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Development Questions for 25 Years

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Abstract

Recent growth experience in developing countries is reviewed, with an emphasis on structural change and sources of effective demand. How policy influences such outcomes is analyzed in light of historical experience. Options are discussed for macro and industrial/commercial policy, and how they may influence the growth process. The recent 'institutional turn' in development theory may obfuscate serious policy analysis.

Keywords: development, growth, economic policy, institutions
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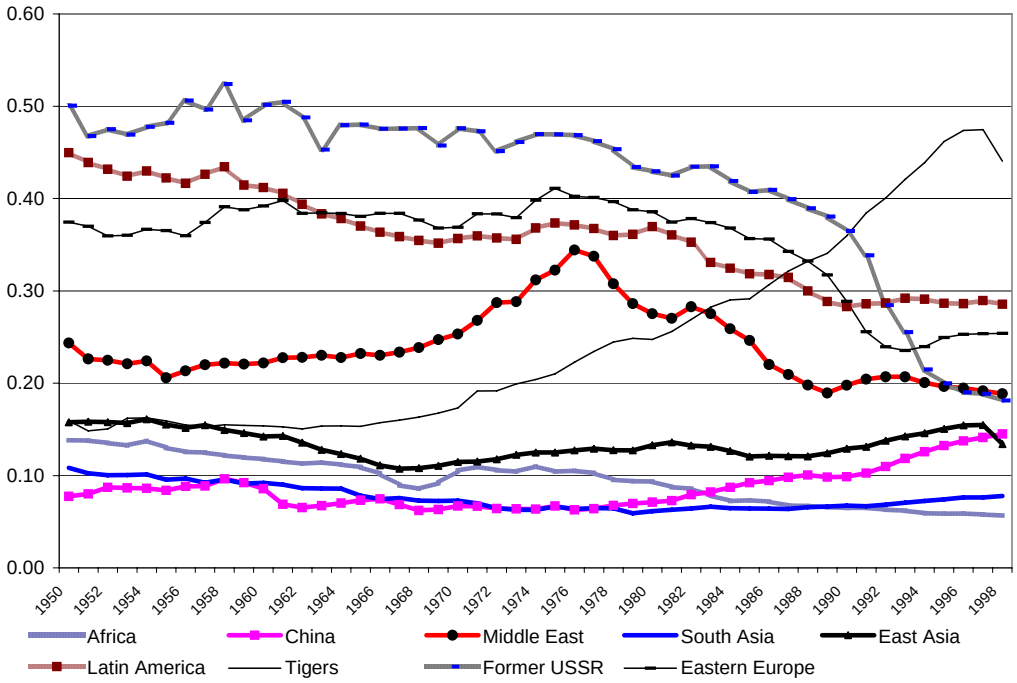
1 Recent development

Looking at recent history, a first point that stands out is that there has been a massive divergence of growth rates in the last decades. Figure 1 shows income ratios of poor to rich countries in purchasing power parity (PPP) terms for selected regions in the second half of the last century, based on data from Maddison (2001). The East Asian 'Tigers' are the only group showing a sustained increase over most of the period, with modest catching-up on the part of other Asian regions (including China since the 1980s, and more recently India) in the last 25 years. Elsewhere, ratios declined, most notably for the Middle East and the formerly socialist countries after 1975. The diagram is disturbing especially because the downward paths of the ratios in several instances are due to stagnation or a decrease in the absolute value of GDP per capita of the follower countries. For example, Africa's GDP per capita decreased from a high of 1,433 Geary-Khamis dollars[1] in 1977 to 1,217 in 1998. The Middle East fell to 4,053 Geary-Khamis dollars in 1998 from 4,716 in 1977. Lastly, the former USSR lost ground in record time, from 7,078 dollars per capita in 1989 to 3,893 in 1998.[2]

Figure 1: Catching up: GDP per capita of developing countries versus OECD



[1] Geary-Khamis dollars for the year 1990 are Maddison's preferred benchmark numeraire for computing PPP income levels.

