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The Development of Development Economics

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Abstract: This paper discusses the historical roots of development economics and how it has changed over the last half century. We first identify the most important changes in orientation within development economics and discuss whether there are important areas that have been side-lined. Then we look at current work in development economics and discuss where the field should go in the future.

Keywords: development economics, review, methodology

JEL-classification: B2, O1, O2, O3, O4, O5

1. What is development economics?

I think the discipline of economics can be viewed as a tool-box, from which one chooses different tools depending on the issue at hand. Economics theories and models in our box are generally characterized by certain features such as preferences, interdependence, and equilibrium. Theories often use simplified assumption to make it possible to aggregate or to find equilibrium solutions, although behavioural economists are now looking for alternative behavioural assumptions. Research today is more empirical than theoretical and it has a strong focus on trying to identify causality. Impacts of interventions are investigated with the help of natural experiments or lab-experiments. Still, economics should also help us understand mechanisms, and possibly the estimation of structural models is on the increase again. Anyway, we need to be aware that all tools are not useful for everything or everywhere. The general economics approach is certainly relevant also for the analysis of development issues, and the development economics field has over time become less “special” in terms of analytical approaches. I would characterize it as a branch of economics, which analyses the development in low-income countries, develops theories and methods that aid in the determination of policies and practices, and takes a broad perspective.

One might ask how the status of the discipline has changed over recent decades. In the first chapter of Yotopoulos’ and Nugent’s excellent textbook *Economics of Development: Empirical Investigations* (1976) titled “The Record of Economic Development and the Disillusionment with Development Economics” the first footnote reads as follows:

For example, Srinivasan (1972) attributes to an unnamed but highly respected economic theorist the following statement: “Those among economists who cannot make the grade as mathematical economists, statisticians, monetary or trade economists or economic historians usually end up as either labour economists or worse still as development economists”.

So the status of our sub-discipline was not high at that time, while today Ray (2008) can argue that the discipline “has burgeoned into one of the liveliest areas of research in all the social sciences.” It seems fair to say, at least, that the field is more respected now than it was a few decades ago.

The outline of the paper is as follows. I start by briefly discussing how the issue of development emerged within economics, i.e. look at the roots of development economics (Section 2). Then I focus on the modern conception of development economics as it has emerged post-World War II. By reviewing how the contents of standard textbooks of development economics and development economics publishing in refereed journals have changed over the last half-century, I try to identify the most important changes in emphasis within the field (Section 3). I then discuss and evaluate these developments and draw some conclusions about where I think we ought to go in the future (Section 4).

2. The Roots of Development Economics

Economists have been seeking to explain economic development for a long time. I start with a review of the classics to show that many of the themes of today have been with us for a very long time. What has changed is not so much the questions but our techniques of analysis as well as data availability.

Some would argue that mercantilism was the first (Western) theory of development, but I choose to start from the father of economics, Adam Smith, who thought systematically about the passage of the economy through stages of development. He did not have a clear theory as to why economies develop, although he emphasised specialization and the division of labour as key factors behind productivity improvements. Consequently he argued that the extent of markets and international trade mattered a lot. This view was shared by Marshall (1st ed. 1890, 8th edition 1920, p. 270), who argued that “the causes which determine the economic progress of nations belong to the study of international trade”. He argued that the demand from England for raw materials spread growth to new countries overseas. The role of international trade has obviously continued to be high on the development economics agenda.

Another classical economist concerned with development in the long run was David Ricardo, who actually had a model seeking to explain how an economy expands in a Malthusian situation with labour costs at the subsistence level and with limited supply of land (or natural resources). The key factor here was that as the economy grows the pressure on the land increases leading to higher land rents, which would eventually squeeze out capital profits. And when capitalists no longer had incentives to invest the economy would stagnate. The key factor that was emphasized was thus that the fixity of a key resource could halt development. Ricardo’s prediction was obviously wrong, since technological progress helped push incomes

much higher in spite of the fixity of land resources. Still, the debate about the sustainability of growth and environmental impacts is again high on the agenda.

A third classical stage theorist was Karl Marx, whose saw development as the movement from feudalism through capitalism to socialism (which supposedly was the end station). He was interested in figuring out how the organization of society would change when its economic characteristics changed. He argued that technological progress led to ever increasing economies of scale, which in turn led to capital concentration. This aggravated the tension between capital and labour, and at a certain point the workers would take over the means of production. Something like this happened in some countries, but in most of these there has by now been a reversal back to capitalism. So development was not a one way street as Marx believed. But the idea that there is a link between the requirements of technology and the organization of society is still relevant.

All these three classical economists had more or less elaborate stage theories of development covering the change of the whole society. Sometimes this type of approaches has been referred to, somewhat critically, as grandiose theories or magnificent dynamics, and there have been periods where they have been marginalized. Still, currently there is again work within the profession on issues of really long-term change, even starting from the stone-age. So magnificent dynamics has made a comeback!

After the classical epoch neoclassical economics took over the stage, and the focus shifted to issues of market allocation, coordination and equilibrium. Issues such as long-term growth and development were in the background for a while, and did not get back to centre stage until the Great Depression. In the meantime there were, of course, still some voices presenting interesting ideas about development such as Schumpeter (1934, 1st issue 1911) who was sceptical about the virtues of equilibrium and instead emphasized the role of entrepreneurs and innovations. These notions are still with us, and much of current development policy is actually about creating conditions where entrepreneurs can function effectively.

The point I am trying to make here is that some key themes that feature in the debate today have been with us for a very long time - even long before we came up with a specific sub-discipline called "development economics". Within the field of economics there are often ideas or models that have been half forgotten, but which come back with renewed relevance. Lewis (1954) model of development drawing on classical economics is just one case in point. So we add new theories and methods to our toolbox without discarding the old ones.

