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Reading Economics: The Role of Mainstream Economics in International Development Studies Today

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Abstract:

What is the role of the economics discipline in teaching and studying international development today? This paper draws upon experiences of teaching and reading economics with students in interdisciplinary international development studies. The main conclusion is that economic literacy is a key ingredient in development studies. This paper discusses different interpretations of what economic literacy may entail and why this literacy is important. It concludes by suggesting a number of paths to achieve the necessary level of understanding.

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Morten Jerven is an economic historian and a specialist on African development statistics. His first book, *Poor Numbers: How We Are Misled by African Development Statistics and What to Do about It*, was just published by Cornell University Press. He has conducted research in Botswana, Ghana, Kenya, Malawi, Nigeria, Uganda, Tanzania and Zambia, and his work is published in leading journals in development and African studies. His PhD is from the London School of Economics.

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Reading Economics: The Role of Mainstream Economics in International Development Studies Today

Mainstream economics has a proven superiority in terms of providing influential ‘numbers, patterns and stories’ to the development community. Does this influence alone justify a central place for economics in international development studies? Or, should international development studies act as a counterweight and continue to focus on drawing attention to issues ignored by mainstream economics? In my opinion, the consensus in development studies dating a few decades rightly sided with the latter proposition. However, I argue here that the time has come to reread the role economics in international development studies. Most importantly, we would be doing our students a huge disservice by either ignoring or misrepresenting contemporary mainstream development economics.

The article makes three central arguments: first, it is argued that the challenge of reading economics in interdisciplinary studies today is different, mainly because most economists are using more analytical tools than those provided by the outdated neoclassical toolbox. Next, it is argued that because of economics’ practical importance in the development community, economic literacy is a necessary skill. Basic acquaintance is not enough – a deeper understanding is required to engage critically with the arguments of economists. This section further engages with what I have found useful to call ‘numbers, patterns and stories’ in economics. Three critical questions are suggested to address each of these constituent parts of applied economics. To illustrate, this method is applied to different papers to show how students can read economics without doing applied econometrics. The final section sketches out some of the main theoretical questions that occupy mainstream development economists today and discusses how interdisciplinary studies still can contribute to the study of development. It is argued that it is important for students to gain economic literacy, which at times may lead to confronting mainstream economics in the classroom. Appropriately guided by the instructor, this, however, ultimately results in more ‘informed consumers’ of economics. Michael Woolcock argued (2007) that graduate programmes in development studies should focus on helping students acquire three

core competencies—the skills of ‘detectives’ (data collection, analysis and interpretation), ‘translators’ (reframing given ideas for diverse groups) and ‘diplomats’ (negotiation, conflict mediation, deal making). By the term “informed consumers” I seek to deepen what it means to be good ‘detectives’ when reading economics.

The examples discussed in this article all come from a graduate course I taught and thus the focus here is on teaching economics in IDS graduate programs. However, in contrast with for example the UK, in Canada IDS is predominantly an undergraduate field of study. Thus the question arises whether these approaches proposed here also are appropriate for undergraduate classes. I argue that the methods and approaches put forward here also applies to undergraduate students. Moreover, many undergraduate students already read economics as a part of their undergraduate study. I think these approaches can be well introduced to undergraduate IDS students in their third and fourth years, when students should be ready to critically question economics in an interdisciplinary setting.

International Development Studies and Development Economics Today

Originally, development studies was envisioned to move beyond the narrow focus on economic growth and factors of production of development economics and to include lessons from the study of social and political relations that were found to have increasingly important bearings on the efficacy of policy interventions (Sumner, 2006). Thus, as Harriss has argued, the intervention of cross or inter-disciplinary development studies in the study of economic development could be thought of as a necessary intervention of “saving disciplines from themselves” (Harriss, 2002).