[2] Needless to say, Figure 1 runs completely counter to the ahistorical optimism of mainstream authors such as Lucas (2000). His model resembles a horserace with a staggered start. Each successive group of poor countries leaves the gate some time after its immediate predecessor and then appropriates existing technology to run faster than all the rest to catch up. Because the USSR must now be reckoned a failure, over almost 200 years Japan and possibly the Tigers are the only observed successes among new entrants to the race.

It is also notable that sustained growth among 'successful' countries was accompanied by structural change, an aspect of the whole process of development that has basically been ignored for the past 20 years. Tables 1 and 2 provide numerical illustrations, with implications for development theory. The former gives a decomposition of labour productivity growth for the Tigers and Southeast Asia between tradeable and non-tradeable sectors, with the overall total as a weighted average at the far right.[3] The total incorporates own-rates of productivity growth (weighted by output shares) for all sectors and 'reallocation effects', which are positive for sectors with relatively low average productivity (often non-tradeables) in which employment falls or for high-productivity sectors (tradeables) in which employment rises.

Table 1: Labour productivity decompositions

	Tradables		Non-tradables		Productivity
	Sector's Productivity	Reallocation effect	Sector's Productivity	Reallocation effect	Total
1980-1985	2.2%	0.1%	1.3%	0.5%	4.1%
1986-1990	2.0%	-0.1%	3.5%	0.3%	5.7%
1991-1995	2.5%	0.1%	2.5%	0.3%	5.3%
1996-2000	1.8%	0.0%	1.8%	0.0%	3.6%

Tigers Region: Korea, Malaysia, Singapore, Taiwan
Source: Authors' calculations (www.icsead.org and UN database)

	Tradables		Non-tradables		Productivity
	Sector's Productivity	Reallocation effect	Sector's Productivity	Reallocation effect	Total
1980-1985	0.5%	-0.6%	-0.7%	1.9%	1.0%
1986-1990	1.1%	-1.0%	3.0%	0.8%	3.9%
1991-1995	3.1%	0.2%	0.9%	1.5%	5.7%
1996-2000	0.1%	-0.3%	-0.7%	0.5%	-0.4%

South East Asia Region: Indonesia, Philippines, Thailand, Viet Nam

Source: Author's calculations based on www.icsead.org and UN databases.

In the Tiger region, weighted own-rates of productivity growth in both sectors are high and reallocation effects generally positive. In Southeast Asia on the other hand, non-tradeable productivity growth lags the rate in tradeables (the finding for most countries) and reallocation effects are often negative. This sort of contrast underlines how different economies perform differently at a disaggregated level, which undoubtedly helps determine their performance overall. Table 2 decomposes growth rates of the economy-wide employment/population ratio (far right) into an average of growth rates of the ratio by sectors weighted by employment shares. As it turns out, the ratio of a sector's own-employment to population will rise if the growth rate of its output per capita exceeds its growth rate of labour productivity.

The panel for the Tigers shows that agriculture consistently shed labour while 'other' (tertiary) sectors created jobs. Manufacturing was job creating during the 1980s but

[3] Rada and Taylor (forthcoming) present the formal details of the decomposition procedures discussed herein as well as empirical results for 12 regions.

shifted to shedding labour (to a lesser degree than agriculture) in the 1990s. In Southeast Asia, agriculture was a far less dynamic labour source than in the Tigers and the other sectors were less effective at creating jobs so the overall employment/population ratio was quite stable.

Table 2: Population-employment decompositions

	Agriculture	Manufacturing	Others	Total
1980-1985	-1.3%	0.2%	1.7%	0.6%
1986-1990	-0.7%	1.1%	1.8%	2.2%
1991-1995	-0.8%	-0.3%	2.1%	1.0%
1996-2000	-0.3%	-0.2%	1.0%	0.5%