3. Recent Developments of Development Economics

To be able to characterize the developments of development economics in recent decades I used two approaches. First I scanned a set of standard textbooks in development economics, namely Higgins (1968), Meier (1964 and various editions up to 2005), and finally Todaro and Smith (2011) (See Appendix A). I then looked at changes over time in the publication patterns of development journals (using the data base ECONLIT). I considered publications in five development journals (Journal of Development Economics, World Bank Economic Review, Economic Development and Cultural Change, Journal of Development Studies, World Development), but I also check what development papers make it into the top 5 general journals in economics (American Economic Review, Quarterly Journal of Economics, Econometrica, Review of Economic Studies, and Journal of Political Economy) (See Appendix B). Here I summarise the main changes in emphasis that I identified.

The movement between stages of development or *magnificent dynamics* was about very long-term economic development, and Rostow tried to produce a modern version of the classics mentioned above. This was in vogue in the 1960s, but then faded out. In more recent decades there has emerged a buoyant literature on really long-term growth, which does seek to come up with better causal analyses of patterns of growth in empirical applications.

Capital accumulation was the key aspect of development fifty years ago, and one considered savings, foreign aid, and FDI. These dimensions are much less important now. Development is driven by many factors, and the emphasis in development economics has changed over time. Hoff and Stiglitz (2001: 389) argue that modern economics has concluded that “development is no longer seen primarily as a process of capital accumulation but rather as a process of organizational change” “Capital fundamentalism” focusing on increasing the capital stock, has been supplanted by first “technology”, the role of ideas more generally, and finally by “Institutions” – particularly governance institutions.

Fifty years ago there was a large interest in the *allocation of investment resources* as well as technical choice, and the role of education. Research on investment planning does not feature much today, while technical choice is still relevant within the framework of the new economic growth literature. Education remains central.

Dualism and *structural change* were almost the defining characteristic of development economics then, and *unemployment and underemployment* were central issues There is a

current literature concerned with employment issues, but there is much less focus now on structural change. The *industry – agriculture* balance was very much in focus then, but also this issue has been marginalized

International trade has been an important aspect of development debates since Adam Smith, and it remains so. During the period of structural adjustment in the 1980s and 1990s opening up to the international markets was very high on the agenda, and in recent years the booming trade in tasks also features in the literature.

The discussion of *development planning* had a much greater focus on central planning than the current discussion. Then there were extensive discussions about planning techniques, which has almost completely disappeared. During the last few decades there has been a lot of discussion about development policy. Since the turn of the century the focus of the policy discussion has been on poverty issues rather than macro-issues.

The *Big Push* argument was there in the mid-20th century (Rosenstein-Rodan, 1943), and we have certainly had debates in recent years on poverty-traps and development-traps.

Inflation and its effects are still discussed, but macro issues are less in focus now (after a strong revival in the 1980s and 1990s).

Foreign aid and its impact have been discussed throughout, and globalization is now high on the agenda.

In an earlier review of the field, Sen (1981) identified four themes as classical development economics, namely (1) industrialization, (2) rapid capital accumulation, (3) mobilization of underemployed manpower, and (4) planning and an economically active state. With regard to these central areas there is now much less emphasis than earlier on industrialization and structural change than in earlier times. There is relatively little on capital formation in the development economic literature proper, although it is a central theme in the growth literature. There is hardly anything on development models or planning, although there is a lot of experimental work trying to evaluate the impacts of policy interventions. Labour absorption is also marginalised, although there is some work on labour markets and the informal sector. The shift has essentially been in the direction that Sen asked for, that is towards the impacts on individuals. He argued that a major failing of development economics had been its concentration on the supply of goods rather than ownership and entitlements. This is certainly an area where much has happened during the last decades, partly thanks to the work of Sen

himself. This was useful, but I would say that we have gone too far and abandoned some really central growth and development planks.¹

4. Where Should We Go Now?

Development economics (and development studies generally) is about understanding the development processes, but also very much to seek to understand how the processes that bring welfare improvements can be and are affected by policy.

Development economics research used to have a strong impact on how development policy is formulated in poor countries. But papers published in economics journals in recent years have become less important as a vehicle for communicating ideas about development strategy and policy, and are more concerned with more limited and well-designed analyses of specific micro-issues. It is not automatic to end a paper with “policy conclusions”.

What should a good paper in development economics deliver? I would argue that a good development economics paper addresses an economically-socially-politically important issue relating to the development of poor countries. It should use appropriate theoretical and empirical tools and end with well-grounded policy conclusions relating to important policy concerns. Development economics is clearly a broad field where most things are touched upon somewhere in the literature, so what I am discussing here is thus where I think we should increase our emphasis.

The quality of data

I noted initially that data availability has improved dramatically over time, but there are still huge challenges in some areas. If we want to analyse macro-issues we need macro-data, and in the case of particularly Africa national accounts data are often of poor quality (Jerven, 2012). When GDP estimates are re-based we can see enormous jumps in GDP. Recently Nigeria published its re-based GDP estimates, which were about 65% higher than the previous estimates. Another example of the data challenges is provided by Beegle (2014). She reports on experiments with different types of data collection approaches to measure hunger

¹ There are also old insights that have been forgotten. Krugman (1995) notes that interesting efforts of the development pioneers got side-tracked, because people like Rosenstein-Rodan (1943), Myrdal (1968), and Hirschman (1958) were not able to provide models incorporating their ideas in a “teachable” form. The reason according to Krugman was that notion of scale economies were part and parcel of what they were arguing. The exception was Lewis (1954) who did not have economies of scale to struggle with in his framework, and therefore survived.

in Tanzania – spanning from long term recall to daily diaries. The resulting estimates of hunger varied between 19% and 68%! Both these examples show that data problems remain a serious concern.

Given these problems it seems unlikely that we can have too much trust in the results from the cross-country growth work we have been doing. To get more credible and policy relevant results it seems to be more important to improve data collection than to refine regression techniques or to come up with new and more sophisticated indices of poverty or inequality. So my first conclusion is that we should take data issues much more seriously.

The RCT focus

In recent years an increasing share of research in development economics has focused on the investigations of the effects of projects or programmes with the help of Randomized Controlled Trials (RCT) (Duflo et al, 2008). With this approach it is possible to identify causal effects in a defensible way. One can see which interventions work and which do not.