By now, remaking some of these points is akin to kicking in a wide open door. There are many convincing and therefore widely accepted examples of how economists equipped with poor numbers, naïve assumptions and parsimonious models have been blind to social and political realities (see Ferguson 1990 for a particularly compelling case).¹ Equally accepted are those contributions of other disciplines that have enriched the study of economics, most famously that of Amartya Sen, who drew on philosophy to widen our current measures of development. Today, we should also add the newly accepted truisms: history, institutions and

geography matter in economic development² – new innovations that have been added to standard neo-classical economists’ toolbox over the past decades.³ Thus, those important arguments that previously engaged the neoliberal agenda may now be misleading that amounts to teaching our students to attack straw men, rather than fruitfully engaging with prevailing consensus in mainstream development economics.

Thus, for a degree in international development studies to remain relevant to actual development practice it is important that the training does not become an exercise in all other approaches to development but economics. The challenge is to enable students to become well informed, critical and literate consumers of economics. But how can one teach non-economists to read economics? The next section approaches this question by introducing what I find useful to call numbers, patterns, and stories in economics.

Numbers, Patterns and Stories: A Little Learning Is a Dangerous Thing?

In development economics terms, ‘numbers’ are the equivalent to quantitative evidence – such as poverty lines, GDP per capita measures and others. ‘Patterns’ are the so called stylised facts – such as the *Bottom Billion*, ‘Divergence. Big Time’, the ‘Lost Decades’, the ‘Reversal of Fortune’, or other influential short cuts to describing what has happened in the world.⁴ The final step is the ‘stories’ – or what economist would call models. Basically, explanatory algorithms in which some assumed relationships between variables predict certain outcomes. Applied development economics is the use of numbers to tell stories that explain established patterns. Many of these stories are hugely influential. This is in part due to the intrinsically compelling nature of numbers and patterns, explained by intuitive parsimonious models. Or as Leamer (2009, p.3) puts it: “We are pattern-seeking, story-telling animals”.⁵ This is not intended as a normative argument for applying Occam’s razor - that among competing hypotheses, the one that makes the fewest assumptions should be selected – it just is to acknowledge that simple models can be quite persuasive, and therefore more influential than more nuanced pictures and explanations.

To illustrate, I assigned Lant Pritchett’s aforementioned article, “Divergence. Big Time.” as a reading assignment in a graduate class in international development studies. The article’s

main argument is that it is divergence, rather than the neoclassical prediction of convergence, that characterises the recent economic history since 1870. According to Pritchett, while there is a trend of convergence in economic growth within a group of developed nations, the most remarkable pattern is a big divergence between developed and developing countries. I asked students to prepare a report to describe the methods, evidence and findings of the article, and to evaluate its persuasiveness. One student provided a very honest and helpful answer: “I found the article to be rather convincing, but confess that my background in qualitative methods makes me susceptible to influence by quantitative data.”⁶

The reply is instructive. The lesson is that it requires numerical literacy to engage with numbers. That is, a little knowledge can be a dangerous thing. When exposed to such influential papers, it requires experience of critical reading of economics papers to engage with them. With just a cursory knowledge, a student and a future development practitioner may either be overwhelmed and therefore become convinced by the economist’s conclusions, or equally unsatisfactory: dismiss the economist’s work as irrelevant to the study of development. Through numerous seminars and conference presentations, as well as peer review in economic journals, these papers have been tested and tried by the best minds in economics. Robustness tests are required and caveats are noted until the paper is published, making a positive contribution to the discipline. This means that it requires solid training to come up with good questions. The role of interdisciplinary studies here is to ask different questions than those requirements of robustness that are demanded within the economics discipline itself. That the papers are peer-reviewed by economists does not mean that they are incontestable – I am merely proposing that the contribution interdisciplinary studies can do in reading economics is to ask non-technical questions that will allow non-economist to evaluate how compelling they find published economics papers in a more systematic fashion.

Today, non-economists are most often exposed to the works of economists in best-selling books that present a narrative written for a popular audience, based on a summary of a range of papers previously published for a scholarly audience.⁷ These books may be a quick and easy way of catching up to what the economists are saying, but the books are – to varying degrees⁸ – foremost designed to sell the arguments. If we want to see how these findings were reached,

what was in the dataset, what assumptions were made, and come up with equally satisfactory yet competing explanations, we have to expose our students to the underlying scientific journal articles. This type of reading economics helps students to understand the methods of economists; that is, exposing ‘how they come to know’.

