

EXPLAINING LONG TERM GROWTH DIFFERENTIALS

One of the biggest questions of our time.

Particularly interesting when get 'pairs' of countries with similar initial conditions. Eg, Phils-Thai; Indo-Nigeria; Mal-Ghana.

Thinking of the long term: decades, not years.

Economists better at explaining the past than predicting the future!

Growth accounting (TFP) v/s determinants of growth.

Dependent variable: GDP, GDP per capita/hours worked, TFP, etc.

Note convergence literature, 'catch-up' phenomenon.

Selection of variables: motivated by theory and empirics.

'History, Geography, Policies'.

Rodrik: 'Integration (trade and investment), Institutions ('Rule'), Geog.

The three "I's": Institutions, Incentives (prices), Infrastructure (social, physical, financial).

Various proxies for each; may generate different results.

GROWTH DETERMINANTS:

Variable	Proxies
Openness	X+M/GDP Trade barriers: average tariffs, dispersions, NTBs Sachs-Warner FDI/GDP; FDI barriers exchange rate regime; forex controls; black market Openness to technology, labour, etc
Macro	Inflation; money supply growth Fiscal deficit/GDP; public debt/GDP
Human Capital	Years of schooling; enrolment ratios (various levels); equity (gender, class, region); quality. Health - life expectancy, IMRs. 'Sen ratio' - govt exp on: health & education/defence.
Equity	No clear evidence; contending theories; depends also on how much social/occupational mobility.

Variable	Proxies
Institutions, Legal	<p>Difficult; subjective; hard to compare; few LT series.</p> <p>Legal, contract protection; international rankings (GCR).</p> <p>Do Soto: 'Why capitalism succeeds in the West but ...'</p> <p>Contract-intensive money; $(M2-M0)/GDP$</p> <p>Civil service quality; eg, central banks.</p>
Government	<p>Also very difficult to measure.</p> <p>Eg, intangibles like 'regime credibility'.</p> <p>Size, disincentives from high taxes; but ambiguous.</p> <p>Specifics: CB quality; size of SOE sector.</p> <p>Corruption/KKN - but mixed, 'good' and 'bad'.</p> <p>Democracy/responsive govt.</p> <p>Political stability, coups; also mixed: Phils v/s Thai.</p>
Others	<p>Geography - coastline, distance, natural resources, etc.</p> <p>Regions - eg, 'Africa dummy'.</p> <p>Infrastructure; finance; etc.</p>

Note many complexities. Eg:

1) How to weight these variables; and universal weights?

2) Which way causality? In most cases, both directions.

Eg, (a) higher GDP/capita, can afford better institutions;

(b) higher growth;

(c) more open economies require better macro, institutions.

3) Lags - how long before get 'reform dividend'?

More generally, are growth trajectories 'path dependent'? Eg, once have high inequality, very difficult to change?

4) Non linearities: likely to apply to most variables, but not clear how and how much. Eg, inverse relationship between growth and inflation; but is there a threshold, and if so where?

5) Major measurement problems for everything. Even apparently straightforward variables. Eg, trade/openness: (a) large economies less trade-dependent; (b) illegal trade often large; (c) product fragmentation complicated the picture, eg, in electronics; trade barriers also tricky.

6) Convergence: absolute v/s conditional. Little evidence of former.

7) A framework attempting to explain LT growth. Most countries experience episodes; many 'boom and bust'.

Not suitable for understanding crises; need a separate analytical framework for the latter (next topic).

Some empirics, applied to Southeast Asia.

Step I: some intuitive reasoning, with crude 'synthetic' numbers.

Step II: some formal econometrics; Hill and Hill, Singapore Economic Review, 2005. In Reading Brick.

Step I: Apply the simple analytical framework outlined above, and nominate ranking on scale 1-5 (5 = best) for each variable and country.

See following illustrative example. Heroic assumptions and generalizations!

VARIABLE	IND	MAL	PHIL	SING	THAI	VN
Openness	3-4	4-5	3-4	5	4	1 3
Macro	4	4-5	3	5	4-5	1 3-4
Human capital	3-4	4	4	4	3	4
Equity/'inclusion'	4	4	2-3	3-4	3-4	4
Institutions	2	4	2	5	3	2
Govt	3	4	2-3	5	3-4	2
Others (eg):		distance, same for all				
'coastline'	5	4	5	5	3	4
Infrastructure	3-4	4-5	2-3	5	4	2-3
Natural resources (??)	3-4	4	2-3	0 (?)	3	2-3
Average	3.5	4+	3-	4.5+	3.5+	2+/3+