To be able to measure effects well one need a clear distinction between the treatment and the control group. This means that one has to focus on projects, which are limited in space and scope. Evaluation of more complex programmes with interactions between activities is difficult to do with the help of RCTs. Elbers and Gunning (2014) discuss how one in such cases could use regression techniques in evaluations. There is also a concern that what works in a well-organised small-scale experiment, may not work when an actual government is trying to roll it out on a large scale.

Deaton (2010) points out that the approach is good in explaining what works, but that it cannot explain the mechanisms that make an intervention work. This is a problem when one wants to transfer an intervention to another context. To be able to formulate development policies, we need to understand mechanisms and not only impacts.

Moreover, there are many dimensions of development, which cannot be analysed with the help of randomized experiments. There may be a risk that we avoid analysing important issues, because we cannot use the “best” empirical approach and instead shop around for “good” experiments on not so important issues. So RCTs is a very useful addition to the toolbox, but it is not the general solution to our wish to understand what causes economic development.

Organisation of society

Already the classical economists were interested in “magnificent dynamics”, that is the large changes in the organisation of society that basically determined its long-term evolution. The interest in the big questions is back. When it comes to identifying the deep determinants of development, today the emphasis is on institutions. Acemoglu and Robinson (2012) argue that long-term development is all about inclusive institutions and that these are the crucial determinants of economic take-off. It is obvious that there is a high correlation between good institutions (defined in different ways) and level of development, but is the direction of the causation so clear? Fifty years ago the modernisation theory was dominating the field (Lipset, 1959), and then the argument was essentially the reverse, that is that growth generated institutional improvements. This line of argument is not unreasonable, and for example Barro (2012) provides some econometric support for this notion.

Besley’s and Persson’s (2011) approach with focus on development clusters with less clear predictions of the direction of causal effects seems more reasonable. They suggest that there is a set of factors that interact and determine development outcomes, and that there are complementarities between different dimensions determining outcomes. The framework within which markets work is crucial, and it is formulated by the state. They argue that the institutions for acquiring power (democracy) are less important than institutions for holding power (control of the executive etc.). They argue that development is better served by a common interest state and not a selective interest state, which of course is not too different from Acemoglu’s and Robinson’s push for broad based politics. We need to understand what institutions can make governments accountable, and in particular how these institutions can emerge or be created.

Acemoglu and his colleagues have been criticised by those who think that it is more fruitful to focus on education than on institutions. Glaeser et al (2004) note that the institutional variable that works best is expropriation risk, which is actually the variable least related to institutions. They further argue that education does a much better job in explaining development than the quality of institutions. This is an issue that certainly deserves to be further investigated. It seems like one of the “big” questions in development economics.

How one thinks about these relationships also matters for how one can formulate policies. If institutional quality is the key, the natural choice for policy is to try to improve institutions. How this can be done is still very unclear – particularly when the institutional problems are in

power and formulate the policy. If the primary target is education it may be easier to formulate and implement policies, although these will again have to be passing the ruling class. Acemoglu and Robinson have had a hard time to explain the Chinese economic take-off, which was achieved without very secure property rights. Here it may well be that the modernisation or education stories are easier to apply. Institutions in China are slowly improving, and there is evidence that this is driven by economic growth (Wilson, 2016).

The key institution is the state, and the quality of this is obviously crucial for the quality of policy decisions and implementation and eventually development outcomes. Myrdal's *Asian Drama* (1968) dealt early on with the problems of planning in a situation with a "soft state" and discusses the causes and effects of corruption extensively. He argued that one had to take structural factors into account, and he argued for a broad, institutional approach which explicitly to account of rigidities and countervailing forces in the social system. Myrdal saw stagnation in Asia a low-level equilibrium, which could only be broken by a big push. Myrdal saw the soft state with corruption and incompetence as the crucial development obstacles in India. In this respect he was way ahead of the current debate on the role of institutions in economic development, although it is seldom acknowledged (Besley and Persson, 2011). The quality over governments is still the most important determinant of development outcomes, and to understand how this is achieved remains a central challenge.

Capital accumulation and savings

Simple explanations of development have always been problematic. Early on Lewis (1954) talked about "how to change a country from being a 5 per cent to a 12 per cent saver" as the central question. The view that savings was the key to development dominated in the 1950s and 1960s – implying that it more or less automatically would be converted to growth. As it turned out there were many big savers who did not make it. Obviously savings and investments were not the only factors that mattered, but they do still matter!

The key problem in African development is that K/L is too low and grows too slowly, or not at all. Investment has in recent decades been seen as a proximate cause of poor development, while the "deeper" determinants are those related to institutions and governance and politics. It is clearly important to seek to understand the determinants of savings and investments. I think it is important to have the focus on the key variable we need to change, that is K, and look for policies to use to affect it. But here the deeper determinants naturally matter.

Structural change, labour absorption, and inequality

Structural change was almost a defining characteristic of development economics early on, but it does not feature very much these days. Still, the shift of resources from low-productivity sectors (say smallholder agriculture) to high productivity sectors (say manufacturing) is a key driver of income increases (McMillan et al, 2014). The slow poverty reduction in Sub-Saharan Africa is obviously related to the fact that the sector structure has changed little, which of course in turn is related to the fact that K/L has not increased much.

The distribution of income and its change is strongly related to the distribution and evolution of asset ownership (capital, land including natural resources, labour, and human capital). Economies move between patterns of specialisation as factor abundance changes. When factor endowments change, the pattern of specialisation changes as does the factor price structure. The impact of education and human capital on inequality is strongly related to the functioning of the labour market. Inequality levels will depend on the relative size of different activities and the relative rewards in those. Structural change remains a major determinant of the evolution of income distribution, which remains a fundamental aspect of development..

To explain changes in inequality we need to look at changes in factor proportions and structural change. In the case of Africa there is increasing pressure on land due to the rapid growth of the labour force (Bigsten and Durevall, 2008). The fact that the process of capital deepening has been slow in Africa has implications for the pattern of structural change. Since the capital-to-labour ratios have stagnated, people that have been pushed out of agriculture have generally not been absorbed by the modern sector. They have instead been absorbed by the informal sector, where incomes are often not higher than in smallholder agriculture. This has meant that the shrinking of the agricultural share has not led to a decline in overall inequality.

