Dani Rodrik's *Economic Rules:* Defending economics against economists?

A critical review

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Ever since the 2008 global financial and economic crisis has the discipline of economics been facing unpreceded criticism, both from outside and from within its academic community. Not only has the neo-classical synthesis, which has dominated the discipline since the 1980s, been put into question, but also the entire epistemological and methodological foundations of orthodox economics have since been debated. Julian Reiss' Explanation Paradox (2012) represents an effort of summarizing the different positions of philosophers of economics with regard to economic models and their explicatory capacity. Many non-economists perceived the gigantic failure of the most trusted economic predictions that took place in 2008 as the confirmation of their criticism towards the discipline, as well as towards the political role played by prominent mainstream economists on the global scene during the last decades. Using their favourite models as universally valid mantras, several influential members of the academic community have offered policy-makers the perfect coverage for political responsibility: scientific truth. Once the crisis struck, the collapse of the world's economies hauled along itself the credibility of the discipline - an extraordinary opportunity for the reconstruction of a social science which, compared to its poorer cousins, has too long been immune to the self-criticism that, during the entire 20th century, has transformed and enriched sociology, political science, anthropology and history.

Dani Rodrik's Economics Rules (2015) represents both a passionate defence of the scientific robustness of economics and a call for revising our understanding of the discipline. The book is innovative – keeping in mind that a decade ago, some economists would associate their discipline to natural sciences rather than to the social ones (cf. Lazear 2000) – and its impact on the academic community might be relevant, considering that Rodrik's aim is to reject criticisms towards economics and provide a guide on how to prevent repeating the mistakes of the past. Reduced to its essence, Rodrik's book is a critique of universalism, based on the simple observation that economics is a social science, which per definition cannot provide any eternal truths. Being the social world the composition of agency-possessing individuals, whose behaviour is nonetheless influenced by social and cultural institutions and dynamics, it has no natural laws that can be discovered. Economics must seek to define "tendencies" or "context-specific regularities" (p. 83), to understand their essential causal mechanisms, and to provide a knowledge that must be treated as strictly context-specific. In other words, the analysis of the social world offers the possibility to construct a great quantity of models: none of them is universally true or valid, but the good economist has the job of picking the appropriate one(s) when he or she seeks to give an answer to a specific question. The diverse set of models is the true strength – and Achilles' heel – of the discipline, and the rigorous scientific method allows us to check if a model is internally coherent (through mathematical formalism) and externally applicable (often, but not always, through empirical testing). I will discuss Rodrik's position by dividing it in two parts: first, I will analyse how Rodrik defends his views on the methodology of economics; secondly, I will present his critique against what he regards as misuses of the discipline on the one hand, and unjust critiques by non-economists on the other.

Rodrik's Models vs The Explanation Paradox

Although the entire book is based on Rodrik's definition of economic models and their application, the first four chapters are dedicated exclusively to this issue. In the second chapter, the author

praises what he regards as the main virtues of relying on economic models: firstly, they allow us to clarify hypothesis, and to understand under which conditions these *might* be true. Secondly, they warn us about counter-intuitive consequences of a specific phenomenon or policy, because we can, if we apply alternative models (hence their different assumptions and different conclusions) to the same setting, grasp the range of possible outcomes. Thirdly, they allow "horizontal" accumulation of knowledge, i.e. the expansion of our collection of models. Lastly, models usually involve an empirical method, hence they (often) allow us to verify or refute their validity empirically. The bottom line is the following: economics consists of many models, and confusing *one* model with *the* model is the main source of error within the discipline.

This call for methodological pluralism is convincing, yet how does a model work in Rodrik's opinion, and what are its essential components? A model is an intellectual construction that, thanks to its simplicity and formalism, "captures the most relevant aspect of reality in a given context" (p. 11). *Simplicity* – regarded by critics as one of the weaknesses of economics, often accused of producing over-simplified caricatures of the human world – is salient, as it allows us to ignore non-relevant information and to focus on the essential causal relations that determine a specific mechanism. *Formalism*, whose main example is economics' extensive use of mathematical reasoning, provides us with "clarity and consistence" (p. 31), allowing us to formulate non-ambiguous statements and to simplify academic communication, while helping us understand whether a model is logically coherent or not. Borrowing from both Nancy Cartwright (cf. Cartwright 2007) and Uskali Mäki (cf. Mäki 2005), Rodrik explains the functioning of models in the explanatory process by comparing them to *fables* and to *experiments*. They work like fables because they offer an "interpretative shortcut" (p. 19): their message is simple and their setting is abstract, but their "moral" (the policy inferred from the detected causal mechanism) can only be applied in a specific context, and only after the applicability of the model in the specific case has been justified. At the same time, they work like experiments: both isolate (physically or mentally) the relevant causal mechanism from the non-relevant side-phenomena and allow us to determine the causal factors. As with the conclusions drawn from experiments, the model's applicability depends on its external validity with regard to the given empirical setting. Yet most importantly, Rodrik wants us to bear in mind that the knowledge offered by models is not only contextual, but also strictly *modal*: here we have an interesting combination between Mäki's definition of the model's explanatory function as the isolation of essential causal relations (cf. Mäki 2011) and Robert Sugden's "credible worlds" account (cf. Sugden 2000, 2009, 2011). According to Rodrik, different models give us insight on different *possibilities* that might take place in a scenario to which one or many models apply. Yet how does the economist understand when the models apply? Rodrik offers a users' guide (p. 96), but the main step boils down to checking whether the model's *critical assumptions* apply to reality – in other words, critical assumptions must be *realistic*.