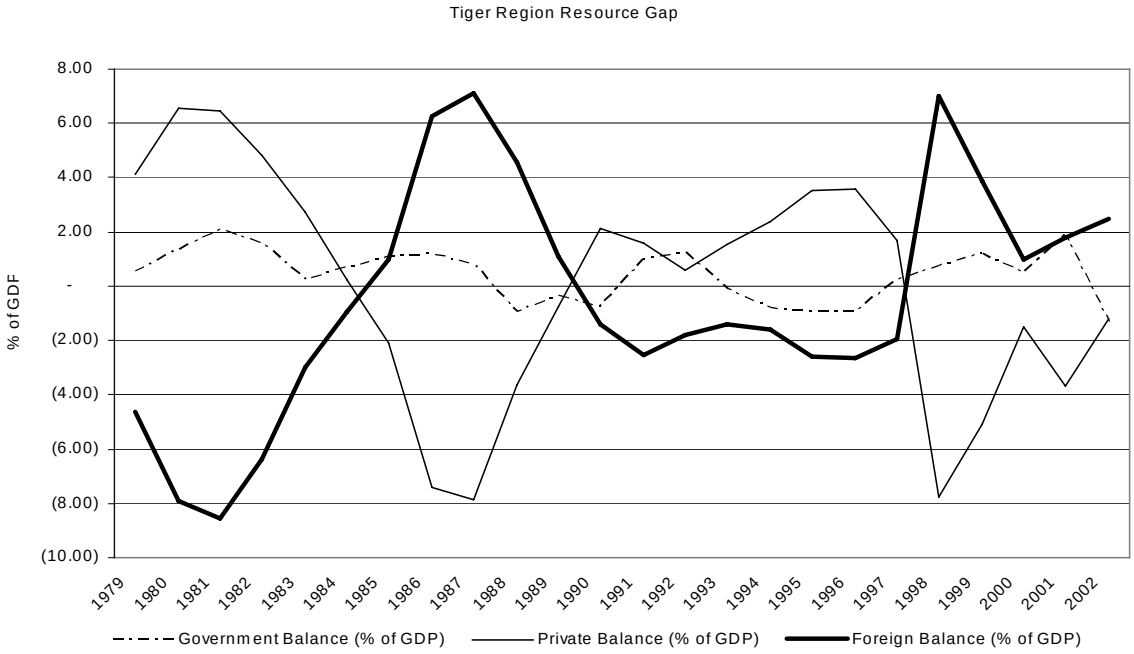
Tiger Region: Korea, Malaysia, Singapore, Taiwan
Source: Authors' calculations (www.icsead.org and UN database)

	Agriculture	Manufacturing	Others	Total
1980-1985	-0.4%	0.0%	0.5%	0.1%
1986-1990	-0.3%	0.1%	0.2%	0.0%
1991-1995	-1.2%	0.2%	0.6%	-0.5%
1996-2000	-0.3%	0.1%	0.2%	-0.1%

South East Asia Region: Indonesia, Philippines, Thailand, Viet Nam

Source: Author's calculations based on www.icsead.org and UN databases.

Figure 2: Effective demand decompositions



Decompositions such those in Tables 1 and 2 can readily be constructed to analyze disaggregated effects of external shocks, import substitution and export promotion

policies, and so on. Work along these lines ceased to be popular two decades ago but that does not mean it is useless. In one final illustration of structural change, Figure 2 gives net borrowing flows (incomes minus expenditures) over time for the government, private, and rest of the world sectors in the Tiger region (normalized by GDP). As an accounting identity, borrowings must sum to zero:

(Private investment – saving) + (Public spending – taxes) + (Exports – Imports) = 0

with a positive entry indicating that a sector is a net contributor to effective demand.

In the Tigers, public sector spending as a share of GDP has been close to zero, so that private and foreign net lending and borrowing levels look like twins. There was an external deficit in the early 1980s, with a reversal signaled by the Plaza accord in 1985. A surplus period followed until the early 1990s, then a deficit which ended as the region switched to a strong trade surplus after the 1997 crisis. The private sector pattern is broadly the same, with signs reversed. Of course, the diagram does not establish which 'twin' is driving the other, but it does point to linkages to be explored. Again, patterns across countries differ. The Tigers illustrate flexible adjustment in the face of external and internal shifts. Elsewhere, one or another sector may consistently lead demand, as has the government for several decades in India. What one does *not* see in general are opposite-signed co-movements of the fiscal and foreign deficits. That is, the traditional 'twin deficits' of orthodox open economy macroeconomics do not often appear. They have been at the core of IMF stabilization packages for 50 years. Small wonder that the programmes very often fail.

