Inclusive Growth Diagnostics: A Response

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Inclusive Growth Diagnostic: Analytics I

• Let $X = (X_{i,h,t}: i \in I, h \in H, t \geq 0)$ be a complete (intertemporal) description of the economy along a given growth path characterized by the system of equations:

$$S_i(X) - P_{h,i,t}(X) - d_{h,i,t} = 0, \quad i, h, t$$

(1)

where $S_i$ is the marginal (or incremental) social valuation of activity $i$, $P_{h,i,t}$ the marginal (or incremental) private valuation by agent $h$ (indexed by relevant social marker (class, place, ethnicity, gender, status, religion) and $d_{h,i,t}$ the distortion of activity $i$ by agent $h$ at time $t$.

• Sources of distortion: market imperfections, externalities, increasing returns, fairness/equity considerations, position in a social network, behavioral biases etc.

• Extension of Hausmann, Rodrik, Velasco 2005.
Inclusive Growth Diagnostic: Analytics II

• Treat (1) as a system of constraints in the underlying intertemporal social welfare maximization problem.

• Social Planner solution satisfies the FOC (by duality)

\[
\frac{\partial W(X)}{\partial d_{h',j,t'}} = -\mu_{h',j,t'} + \sum_{h,i,t} \mu_{h,i,t} \frac{\partial [S_{i,t}(X) - P_{h,i,t}(X)]}{\partial d_{h',j,t'}} \quad \text{for all } h', j, t'.
\]

where \( W \) is the intertemporal social welfare function and \( \mu_{h,i,t} \) is the marginal (incremental) social value of reducing the distortion of activity \( i \) by agent \( h \) at time \( t \).

• First term: direct effect at a given point of time due to small reduction in distortion

• Second term: indirect effect both within a time period and over time due to a small reduction in distortion.

• Underlying Constraints: intertemporal budget (resource) and technological constraints, intertemporal political constraints.
Inclusive Growth Diagnostics and Traverse

- Both distribution and sequencing matters for policy formulation in relation to inclusive growth.
- Policy is context-specific, history dependent, sensitive to political and institutional considerations and behavioural biases.
- If a policy recommended: what is the presumed binding constraint(s), what are the (“local” economic, spatial, social, political, behavioural, intertemporal) spilllovers, what is the supporting evidence (administrative data, longitudinal studies, policy experiments, RCTs, market data (prices), survey data), what are the (second-best) trade-offs with limited fiscal resources?
- Link to older literature on “traverse”: Adolph Lowe (1976), Hicks (1965, 1969, 1973) and before that, Kaldor, Robinson, Marx, Ricardo.
A Research/Policy Agenda

• Both new theory and empirical work to underpin a second-best, inclusive growth analysis appropriate for Scotland (and potentially set the template for other countries (OECD, emerging market economies);

• Reformulation for the case where the economy is viewed as a complex, adaptive system.

• Two way flows of problems/ideas/empirical research between policy-makers and academics.