Industry and international trade

We noted in our review that international trade was linked to development from the beginning, and early on there was also much discussion of industrialization as the path to modernization and higher incomes. The trade and development links are still quite high on the agenda. But the changes brought about by the shift towards trade in tasks relating to the manufacturing sector are not so much reflected in the development economics literature, although it seems like crucially important for Africa if it is going to achieve an economic take

off. There are discussions about trade policy and the rules and regulation that affect access to developed market economies, but here there is need for more work.

Industry is not the only sector that matters for export performance, but it is important for countries that want to achieve structural change and labour absorption. Fifty years ago industrialization and import substitution policies were on top of the agenda, but particularly in Africa they did not work out. Interventions to “pick winners” did not work, and industrialization policy disappeared from the agenda. The reaction went too far and there is again a discussion of industrial policy and about what can be achieved in this area. For example, Rodrik (2008) has done interesting work on this, and it seems clear that one needs to consider how policies affect manufacturing growth. To absorb the rapidly expanding labour force in Africa, one needs major non-agricultural growth, and much of that need to come in manufacturing. Rodrik notes that increases in the industry share is more significantly related to growth than increases in export shares overall and therefore it is the structural change that matters and not the export orientation.

Firms in the industrial sector are subject to learning spillovers and coordination failures and to high costs imposed by weaknesses in legal and regulatory frameworks. The process to fix institutions and to remove market failures is long-term. Some successful countries have alleviated these constraints indirectly, by raising the relative profitability of modern activities through other means. Maybe SSA countries could get away with undervaluing their currencies as China has done, but which may be harder in the future.

Rodrik’s strategy proposal is that government should seek to enhance the relative profitability of non-traditional products that face large information externalities and coordination failures, or which suffers particularly strongly from the poor institutional environment. Interventions such as tax exemptions, directed credit, payroll subsidies, investment subsidies, export processing zones aimed at specific firms or sectors. A typical area for intervention would be infrastructure to lower transport and logistic costs. There are two arguments against these interventions: The government does not have enough information, and even if they had, there will be rent-seeking and corruption. Still, to think more about what industrial policy could do.

Development policy

Development planning as discussed fifty years ago has disappeared from the agenda, but countries still pursue policies. These are on the one hand fiscal and monetary policies and

policies relating to the external balance, and on the other hand structural policies seeking to improve the functioning of markets, the building of infrastructures etc. These issues are crucially important, but in recent years there has not been enough attention on analysing the impact of policies. The exception is the increased emphasis on the analysis of environmental impacts and of the sustainability of development.

While policy impacts have not been in focus, there has been a lot of attention on why certain policies are undertaken or not. The political economy of economic policy has been discussed a lot, and it is important to understand the dynamics of power. Still, it may well be that the impact of an analysis of policy impacts may be more useful and have larger effect on what is actually done, than an analysis seeking to understand why decision makers protect vested interests. Checks and balances and controls of the executive are important, but the question is what one does with the knowledge about this. Who uses this understanding to do what?

Foreign aid

Taxes are the main source of development finance, but there is also foreign and other external financing. International capital markets have changed dramatically during the last few decades. This is clearly an area with high policy relevance, but where a lot of the empirical work has been devoted to the attempt to identify growth effects of aid through cross-country regressions. This endeavour has certainly run into seriously decreasing returns to scale. Still, we should continue to analyse the impact of aid interventions in other ways, since this is one of the main tools of external interventions for development in poor countries.

The global economic landscape has changed dramatically in recent decades: low and middle income countries have been driving global growth, new sources of development finance have emerged and the development cooperation arena has seen continued diversification of actors, instruments and delivery mechanisms. While official development assistance (ODA) has increased, the relative importance of ODA in resource transfers to poor countries has declined during the last decade. At the same time, the dominance of aid from OECD-DAC countries is declining, and the modalities of aid transfers are changing. The changes that are emerging are making it harder to draw a clear line between aid and non-aid transfers. Aid is increasingly blended with trade, investment and security agendas. This is particularly the case for the non-DAC donors, such as China, India, and Brazil. It is not only that new donors with different behaviour are coming in. There is also a trend among regular donors to try to measure impact. These has generally meant not only that there are more reporting requirements, but also that

there is a change away from broad forms of aid (i.e. general budget support) towards more narrowly defined projects. So there may be a conflict between donors interest in being able to report back to tax payers about where the money went and what they did and the efficiency-motivated ideas of ownership etc. in the Paris agenda. Interventions are also increasingly concentrated to fragile states, which makes the work of formulating policy even harder. Given these changes there is need for a new look at global cooperation

Global justice

There is considerable work on global distributional issues, and its policy relevance increases as the world is becoming increasingly integrated. Recently Piketty (2014) has produced interesting work on the changes in global income distribution and emphasizes in particular the role of the increasing share of capital in global incomes. The potential consequences of this for convergence may be profound.

I think most people who work on development issues have some concern for global inequality and poverty – or justice. The most influential work on justice in recent times is John Rawls' *A Theory of Justice* (1971), in which he argues that principles of justice should be the basis on which we determine which institutions should govern society. (Although he did think that it applied only to nations, not the world as a whole.) Rawls first point is that each person should have a set of equal rights. Social and political rights, such as the right to vote and the right to a fair trial, should be equally distributed. These rights are arrived at and exercised without any monetary compensation. They are not distributed as incentives, and they are equally distributed even if there are efficiency costs. He further says that institutions should be non-discriminatory or impartial, which is obviously just. Rawls finally accepts inequalities, but only as long as they imply that the poorest person gets better off. Equality of the distribution of income (and other assets) may be seen as an extension of on the humanistic principle of equal rights, but its implementation could have serious consequences for incentives, efficiency, and growth (Okun, 1975).

Sen (2009) is sceptical about Rawls proposition that there will be a unique choice of principles. Inequality can take many forms, and several choices are possible. Sen instead thinks that one should seek institutions that promote justice, and not see the institutions as a manifestation of justice. The Rawlsian approach cannot address questions about advancing justice or compare alternative proposals for a more just society. Sen argues that it is crucially important to be able to compare different imperfect alternatives, if we are to be able to

understand how to enhance justice. An identification of the perfectly just society is neither necessary nor sufficient to be able to compare two states of the world.