These decompositions are also useful in tracing though the implications of a major policy shift that has occurred worldwide since the 1980s—a move on the part of most countries to deregulate or liberalize their external current and capital accounts along with domestic labour and financial markets. They have also privatized public enterprises, de-emphasized industrial policy interventions, and allowed a greater private sector role in general. The results have been mixed (Taylor 2006).

As Figure 1 illustrates, growth performances deteriorated in many parts of the world. The success cases—the Tigers, China, and more recently India—are scarcely paragons of neoliberalism. Liberalization has often been accompanied by a peculiar combination of 'macro prices,' strong real exchange rates and high interest rates in particular. Together with current account deregulation, the shift in prices seemed to stimulate productivity growth and hold down demand in tradeable sectors which consistently shed jobs. Along the lines of Table 2, any employment creation that occurred took place in agriculture and non-tradeable sectors, often at lower pay levels than in tradeables. Import 'leakage' coefficients tended to rise and saving rates to decline in the wake of liberalization, leading to the net borrowing pattern illustrated in Figure 2 for the Tiger countries in the 1990s prior to the crisis. Not just in Asia, such shifts have been

brusquely reversed as external accounts deteriorated. In somewhat related fashion, privatization and financial deregulation were followed by financial crises (sometimes repeated) in many countries.

Other supply-side policies seemed to have a range of results. Take the effort to stimulate human capital accumulation. A useful indicator is average years of schooling. After the 1970s, its growth rates were broadly similar in the Tigers, Latin America, and sub-Saharan Africa. Levels differed, being roughly nine, six, and three years respectively in 2000. It may be that a certain *level* of human capital is required to support development, but faster *growth* of this 'produced means of production' is clearly not closely associated across regions with higher growth rates of output per capita. Distributive impacts of all these changes also were mixed. High-quality jobs were lost in tradeable sectors but in some cases employment opened up in non-tradeables benefiting the poor. The functional distribution often shifted against labour and in favour of profits and (especially) interest earnings associated with newly deregulated financial sectors. Turkey and Brazil are striking examples of economies in which a distributive shift toward the financial sector has been accompanied by skewed macro prices, overall instability, and unimpressive growth over the medium run.

2 Some more ancient history

It makes sense to place these relatively recent observations against a longer historical background, with a focus on the role of the state. Following Chang (2002) we can briefly consider how macro and micro 'policy' was formed when currently prosperous countries were growing rapidly.

In the USA throughout the nineteenth century, for example, investment in infrastructure like the Erie Canal and the railroads was aggressively supported by several levels of government, with subsidies to the private sector often channelled via Wall Street which always took care to cream off a generous portion of the funding (Shapiro and Taylor 1990). The period between the Civil War and the 1890s was of course incredibly corrupt, with robber barons practically ruling the land under a succession of permissive Republican administrations in Washington. Even after the partial private regulation or 'Morganization' of finance in the 1890s and the subsequent reformist pressure from the Populists and Progressives, the system was at best partly democratic and economically opaque. All of this went on behind towering tariff walls, in a bank-based financial system without a central bank, embellished by patchy property rights and a corrupt judiciary.

Similar periods of state-sponsored developmentalism took place elsewhere. Sweden between the 1930s and 1980s where a long string of Social Democratic governments actively collaborated with private industrial groups, notably the Wallenberg empire. Japan, Korea and Taiwan long had close state/private collaboration which has been

chronicled by many scholars (Alice Amsden and Robert Wade were the pioneers). Brazil was ultimately less successful but had an extremely high growth rate during 1950-80 under state control. And as noted in connection with Figure 1, China and India are more recent success cases with rather tightly regulated market systems.