Thus, the remaining section sets out some strategies for reading economic papers critically by simply asking these questions:

1. How good are the numbers?
2. What are the assumptions?
3. What alternative and equally convincing stories could you tell to explain the observed pattern?

These questions do not take issue with the algebraic model specification or the econometric testing of the arguments; these are ways in which interdisciplinary students, without a background in economics can engage with some of the most influential contemporary macroeconomic papers.

There are a number of papers that may be chosen. Personally, I have assigned Pritchett (1997) to discuss the pattern of divergence in global economic development since 1850; Lucas (1990) for his attempt to empirically rescue the neoclassical model; Sala-I-Martin and Pinkovskiy (2010) for an audacious investigation between growth and poverty in Africa; Sokoloff and Engerman (2000) to relate current poverty and income inequality in Latin America to geographical suitability of plantation crops in the colonial period; Acemoglu, Johnson and Robinson (2001) for their explanation that the lack of development of today is rooted in the type of institutions established during the colonial era; Pritchett (1996) for finding no positive relationship between education and economic growth in Africa; Besley and Burgess (2000) for an ambitious attempt of asserting a relationship between land reforms and poverty reduction in India; and finally, Burnside and Dollar (2000) for their estimation of the effect of official development assistance on economic growth rates.

These are all macroeconomic papers that deal with big questions and interrogate datasets for relationships between the key macroeconomic indicators of development. They ask, what matters for economic development: is it trade liberalisation, geography, education, land reform, aid or institutions? They all deliver clear policy implications ready to be acted upon if we accept their findings. With all their deficiencies, this is a representative sample of some of the prevailing wisdoms that seek to generalise what works and what does not work in international development on the macroeconomic level.⁹ In the following, I use a few examples to show what an interrogation of these papers in an interdisciplinary setting may look like.

Numbers

The first question relates to the quantitative evidence, the numbers. Most aggregates are to some extent, inaccurate and misleading.¹⁰ GDP per capita is measured with large errors, and important issues such distribution of income is not reflected in these measures to mention a few number problems. Yet, in these large samples it may be difficult to assert exactly how it biases the examination, and it can sometimes be a diversion. All these papers deal with some expression of national income or product, expressed as per capita at a point in time, or as averaged economic growth over a certain period of time. A good question might be how a different explanatory variable might change the picture.¹¹ Does the explanation hold for other variables, such as education or health as well? This particular point is well made by engaging with Pritchett (1997), who when looking at GDP per capita finds “Divergence. Big Time,” whereas Kenny (2005), using different indicators asked: “Why are we worried about income? Nearly everything that matters is converging.” While Pritchett finds that gaps in GDP per capita between countries have been increasing in a big way over the past 150 years, Kenny finds that on other measures such as life expectancy and educational attainment the global trend is convergence.

Thus, the use of different numbers supports different patterns, and asking these types of questions opens up fields of interrogation that allow students to say, yes, you might be right about that, but it looks entirely different if you use other numbers. Then proceed to make an informed decision about which patterns to accept and/or reject as the most important one. A discussion of quantitative evidence does not have to be informed by comparing datasets. It is

important to remember, paraphrasing Albert Einstein, that not all that counts can be counted. Economists are well aware of this problem, and because quantification often represents the boundary of investigation, they often take bold leaps of faith when attempting to capture phenomena that are difficult to count. A classic example is provided by Besley and Burgess (2010) who attempt to quantify the effect of land reforms on poverty reduction.¹² As all observers of land reform and economic development in India would know, one of the key flaws of the land reform legislation was its incomplete implementation. The example illustrates the inherent problem of using formal or officially recorded changes to analyse development. Often, the information on how the proceedings unfolded is not available. In this case, it is not clear whether, or to what extent, *de jure* land reforms had *de facto* impacts on land holding. In absence of that information, Besley and Burgess measure the extent of reform by summing up the number of legislations passed, and use this number to see whether poverty reduction was higher in the states where more land reforms passed. They find that there is a relationship and assert that it is a causal relationship.