The view of Sen about justice is thus that it is more important to focus on how one can enhance justice and remove injustice, than try to sort out questions about what “perfect justice” is. This differs from the approaches of most philosophers working on justice, including Rawls, which focus on the setting up of just institutions. Sen argues that one must also take account of people’s actual lives when assessing issues of justice. Sen is concerned about realizations, while Rawls et al. focus on arrangements. The key question for Sen is “How can justice be advanced?” and not “What would be perfectly just institutions?” Sen’s view is more pragmatic, and it is a sensible starting point for policy relevant research on justice.

Development can be defined in many different ways. Sen (2009) conceives of development as freedom and identifies five components, namely political freedom, economic facilities, social opportunities, transparency guarantees, and protective security. This is just one possible configuration, but global justice would always be concerned with a vector a factors. One example is the UN, which has constructed a Human Development Index which combines income, education, and health. The discussion indicates that one can distinguish between *rights* to which every person has equal access, while there are *other welfare components* which are not allocated as rights. The latter are instead allocated via markets or other institutional arrangements. The development economics research agenda should help identify policy areas which are relevant from this perspective, and investigate what improvements of justice can be achieved.

References

- Acemoglu, D. and J. Robinson (2012), *Why Nations Fail: The Origins of Power, prosperity and Poverty*, New York: Crown Publishers.
- Barro, R.J. (2012), *Convergence and modernisation Revisited*, Harvard University, mimeo.
- Beegle, K., J. de Weerd, J. Fiedman, and J. Gibson (2014), *The Challenge of Measuring Hunger*, World Bank, mimeo.
- Besley, T. and T. Persson (2011), *Pillars of Prosperity. The Political Economy of Development Clusters*, Princeton and Oxford: Princeton University Press.
- Bigsten, A. and D. Durevall (2008), "Factor Proportions, Openness and Factor Prices in Kenya, 1965-2000", *Journal of Development Studies* 44(2): 289-310.
- Deaton, A. (2010), "Instruments, Randomization, and Learning about Development." *Journal of Economic Literature* 28(2): 424–55.
- Duflo, E., R. Glennerster, and M. Kremer (2008), "Using Randomization in Development Economics Research: a Toolkit." In T. Paul Schultz and J. Strauss, eds., *Handbook of Development Economics*. Amsterdam: North-Holland, 895–962.
- Elbers, C., and J.W. Gunning (2014), *Evaluation of Development Programs: Randomized Controlled Trials or Regressions?*, *World Bank Economic Review*, 28(3): 432-445.
- Glaeser, E.L., La Porta, R., Lopez-De-Silvanes, F., & Scutter, C.L. (2004), "Do institutions cause growth?", *Journal of Economic Growth*, 9: 271-303.
- Higgins, B. (1968), *Economic development. Principles, problems and policies*, 2nd revised edition, New York: W.W. Norton.
- Hirschman, A.O. (1958), *The Strategy of Economic Development*, New Haven, Conn: Yale University Press.
- Hoff, K. and J. Stiglitz (2001), 'Modern Economic Theory and Development'. Pp. 389-460 in G.M. Meier and J. Stiglitz (eds.), *Frontiers of Development Economics*. New York: Oxford University Press.
- Jerven, M. (2013), *Poor Numbers. How We Are Misled by African Development Statistics and What to Do about It*, Ithaca: Cornell University Press,

- Krugman, P. (1995), "The fall and rise of development economics", in *Development, Geography, and Economic Theory*, Cambridge, MA: MIT Press.
- Lewis, W.A. (1954), "Economic Development with Unlimited Supplies of Labour", *Manchester School*, 22: 139-191.
- Lipset, S.M. (1959, "Some Social Requisites of Democracy: Economic Development and Political Legitimacy", *American Political Science Review*. 53: 69-105,
- Marshall, A. (1890), *Principles of Economics*, London: Macmillan.
- McMillan M, Rodrik D, Verduzco-Gallo I. (2014), "Globalization, Structural Change, and Productivity Growth, with an Update on Africa", *World Development*, 63:11-32.
- Meier, G.M. (1964), *Leading issues in Development Economics*, first edition, New York: Oxford University Press (2nd ed. 1970, 3rd ed. 1975, 7th ed. 2000, and 8th ed. with James Rauch, 2005).
- Myrdal, G. (1968), *Asian Drama: An Inquiry Into the Poverty of Nations*, New York: Pantheon.
- Okun, A.M. (1975), *Equality and Efficiency: The Big Tradeoff*, Washington DC: The Brookings Institution.
- Piketty, T. (2014), *Capital in the 21st century*, Cambridge MA: Harvard University Press.
- Rawls, J. (1971), *A Theory of Justice*, Cambridge MA: Harvard University Press.
- Ray, D. (2008), "Development economics". *The New Palgrave Dictionary of Economics*. Second Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. London: Palgrave Macmillan.
- Rodrik, D. (2008), "The Real Exchange Rate and Economic Growth", *Brooking Paper on Economic Activity*, 2: 365-412.
- Rosenstein-Rodan, P., (1943), "Problems of Industrialization of Eastern and South-Eastern Europe", *Economic Journal* 53(2): 202-211.
- Schumpeter, J.A. (1934), *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.

Sen, A. (1981), "Development: Which Way Now?", *Economic Journal* 93: 745-62.

Sen, A. (2009), *The Idea of Justice*, London: Allen Lane.

Todaro, M.P. and S.C. Smith (2011), *Economic Development*, 11th edition, New York: Pearson.

Wilson, R. (2016), "Does Governance Cause Growth? Evidence from China", *World Development*, 79: 138-151.

Yotopoulos, P.A. and J.B. Nugent (1976), *Economics of Development: Empirical Investigations*, New York: Harper & Row.

Appendix A: Development Economics in Textbooks

What has happened to the mainstream of development economics is reflected in textbooks, with a certain lag. I have checked out some of the major textbooks from the last half-century to see how the emphasis of the field has changed.