3 Thinking about development

Liberalization was of course heavily promoted by the Bretton Woods Institutions under the famous aegis of the 'Washington Consensus'. One new strand in development thinking is related to liberalization's motley and often unfavourable outcomes. It is the study of 'governance' or how 'institutions' condition the development process. This line of thought easily boils down to 'blame the victim'. To put the two institutions' accusation in a childish vein: 'We gave you all those great policies. They haven't worked. Which means you have bad institutions. So it is your fault.'

Now of course the Bank and the Fund do not normally rant, but they have engaged in a great deal of discourse about how developing and transition economies should pull up their institutional socks along neoliberal lines, a view that is thoroughly ahistorical as discussed above. Other ideas are more worth developing. We can begin with notions relevant to the growth process as such. One important point, strongly enunciated by Nayyar (2005), is that policymakers in developing countries have had their hands tied by the liberalization process in the areas of macroeconomics and industrial policy among others.

An idea tracing back to Adam Smith and recently restated by Reinert (2005) is that the economy can usefully be viewed as a combination of dynamic increasing returns sectors and more plodding constant or decreasing returns activities. The goal is to stimulate the former while shifting resources (especially labour) from the latter. Tables 1 and 2 illustrate how the Tigers succeeded at this task. The question is how to design policies that will facilitate similar processes elsewhere. As illustrated in Figure 3, Kaldor (1978) has always been a fertile source of thought about such an endeavour. Indeed, charting institutional changes that could open up degrees of freedom for the pursuit of developmentalist policies looks like a more fruitful approach than abstractly theorizing about institutions and trying to quantify their impacts along purely neoclassical lines. Some examples: does the open economy 'trilemma' really bind? That is, can independent monetary/fiscal policies, exchange rate programming, and open capital markets all be combined? In the land of textbooks it is straightforward to show that they can be, or in other words that the Mundell-Fleming 'duality' between a floating exchange rate and control of the money supply does not exist. A central bank in principle has enough tools at its disposal to control monetary aggregates regardless of the forces determining the exchange rate.[4]

[4] For the gory textbook details see chapter 10 in Taylor (2004). Frenkel and Taylor (2005) present a more institutionally nuanced discussion.

In practice, however, arbitrary changes in monetary and exchange rate policies may be attacked by markets. Along Nayyar's lines, the question then becomes one of how other policies may be deployed to widen boundaries on feasible maneuvers. Frenkel and Taylor (2005) argue that under appropriate circumstances a weak exchange rate can be desirable for developmentalist reasons. The 'circumstances' include a productive sector which is responsive to price signals, a monetary authority willing and able to maintain a weak rate for an extended period of time (perhaps supported by capital market and other interventions), and political willingness to bear the (conceivably high) initial costs of devaluation including potential inflation and output contraction. Getting away from the recent obsession with using the exchange rate for 'inflation targeting' could be a useful step toward making it a more developmentally useful policy tool.

In the area of industrial/commercial policy, the impact of the WTO has been to rule out interventions involving tariffs and trade while up to a point different forms of subsidies (witness Airbus versus Boeing) are still considered kosher. How can developing and transition economies operate effectively in this new environment? The Smith-Reinert prescription to stimulate increasing returns sectors did not cease to apply when the WTO was born. The question is how to implement it under present circumstances.