This reductionist approach may raise eyebrows in many audiences. In a classroom, it will spur students to ask questions about other possible explanations, question the numbers and seek out methods that may usefully test the relationship that the authors find. At face value the finding coheres with theory; we would expect reforms that contribute to land distribution to relieve poverty. Therefore, we may approve when reading just the abstract or the conclusion. On the other hand, when we know that land reforms were poorly implemented, to think that the number of land reform legislations that were passed, seem intuitively to signal lack of implementation rather than actual land redistribution. A closer reading reveals the bare bones of the estimation, and the resulting puzzle makes a good case for interdisciplinary research that can establish the actual social, economic and political conditions on the ground to test whether we can make sense of this finding.

Assumptions

Many non-economist (and some economists too) are reluctant to even accept the fundamental assumption of rational behaviour or *homo economicus* that underpins most economic modelling. Milton Friedman (1953) famously claimed that one should not judge a

theory by the realism of its assumptions but rather by the predictions that resulting models make when it is assumed that actors behave rationally.¹³ Lucas (1990) provides a good journey through what unravels when you start with ‘let’s assume...’. He starts by stating one of the most obvious challenges to the neo-classical predictions for the world economy. If capital has a higher return where the supply of capital is low then why isn’t capital flowing to poor countries – and its corollary – why isn’t the whole world developed?

Lucas then proceeds to try to rescue the model by adding empirical measures that may capture political distortions of capital flows, different levels of human capital in poor and rich countries, and finally that there may be high externalities that make capital more productive in certain locations. It is an effort in attempting to rescue the neo-classical model by using measures that capture the differences in the hypothetical neo-classical world and the real world, where politics interfere, markets are not perfect and returns to capital are not actually diminishing. At the end of the journey, Lucas has provided a new theory of economic growth, which contends that the differences between the real world and the neo-classical world have been reconciled.

A step by step examination of how the initial assumptions are modified is illuminating. Students do not need to contest the basic algebraic formulations, nor the datasets that enter into the empirical testing, but can take part in evaluating how the model is built up to explain the observed patterns in the world economy. The article provides an excellent example of how a model with a few assumptions shapes the explanation. This reading may also initiate a discussion of which assumptions the students feel are the most reasonable point of departure, and then to see that while this model is internally consistent, there are other equally valid starting points that may explain the observed patterns. Alternative models, such as those that as a starting point that some locations are more desirable than others or that do not assume – as in the neoclassical model – that transport costs are zero, will provide completely different versions of the world economy (see for instance Krugman 1995). In such models one would predict convergence and agglomerations, as capital and labour will seek to places where they already exist in abundance. Meanwhile, world systems theory and the dependency school of thought suggest a quite different world where power and nationalism matter (Wallerstein 1979). It is instructive that the assumptions do often feed into the policy implications. The starting point of the neoclassical

model is still that convergence would occur in the absence of some obstacles. Thus when neo-classical economics acknowledges divergence, liberalisation would still be the policy advice. Because of the assumptions of the models divergence is explained as a result of irrational obstacles. Meanwhile, a dependency model, which starts from assuming exploitation, will end up with quite different policy prescriptions. These might be more directly addressing how power is distributed in the international political system.

Stories

As noted in the introduction, there has been a surge in economics literature that seeks to explain economic outcomes as results of historical processes, and thus it has become a truism that both ‘institutions’ and ‘history’ matter for economic development. These versions of explaining why some nations are poor do increasingly have sway in place where development policies are formulated. Thus, this literature matters for students of international development. Jeffrey Sachs is one of those many economists that have risen to a role of policy advisor. He has also written a paper on the detrimental effects of malaria on economic development in Africa (Bloom and Sachs 1998). The findings in that paper provide strong support for the programmes that invests in the distribution of malaria nets. Thus in their version of the story, it is geography that matters for economic development (or rather that areas ridden with malaria are less developed as a direct result of malaria prevalence) . Acemoglu, Johnson and Robinson (2001) take a completely different view in their version of the story. The level of economic development today is determined by whether formerly colonized nations have what they call ‘inclusive’ or ‘extractive’ institutions. In their model, the design of institutions in former colonies depended on whether the number of settled colonizers. In places where they settled in large numbers, such as in Canada or Australia, ‘inclusive’ institutions were established. Whereas places where they did not settle in large numbers, such as in the Congo, ‘extractive’ institutions were enforced during the colonial period. These early institutional patterns persisted and explain the wealth and poverty of nations today.