Benjamin Higgins

An early standard work on development economics is Benjamin Higgins' *Economic development. Principles, problems and policies* (2nd revised edition, 1968). This is a nice book, which starts in a very modern fashion with a first chapter on "The Worldwide War on Poverty" (followed by a second chapter on The Population Explosion). He then reviews general theories of development starting with the classics from Adam Smith to Malthus, Mill, Ricardo, and Marx. Then he goes via Schumpeter on to early growth theory a la Harrod-Domar with a strong focus on investments and capital. Then he has a section on lessons of history covering historical theories of the rise of capitalism of Marx, Weber, and Rostow. He also takes a historical perspective using the work of Kuznets, and has a discussion about the importance of economic factors for development and also a fairly broad discussion of political and sociological factors.

He then goes on to what he calls theories of underdevelopment. First he considers "Environmental Determinism" such as tropical soils, climate and natural resources (a la Jeffrey Sachs). He has a very long chapter on Cultural Determinism, covering many non-economists' views. He argues that there is need for a big push to bring about change in difficult circumstances and notes that particularly education is crucial to achieve this. Then he considers "Colonialism and the 'backwash' effects of foreign trade". He cites Myrdal, who argued that the backwash effects of trade may outweigh the spread effects and thus lead economies away from convergence. He discusses the Prebisch-Singer thesis of secularly declining terms-of-trade for poor countries. These discussions indicate that there was a measure of scepticism about the beneficial effects of trade in poor countries at the time.

Higgins then considers sector interactions a la the dual economy model and the discussion of balanced and unbalanced growth. In his summary to the theory discussion he notes that "in underdeveloped countries, inter-sectoral and inter-regional relations instead of being a frill to be superimposed on a more or less complete system, are the very core of the analytical framework" (p. 346). He notes that strategic functions may be discontinuous, that there may

be cumulative movements away from equilibrium, that population growth and technological progress should be treated as endogenous, and the psychological individualism may be misleading.

The second half of the book is about policies and development planning. It deals a lot with capital-output ratios, input-output analysis and linear programming as well as econometric models. It has a very long and pretty modern part on the planning of social development, primarily education but also health (and land reform) followed by a chapter on urbanization and regional planning. Inflation is given a thorough treatment as is savings. Taxation is extensively discussed followed by stabilization policies and foreign investment.

The issue of foreign aid is discussed at length. The chapter begins by giving the rationale for foreign aid: “Even with the most liberal policies toward private foreign investors in developing countries – in lending and borrowing countries alike – the flow of private capital will not fill the gap between capital requirements for development and potential domestic investment” (p. 575). He concludes the chapter as follows: “Yet when one considers what an extraordinary and novel concept it is that rich nations have a responsibility to help poor nations become rich too, the remarkable future of the foreign aid effort is not its deficiencies, but the fact that it has continued so long and made such apparent progress.” (p. 603).

The book is concluded with a chapter on population policy, family planning, plus a number of case studies. The first case is Japan, which is referred to as “the lone graduate”. This is clearly before the Asian miracle got started. The lack of comprehensive data is also reflected in the choice of cases, namely (apart from Japan) the UK and the US, Italy and Brazil, Greece, plus Indonesia, Cuba, and Libya. There is nothing on sub-Saharan Africa! That latter omission is probably the most glaring difference from what one would (or could) do now.

Gerald M. Meier

The most used collection of readings in development economics from the 1960s and onwards was Meier’s classic anthology *Leading Issues in Development Economics*. By looking at how its contents changed over time we can get some indication about how the emphasis within the field has been changing. The first issue was published in 1964, and it characterizes the mainstream of development economics half a century ago as follows: (1) The movement between stages of development and very long-term economic development are discussed, as Rostow tried to produce a modern stage theory. (2) Different forms of dualism and structural

change as well as issues of unemployment and underemployment were very much in focus. (3) Capital accumulation was the key aspect of development and savings, foreign aid, and FDI were central. (4) Inflation was the key macro issue. (5) Aspects of investments that were in focus were technical choice, balanced vs. unbalanced growth, and the role of education. (6) The industry – agriculture balance was discussed and this is again about structural change. (7) International trade was important then as always. (8) The scope for development planning had a much greater focus on central planning than current discussions. The Big Push argument was there (Rosenstein-Rodan) and there was also a discussion about the public-private trade-off. (9) The volume concludes with a long discussion about planning techniques. The focus half a century ago was thus on development models, structural change, investment, trade, inflation, and development planning.

In the second edition of *Leading issues* from 1970 there was a moderate shift of emphasis. Dualistic development and structural change were still key features. Mobilising domestic and foreign resources – that is investment, savings, aid, and FDI - remained central, complemented by a little discussion of financial development. One discussed the allocation of investment resources via development planning. Trade was still having a section, but human resource development is upgraded and given a separate section (population, education, manpower, and entrepreneurship).

The “new” themes in the third edition from 1976 were poverty, inequality, and employment. There were still discussions of development models and dualistic development, mobilising and allocating investment resources, human resource development, agriculture, industry and trade strategy, development strategy and policy making. Under the latter theme there was still a clear planning focus.

By 2000 Meier had reached the seventh edition. There was now increased emphasis on measuring and evaluating development, which was easier since there was now much more data and experiences to evaluate. Savings and investment were still there, like international trade, human resources (now with more on gender issues), and agriculture. Notably there was by now no section on industry! Migration and the informal sector had emerged on a large scale and income distribution was given a lot of room. Political economy was a major newcomer (state capacity, institutions, rent-seeking), while development planning had more or less disappeared. Environmental economics was starting to come in. There was then a final

update of this book in 2005 (by James Rauch), but with limited changes. Savings and investments were merged with finance, and modern growth theory was more prominent.

So what changed between the 1964 and 2005 editions? The stages of growth focus went out, but long-term development was discussed in other ways. Models of development a la Lewis became more marginal, while new types of growth models entered. There was less focus on savings and capital accumulation, except in relation to growth models. Structural change became much less central, although migration issues were still there. Industrial development was marginalized, except when discussed in relation to trade. Macroeconomics was less in focus, while human resources (not population growth) had become much more important. Development planning was almost completely out, but discussions of economic policy were important. Institutions had entered in a big way, and environmental issues had come in. Distribution issues including gender were more important.

