FDI as a share of fixed investment captures the role of foreign capital in financing and shaping domestic capital formation. It often brings technology, managerial know-how, and access to global value chains.

Oil-related CO2 Emissions

Oil-related CO2 emissions proxy for the carbon intensity of transport and oil-dependent production. They move with mobility, industrial throughput, and fuel mix/efficiency.

$Exports \rightarrow GDP$

Rising exports lift manufacturing and tradable services activity, raise profits and wages, and stimulate upstream investment. Exports often lead GDP in small open economies.

$GDP \rightarrow Exports$

Sustained GDP growth finances capacity expansion and productivity improvements, which can enhance competitiveness and export supply over the medium run.

$FDI \rightarrow GDP$

FDI injects capital, technology, and management practices, raising productivity and investment. Spillovers occur via supplier linkages and labor mobility.

$GDP \rightarrow FDI$

Faster growth signals market potential and stability, attracting market-seeking FDI and reinvestment of earnings.

Exports \rightarrow FDI

Export growth integrates economies into global value chains, crowding in efficiency-seeking FDI to build local supply nodes.

GDP/Exports → **CO2**

Higher activity lifts freight, mobility, and oil-intensive production, raising emissions unless offset by efficiency or electrification.

CO2 → GDP/Exports

Oil-intensive systems are exposed to price shocks and carbon policy, which can affect competitiveness and costs.

$\textbf{FDI} \rightarrow \textbf{CO2}$

Technology-rich FDI can lower oil intensity; resource-seeking FDI in hydrocarbons can raise it. Effects depend on sectoral composition.

Policy Levers

Trade agreements, investment climate, energy transition, and innovation policies all mediate these relationships and can support sustainable growth decoupled from oil dependence.