The explanation matches well with the patterns we may observe today with some former colonies being rich, and others being poor. Thus it is a compelling story, but one that may be easily contested. The first issue would be reverse causality, or omitted variables – did settlers

pick rich colonies? Acemoglu, Johnson and Robinson attempt to get rid of endogeneity of those two variables by finding a variable that does not have a direct causal relationship with income today yet determines the numbers of settlers during the colonial period.¹⁴ They suggest 'settler mortality' and makes use of historical data on the mortality rates of soldiers, bishops and sailors stationed in the colonies from the seventeenth through the nineteenth centuries and argue that the mortality rates of European settlers more than 100 years ago do not have any effect on GDP per capita today, other than through institutional development. Thus, Acemoglu, Johnson and Robinson are content that they have shown that it is the quality of institutions that matter for development today.

The problem is that their story is built on the principle that the disease environment, and particularly malaria, was deadly to settlers, but not detrimental to economic development today. Thus, if Sachs is right then Acemoglu, Johnson and Robinson must be wrong. If we push their stories a bit further and think about policy implications, according to Sachs, incomes are being held back by malaria. As soon as malaria is eradicated or people are properly protected, there will be increases in incomes, and other institutional developments will follow. Thus development funds are put to good use by purchasing malaria nets to be distributed. However, if Acemoglu, Johnson and Robinson are correct, these individuals that are cured for malaria would still be held back by deficient institutions, such as a lack of protection of private property. Moreover, policies such as distribution of malaria nets may be thwarted because the agencies that are supposed to implement the policies are malfunctioning. Again, the robustness of these published findings can be assessed by comparing different explanations. Both models here are internally robust, but a judgement about credibility, and thus the causality question, ultimately depends on which of stories that explain the observed pattern most convincingly.

This point extends beyond the papers discussed here. The key lesson is that non-economists have a role in evaluating the value of the knowledge in the seminal papers of development economics. Reading economics, in the way proposed here, will enable students to have good idea about how economists come to know, or their methods. From there, they will be able to make an informed decision about how much to trust that information for policy decisions,

and as interdisciplinary scholars, and they will be able to judge the relevance of their own contributions to the study of development in relation to economics.

Reading Economics: Toward Economic Literacy

Before I had fully committed to an academic career in development, I was once invited to an interview for an internship with the Overseas Development Institute. The interviewers started off by asking me two questions:

1. How would you explain the notion of ‘comparative advantage’ to the minister of development in a less developed country?
2. How would you explain the notion of ‘Dutch disease’ to the minister of development in a less developed country?

Both concepts are macroeconomic textbook staples. When answering those questions, I had to draw upon the basic knowledge of assumptions and dynamics in these models, then relate them to the reality of development politics, international trade patterns and the wealth and poverty of nations. It was necessary to have an innate knowledge of the dynamics of these models so that I could explain the intuition of them to a non-scholarly audience.

This does not mean that students of international development should accept all the explanatory tools of development economics, but they must understand them. This challenge is well illustrated by the recent attempt of the World Bank and its Chief Economist Justin Yifu Lin in revising development theory in his book, *New Structural Economics*. One would expect a student of international development studies to proficiently engage with these kinds of texts – which take starting point in the aforementioned ‘comparative advantage’ and say something useful about these approaches. To do so, students need a solid grounding in economic theory of development.