Michael P. Todaro

To extend the discussion beyond 2005 I also take a look at the most recent issue of another classic textbook, namely Todaro's (and now Stephen C. Smith's) *Economic Development*, which reached its 11th edition in 2011. So how does this book add to the picture? The concept of development is broadened and it presents development indicators such as the Human Development Index. It covers the classical works in development economics, but adds discussions of dependency theory and "the neoclassical counterrevolution" (free markets, public choice, market-friendly approaches, and traditional neoclassical growth theory). It concludes that there has been considerable reconciliation of the old approaches.

The chapter on contemporary models of development has a range of new features, though. The themes here are (1) coordination failures, (2) multiple equilibria, (3) big push, (4) Kremer's O-Ring theory of economic development, (5) economic development as self-discovery, and (6) growth diagnostics (Hausmann-Rodrik-Velasco).

The issues of poverty and inequality are given much more prominence. There is a lot of material about measurement and conceptual issues, and the interrelationships between inequality, poverty, and growth, and distributional policies. There is a lot on the role of cities, the urban informal sector, and rural-urban migration. They also consider the determinants of social indicators and their importance for economic development and look at education and health systems. It discusses agrarian systems and farmer behaviour. It looks much more than

earlier on the relationship between environment and development and the sustainability of development. It considers the impact of climate change (mitigation and adaptation) and the role of natural resources. It looks at models of common property resources and public goods (or bads), and how urbanization affects the environment. Policy-making and the roles of different institutions have a prominent place. The main message here is that there is a question of balance between the market, the state and civil society. There is actually also a quite extensive discussion about planning at the aggregate levels, sectorial level and the project level. The Washington Consensus is discussed, as well as political economy issues and policy reforms. Institutions and path dependence are prominent.

There is discussion of globalization and classical questions about trade and development. These include the importance of exports, the instability of export revenues, terms of trade, comparative advantage, export promotion versus import substitution, foreign exchange, industrialization strategy, south-south relations, regional trading blocs, and trade policy. It looks at international finance and investments, balance of payments, foreign debt, macroeconomic instability, IMF stabilization policies, debt crises. There is also a chapter on financial resource flows, FDI, remittances, foreign aid, and conflicts. It looks at the financial system, central banks, development banking, microfinance, interest rates, savings and investments, financial liberalization, stock markets, fiscal policy, taxation, state ownership, and privatization. It ends with a section on public administration, “the scarcest resource”, showing the role of institutions and the effectiveness of policy making and administration has become a key feature in the field.

Appendix B: Development Economics in the Journals

There has been an enormous increase in the number economics journals during the last half century, including development journals. There has also been a great increase in the number of journal articles in development economics, so in that respect the field has certainly expanded. If one considers a journal that has been there throughout, e.g. *American Economic Review* (AER), one may note that there has been an increase in the number of papers in development, but as a proportion of the articles published in that journal it has been fairly stable.

We can look in greater detail at the number of development articles in more recent issues (Table B1), and we can then see that in the last five years the AER had an average of 17% of the papers coded O (Economic development). The development economics proportion is about the same for *Journal of Public Economics* (JPE) and *Quarterly Journal of Economics* (QJE), while it is considerably lower for *Review of Economic Studies* (RES) and *Econometrica*. Still, it seems fair to say that development economics is featuring extensively in in the major general economics journals. Development may be rather broadly defined sometimes, though.

Table B1: Number of development economics articles in the Top 5 economics journals 1960-2013

Year	AER	JPE	QJE	RES	Econometrica
2000	36	10	4	4	3
2001	30	4	2	4	3
2002	40	6	12	8	2
2003	47	5	7	5	1
2004	19	6	6	9	2
2005	22	4	11	4	1
2006	47	3	2	6	0
2007	19	5	12	5	3
2008	30	8	6	1	2
2009	39	4	14	7	2
2010	49	6	9	5	2
2011	25	5	9	0	4
2012	48	1	8	0	4
2013	49	5	0	0	5

Source: ECONLIT, All articles with JEL Classification O.

We can then look in greater detail at the pattern of publishing in 2013 development economics in journals classified in ECONLIT. I looked at all articles Coded O in ECONLIT, at five development journals, namely *Journal of Development Economics* (JDE), *World Bank Economic Review* (WBER), *Economic Development and Cultural Change* (EDCC), *World Development* (WD), and *Journal of Development Studies* (JDS), plus the general journal

American Economic Review (Table B2). The output is classified according to the reported JEL-codes. This is not fully satisfactory, since writers do not always code the same, and some instances they do not use the “development” code O at all, although it is related to development issues. And there is also a cross-country literature on growth etc. that is not necessarily picked up by this classification. Still, I think we can get a crude indicator for where the discipline is at present.

The overall publication pattern in “all listed journals” is largely similar to that in the development journals and in the AER. The largest theme is Human Resources, Human Development, Income Distribution, and Migration category, reflecting the focus on issues of education and health alongside poverty and inequality. This is the largest category in all the development journals as well as the AER.

The second largest category is Financial Markets, Saving and Capital Investment, Corporate Finance and Governance, although this is less dominant in both development journals and the AER than in other journals. In the development journals there is a large output of work on micro finance, while the old focus on savings and investments is less prominent. There is also work on financial markets and their role.

The third category is Agriculture, Natural Resources, Energy, Environment, and Other Primary Products. Here agriculture is still a major research interest, while natural resources, energy and environment have become more prominent than 50 years ago.

In the aggregate Industrialization etc. is the fourth category, while it is more lowly placed in the development economics journals (but more prominent in the AER). This is surprising given the role that industry has in recent economic take-offs. In the development economics journals there is much more on Institutional arrangements and International linkages. Macroeconomic analyses are less prominent in the development journals than it is in the whole output. Development planning and development policy still exists in non-development journals, but that it is very marginal in the development journals, compared to what was the situation early on. In the 1950 and 1960s development policy and planning was almost regarded as the defining feature of development economics.