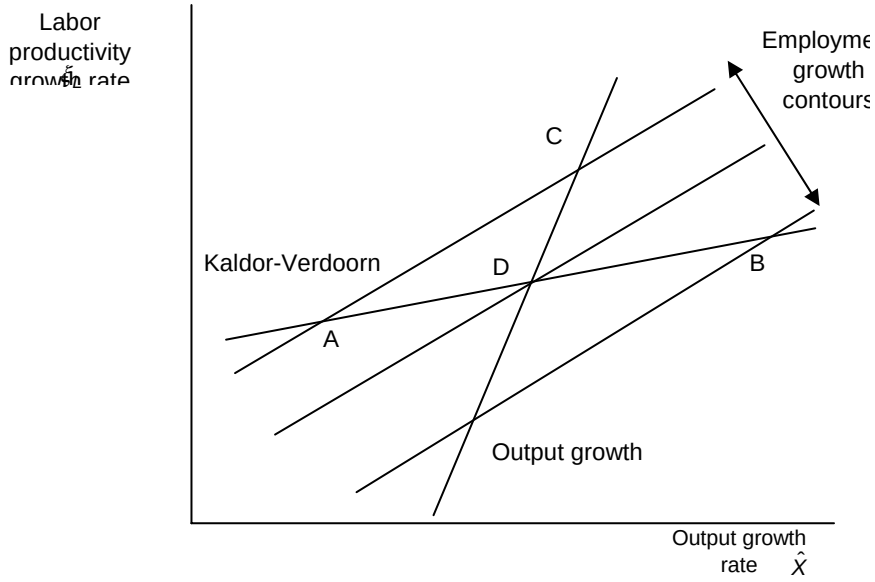
At the macro level, the question implicit in Table 2 is also relevant: how can economies avoid the 'jobless growth' that has been characteristic of the liberalization period? Evidently, productivity growth must be positive for per capita incomes to rise but demand growth must be stronger for employment to be created. It remains to be seen in many countries whether they will be able to programme rapid growth in demand under a regime of liberalized international capital markets. And how are these markets themselves to be regulated? This question became internationally prominent after the round of crises in the late 1990s. It could return again.

One way to summarize some of these ideas is in terms of differential growth rates of labour productivity, which have historically been the most important force behind diverging income levels across countries. Following Ocampo (2001) and ultimately Kaldor (1978), productivity growth in the medium run can be viewed as the outcome of two positive feedback loops building up from basic input factors such as the accumulation of physical and human capital, jumps in productivity resulting from successful industrial and trade policy, and the exploitation of technological backwardness. As will be seen, this system has strong implications for employment growth as well.

The first loop is from output and/or capital stock growth to labour productivity growth, as emphasized by Verdoorn (1949) and Kaldor. These authors insisted that industrial expansion (or, more generally, expansion of tradeable or increasing returns sectors) is the key factor in transmitting technological advance. The second loop runs from labour productivity growth to output growth. Potential channels include stimulation of

investment demand and relaxation of foreign exchange shortages via more rapidly growing production for exports. Finally, the growth rate of employment is equal to the difference between the growth rates of output and productivity. Following Rada and Taylor (2004), this observation means that one can plot 'employment growth contours' with slopes of 45 degrees in a diagram with the output growth rate ($\hat{X}$) on the horizontal axis and the labour productivity growth rate (ξ_L) on the vertical. Each line shows combinations of the two rates that hold the employment growth rate ($\hat{L} = \hat{X} - \xi_L$) constant. Employment growth is more rapid along contours further to the SE. As in Kaldor's (1978) original diagram (sketched verbally but not actually drawn in this paper), Figure 3 also contains illustrative schedules for a 'Kaldor-Verdoorn' technical progress function (the first loop mentioned above) and 'output growth' (second loop).

Figure 3: Joint determination of output, labour productivity, and employment growth rates



The dominant tradition in growth theory is to make $\hat{X}$ endogenous by combining a pre-determined growth rate of employment with a technical progress function, in effect dropping the Output growth relationship. For example, if employment grows at the rate corresponding to the contour passing through point A, then its intersection with the Kaldor-Verdoorn schedule determines $\hat{X}$. If employment growth were faster, say along the contour passing through point B, then $\hat{X}$ would increase as well. However, under the standard assumptions its response elasticity would be *less than one*, so that output growth per employee is *lower* at C than A. This finding has important implications for

the interpretation of mainstream growth methodology.[5] A second way to make the schedules in the diagram consistent with one another is to ignore the technical progress function while combining a predetermined employment growth rate with the output growth function as at point C. The productivity growth rate becomes 'endogenous' and unrelated to the Kaldor-Verdoorn schedule, precisely in the sense of New Growth Theory.[6]