Maintaining interdisciplinarity in international development studies has already proven to have benefits for the study of economic development, and that continues to provide a cause for extending the fruitful exchange. As most fields of scientific inquiry, the study of international

development is a contested field, and in particular some scholars have worried about ‘economics imperialism’ (Fine, 2002), and the relative sway that various heterodox approaches have, as opposed to what is called the neoliberal paradigm. In this perspective, international development studies is a battleground where one aims to create space for disciplines other than economics.

It may be useful to think of these important struggles as being epistemological. Meanwhile, for many students in international development studies it is the practical relevance of ideas, concepts, and theory that matters. I invite instructors in international development studies to think carefully about to what extent it is important convert our students into ‘disciples’.¹⁵ In practice, what ‘matters’ may entail a more pragmatic approach to the value of economics. To be specific: in the field, the development practitioner with a background in international development studies will most likely never be the statistician running the numbers from the recent nutrition survey against household characteristics or that projects the extent to which development expenditures to be financed by future export earnings. Those applied skills are learned in other graduate programmes, but our international development studies graduate in the field may very well be the colleague, supervisor of this statistician, or perhaps just the reader of the economist’s report.

The contemporary economist toolbox, whether it belongs to the World Bank professional or the North American academic, now has more room for interdisciplinary approaches than is commonly assumed. To engage this literature, economic literacy is required. Hence, it has been suggested that while it does not require fingertip knowledge of applied economics, non-economists have an important role as readers of economics.

Notes

¹ Indeed the turn of the IMF and the World Bank from structural adjustment and ‘getting the prices right’, to poverty reduction and emphasis on governance and the recent (admittedly reluctant and delayed) embracement of the Millennium Development goals, could be interpreted as a long term turning away from relying narrowly on neo-classical principles. And of course as I write this, Jim Yong Kim has just been confirmed for the World Bank presidency. He edited a book in 1999 with the title *Dying for Growth*.

² For a review see Jerven (2011b).

³ And like the award of the Nobel prize to Amartya Sen, these enrichments of the economics discipline have been symbolically accepted by the prizes to Douglass North (whose work on institutions provides the discipline with models that predicts divergence, and not convergence), Paul Krugman (whose work on transport costs provides the discipline with models that predicts divergence, rather than convergence in a free trade regime) and to Stiglitz (whose work on the costs of asymmetric information provides the justification for state intervention in markets).

⁴ As in the work of Collier (2007), Pritchett (1997), Easterly (2001) and Acemoglu, Robinson and Johnson (2002).

⁵ A second strength of the discipline is the convincing rhetoric in which economics is presented (McCloskey 1998).

⁶ Student paper submitted to IS801: Institutions and Policies of Development at the School for International Studies, Simon Fraser University, Fall 2011.

⁷ Readers may be most familiar with similar books such as *Bottom Billion* by P. Collier, *Whiteman’s Burden* by W. Easterly, *The Globalization Paradox* by D. Rodrik, *Economic Gangsters* by E. Miguel and R. Fisman and *Why Nations Fail* by J. Robinson and D. Acemoglu.

⁸ *Elusive Quest for Growth* by W. Easterly and Wars, *Guns and Votes* P. Collier are better at displaying the bare bones of some of the hypothesis testing in the economic literature.

⁹ For an argument, by an economist, of why economists should stop making recommendations based on generalizations of what works and doesn’t, but rather focus on country level diagnosis, see Rodrik (2010).

¹⁰ For a discussion of these problems relating to Africa, see Jerven (2013).

¹¹ It has been pointed out that an explanation of changes in economic growth in Africa looks very different from those explanations that focusses on average growth Jerven (2011a).

¹² That ‘poverty’ is a multidimensional concept and thus defies quantification unless we accept a reductionist definition is a point well made elsewhere, and is for instance well discussed in the papers collected in Anand, Segal and Stiglitz (2010).

¹³ The economist profession is divided on this issue. The Nobel Prize in economic sciences in 2002 was awarded to Daniel Kahneman and Vernon L. Smith for their work that questions the validity of the assumption that individuals optimize.

¹⁴ For a review and general critique of the use of instrumental variables, see Deaton (2010).

¹⁵ See Harriss (2002).

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