Table B2: Publishing in academic journals in 2013 on Economic Development, Technological Change, and Growth (Code O in ECONLIT)

O1 Economic Development	All	JDE	WBER	EDCC	WD	JDS	AER
O10 General	104	0	0	0	1	10	1
O11 Macroeconomic Analyses of Economic Development	746	7	0	1	7	5	2
O12 Microeconomic Analyses of Economic Development	251	7	0	7	13	15	7
O13 Agriculture • Natural Resources • Energy • Environment • Other Primary Products	1560	12	4	1	57	29	6
O14 Industrialization • Manufacturing and Service Industries • Choice of Technology	1210	8	4	0	17	3	8
O15 Human Resources • Human Development • Income Distribution • Migration	1863	36	4	19	74	66	13
O16 Financial Markets • Saving and Capital Investment • Corporate Finance and Governance	1675	11	0	5	25	11	7
O17 Formal and Informal Sectors • Shadow Economy • Institutional Arrangements	1043	18	0	5	39	31	10
O18 Urban, Rural, Regional, and Transportation Analysis • Housing • Infrastructure	845	8	1	6	35	25	4
O19 International Linkages to Development • Role of International Organizations	1004	14	3	1	32	13	4
O2 Development Planning and Policy							
O20 General	20	0	0	0	0	0	0
O21 Planning Models • Planning Policy	104	1	0	0	2	1	0
O22 Project Analysis	41	3	0	1	0	1	0
O23 Fiscal and Monetary Policy in Development	323	2	0	0	5	0	0
O24 Trade Policy • Factor Movement Policy • Foreign Exchange Policy	198	1	0	0	0	0	1
O25 Industrial Policy	62	0	0	0	3	1	0
O29 Other	3	0	0	0	0	0	0
O3 Technological Change • Research and Development • Intellectual Property Rights							
O30 General	152	1	0	0	1	0	2
O31 Innovation and Invention: Processes and Incentives	576	0	1	0	0	0	4
O32 Management of Technological Innovation and R&D	178	0	0	0	1	0	0
O33 Technological Change: Choices and Consequences • Diffusion Processes	726	2	0	0	2	1	5
O34 Intellectual Property and Intellectual Capital [†]	256	0	0	0	2	1	1
O38 Government Policy	212	0	0	0	0	0	0
O39 Other	0	0	0	0	0	0	0
O4 Economic Growth and Aggregate Productivity							
O40 General	23	0	0	0	0	0	1
O41 One, Two, and Multisector Growth Models	181	3	0	0	0	0	0
O42 Monetary Growth Models	11	0	0	0	0	10	0
O43 Institutions and Growth	241	7	0	0	14	0	0
O44 Environment and Growth	43	0	0	0	0	0	0
O47 Measurement of Economic Growth • Aggregate Productivity • Cross-Country Output Convergence	604	1	1	0	4	4	4
O49 Other	0	0	0	0	0	0	0

Alongside the AER, we may note that the new *American Economic Journal: Applied Economics* (edited by Esther Duflo) has become an important outlet for development research. It accepts particularly papers on impact evaluation and treatment effects. It provides only micro studies, and tries to measure impacts and also to discuss micro mechanisms.

Looking at recent issues of *Journal of Development Economics*, we note that there has been a clear shift towards microeconomic analysis of individual or household data, often using randomized experiments, to investigate human resource issues. The dominating theme is education and its relation to other dimensions of development. Migration, health and gender are also issues which matter here. Next follows the theme institutional arrangements, such as conditional cash transfers (experiments). International dimensions, such as trade, and exchange rate issues still remain on the agenda, while macro policy is unusual. There is a focus on inflation, though, which seems to have remained since the early days of development economics. There is also considerable work on financial institutions, particularly microfinance, with experiments. There is also an increasing interest in the role of political and economic institutions in development, but maybe less than one would have expected given the large interest a couple of years ago. Environmental issues have also emerged on a larger scale than earlier. Human capital seems to have replaced capital as the core theme of development economics.

World Bank Economic Review has relatively few papers per year. The three dominating themes are Human Resources and agriculture like in the others, but here industry has an equal number of papers. Then there are some papers on international linkages to development, which is hardly surprising for a World Bank publication.

Economic Development and Cultural Change had a very strong focus on micro issues and human resources (O15) dominates strongly. Here both health and education are important, and many of the papers deal with various household issues, be it intra-household allocation or production arrangements. There is also work on labour and welfare or inequality issues. Some work on finance and on aid and actually also a paper on electricity and welfare.

The pattern that emerges from looking at *World Development* 2013 is similar to the one already indicated. The dominating theme is what one would call human development, which includes aspects of human welfare, inequality and poverty, education and health, and some on migration. The second most common theme is international linkages to development, primarily aid related but there were also some papers on trade and FDI. The third theme was agriculture and natural resource related papers, while the fourth one was finance, mainly

microfinance papers. These were the major themes, but then there were papers on institutions, democracy, human rights and development. There were also a few papers on macro issues and also some on industrial development. The latter theme is again marginalized compared to what was the case in early development economic literature. Generally, micro issues including impact evaluation is dominating over macro issues. Environmental issues are addressed, but surprisingly little given the high profile in public debates. Still, they crop up in many of the papers on agricultural development. Institutional issues (and policy issues) are discussed in many of the papers in all categories. There is not much about conflicts, and hardly anything on theoretical models of development. Nor is there much of policy analysis using computable general equilibrium models.

Journal of Development Studies 2013 like the other development journals has a very strong focus on human resources and individual or household issues. Issues like poverty, inequality, nutrition, welfare and conditional cash transfers feature strongly. Also migration and remittances are discussed. There are some analyses of agricultural development, but hardly anything on industrial development. There is some work on FDI and more on foreign aid as well as some on employment and labour. But virtually nothing on development planning or project appraisal or infrastructure. The focus is distinctly micro.

There are a few examples of papers relating to the dual economy or the big push, but development model related papers are rare. Structural change issues are out, but there are still studies using micro data of firms and farms. There are hardly any studies of infrastructure, surprisingly enough, since this should be vitally important. To some extent it crops up indirectly in firm studies.