A third approach to Figure 3 is to combine Kaldor-Verdoorn and output growth schedules, letting employment growth be determined along one of its contour lines as at point D. In a developing country context, one might reasonably take effective demand or available foreign resources as binding restrictions on $\hat{X}$.[7] With such a growth rate 'closure', effects on employment of shifts in the two schedules become of interest. The employment growth rate is higher for combinations of values of $\hat{X}$ and ξ_L lying below the contour running through D than at the point itself, and lower for combinations above. Faster overall productivity growth in the sense of an upward shift of the Kaldor-Verdoorn schedule would reduce $\hat{L}$ due to 'labour shedding'; an outward shift in the output growth schedule (for example, due to more rapidly growing aggregate demand and/or more availability of foreign exchange possibly) would speed up job creation.

Insofar as increased employment growth is a policy objective, it may or may not transpire depending on how the schedules shift. As we have seen, external liberalization in many developing countries in the 1980s and 1990s was associated with faster productivity than demand growth (especially in traded goods sectors), leading to reductions in $\hat{L}$. A combination of active industrial and exchange rate policies could possibly speed output growth enough to offset the job losses that liberalization has provoked.

Finally, a few thoughts about microeconomics. Stein (2005) points out the major complaint to be made about recent work is that economists have been spending far too much time using increasingly sophisticated techniques to examine data that are available, rather than thinking about how diverse economies really function in practice (which could suggest new ways to generate useful information). In other words, the profession suffers from the 'looking under the lamp post' syndrome. Even worse, the

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[5] For example, slower population growth will be associated with faster income growth per capita, a deduction from the model often used to support population control programmes. The fact that countries with negative population growth are not racing toward greater prosperity belies this particular notion.

[6] For example, the well-known 'AK' model includes predetermined values of the national saving rate(s) and the output/capital ratio (u). Their product determines the output growth rate, $\hat{X} = su$.

[7] Demand-driven growth models are presented in Rada and Taylor (2004). External constraints can be modeled in a gap model framework (Taylor 1994), taking into account foreign aid, capital movements, and shifts in the terms of trade. Using a counterfactual methodology, Taylor and Rada (2003) show that output growth rates in the late twentieth century in sub-Saharan Africa and Latin America might have been substantially higher if the debt crisis and adverse terms of trade shocks had not happened.

axiomatic nature of neoclassical economics has meant that data are used for 'verification' of theories, not their falsification. It is no surprise that the mainstream has such a paucity of new ideas to offer the developing world. Indeed, the major academic topics date back for decades: endless themes and variations around human capital; ever finer detail on the measurement of poverty with scant consideration of the socioeconomic forces that permit it to continue to exist; imperfect information models that 40 years ago seemed to be a mildly illuminating way to look at phenomena like sharecropping but which have little new to offer today; and the North/Coase musings about property rights that underlie much of the governance/institutional literature mentioned above. A more recent, seemingly more relevant literature based on field evidence in what the sociologist Peter Evans (2005) calls the 'institutional turn' usually turns out to be ersatz political science or sociology couched in phraseology that economists can understand.

As noted above, the institutional literature has been used by the Bank and Fund to justify the failures of their market friendly policies. At the same time, many recent micro models support the old development economists' view that poor countries are rife with market failures which can only be overcome by proactive policy intervention. The Bretton Woods institutions seem to want the theory to run both ways.

4 Where to go from here

As an institute devoted to development economics research, UNU-WIDER can and should play a major role in exploring the issues pointed out above—the analysis of structural change; a serious study of institutions and the role of the state, ideally from the perspectives of the 'old' institutional economics of Veblen, Myrdal, and Galbraith and Hobsbawm's (certainly *not* North's) brand of economic history; and the construction of policy-relevant micro and macro models of developing and transition economies which can withstand academic scrutiny but which are not driven by academic fads. Lal Jayawardena, the inaugural director of UNU-WIDER, tried to push the institute in these directions. I hope it will continue to realize his vision for a long time to come.

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