At this point, looking at Reiss' *Explanation Paradox* (2012) might be interesting. The paradox consists in the apparent inability of philosophers of economics to justify how models can be *false* and yet *explanatory*, assuming that only true accounts explain. Reiss rejects possible solution attempts: 1) claiming that models are not false in the abstract, as Mäki does; 2) asserting that models are not explanatory but have a different function; 3) affirming that explanation does not require truth, as Sugden implies. As we have seen, Mäki justifies the "truth" in the model by comparing the mental experiment of model-construction to the empirical experiment. As Reiss does, we can take Cartwright's definition of the "Galilean thought experiment" in order to explain Mäki's account (cf. Cartwright 1999): the latter's main point is that, in a model, we isolate the essential causal relations through idealization. The truth is therefore not based on the model's assumptions, but on the identification of the "true" – or in Rodrik's words, the dominant – causal mechanism. Reiss rejects this position by claiming that, in social sciences, it is not possible to replicate the Galilean thought experiment and to "isolate away" non-essential factors:

The problem with non-Galilean assumptions is that they make the model result specific to the situation that is being modelled. There is no way to tell from just inspecting the model that it is one subset of assumptions that is driving the result rather than another. And therefore we do not know where to look for 'truth in the model'. (Reiss 2012, p. 52)

As we have just seen, the first sentence does not pose a problem to Rodrik, since he defends context-specific truth from the very first page of his book. With regard to how to find these essential assumptions, he would point at the critical assumptions, which he defines as the ones whose "modification in an arguably more realistic direction would produce a substantive difference in the conclusion produced by the model" (p. 27). We do not know whether this definition would satisfy Reiss, but it is clear that the determination of whether the "substantive difference" in the conclusion brought upon by a "modification in an arguably more realistic direction" is entirely the task of the single economist. As Rodrik himself declares, selecting the right model is "as much craft as (…) science" (p. 83). Although Sugden's premises are different, since he rejects realistic models in favour of credible models, the reasoning is similar: Rodrik's account recalls Sugden's "inductive inference" (Sugden 2000, p. 33). What Rodrik's "critical assumptions" (those whose applicability to reality must be scrutinized) are, is unavoidably matter of dispute. By using the words "craft", "good judgment", "training" and "experience" (p. 83), the author opens the door to the social and cultural determination of individual cognition that philosophers of science prefer to avoid. Again, we can quote Reiss' response to Sugden, replace the term "credibility" with "model selection", and we might find an important weak spot in Rodrik's arguments:

"Many factors affect judgements of credibility, most of which have no essential relationship with explanatoriness: the specific experiences and values of an individual, his or her upbringing and educational background, local customs and culture, social norms and etiquettes of a community of researchers, its theoretical preferences and history." (Reiss 2012, p. 56)

The misuse of economics

After having explained how economics *should* work in the first half of his book, Rodrik uses the last two chapters to criticize those who have disregarded the discipline's diversity both from within and from outside: firstly, economists ideologically or otherwise motivated to turn context-specific theories into universal laws – with severe political and social consequences – and secondly non-economists who have mistaken neo-classical economics and its prominent speakers for the entire academic community. The chapter *When Economists Go Wrong* is aimed at the first, with emphasis put on the 2008 crisis and on the 1989 Washington Consensus. Rodrik denounces the guild mentality of economics' academia, which leads to immunity to criticism and intellectual elitism. According to him, economists' bad reputation in the public is due to over-representation of some self-confident economists who do and did not represent the profession as a whole – which might sound contradictory, if we look at Mankiw's *Economists Agree* list on p. 149. It is understandable that, being he himself a member of the American academic community, Rodrik does not want to be too harsh on colleagues who, starting in the 1980's, have profited from their academic positions in order to back policies with disastrous social implications. Nevertheless, the reflection on the psychology and sociology of economics, as well as the one on power and responsibility of the profession, require a deeper and more honest analysis than the insufficient 8 pages that Rodrik dedicates to the question at the end of Chapter 5. This should at least be the case if the effort to understand "why economics has gone astray" is a serious one. The reason why economics and economists bear a major social responsibility is evidently not just because "models provide narratives that lodge easily in the popular consciousness" (p. 174).

Similarly, Rodrik rejects some of the most frequent objections to the discipline of economics as a system of knowledge, some of them in just a few words. Simplicity, for example, is a key to social

analysis, and should not be misunderstood for over-simplification. Only critical assumptions must be realistic – yet as we have seen, this might lead to further debate. Economics is based on methodological individualism, yet its recent evolutions have taken insights from history, psychology and sociology into account in order to enrich its models. The question of empirical testability of models remains more or less open. Finally, Rodrik tries to address one of the most important critiques: the hidden value-judgements within the discipline. He does not satisfactorily respond to the accusation of normative bias towards self-interest (he only tries to points at the lacking evidence), and he defines *efficiency* as the core value of the economic science. Again, the issue is of fundamental interest, since the question of whether Pareto-efficiency alone represents a morally good value would require at least a philosophical treatise – similarly to Chapter 6's question of whether it is possible to be a "fox" without being a "hedgehog". Unfortunately, Rodrik just lightly touches several questions of immense relevance for the future of economics, yet provides only some limited, sometimes insufficient answers.

Conclusion

To conclude, *Economics Rules*' legacy is Rodrik's definition of economics as the science of economic modeling. Models offer context-specific knowledge, and it is up to the economist's ability to choose and combine the right models for the right cases, without the ambition of all-embracing, universally valid truths. From this point of view, economics is a social science whose main strength relies in its large collection of models, and whose distinction from similar disciplines is its own specific method of inquiry. Although Rodrik fails in explaining why economics goes astray along with immense social costs – in order to do so, we would need sociology, psychology and history, as well as explicit value judgments – his work is an important critical reflection, whose publication by a prominent economic academician can lead to an innovative debate within the discipline, and perhaps contribute to economics' evolution into something new.

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