

Comparative Review of "The Macroeconomist as a Scientist and Engineer," "The Modern  
Macroeconomic Approach and the Arrow-Debreu-McKenzie Model," and "Macroeconomic  
Shortcuts"

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“The Macroeconomist as a Scientist and Engineer” written by N. Gregory Mankiw, is an article that summarizes, analyzes and studies the field of economics, and the many perspectives of the people within the subject. The article looks to resolve the dichotomy between the “science” side of economics which focuses on theory, and the “engineering” side of economics which focuses on problem solving by looking at the uses of both and recognizing each’s importance. “The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model” by Athreya, Kartik B. discusses and describes the modern macroeconomic approach that is used by economists today in understanding, creating and implementing public economic policy. It looks to explain to an aspiring economist, how to work and be productive in the modern world of economics. “Macroeconomic Shortcuts” is an in-depth look at the process that economists use when creating macroeconomic models. It shows the complexity of the process, and how economists have used strategies and shortcuts in order to create models that can be applied to modern economies. These three articles come together with differing presentations, audiences and organizations that are similar in places, but all convey vastly differing ideas of what economics is as a field.

Economics as presented in “The Macroeconomist as a Scientist and Engineer” is seemingly just a conflict between two main points of view. This conflict has continued throughout history manifesting itself in different schools of thought; but ultimately always leading in a division of the brightest economic minds. Mankiw goes through an extensive amount of economic history in order to illustrate his point, and show the various times in history there has been such a conflict. He illustrates the classical approach and its various stages (Mankiw 211-214) then follows it up with the Keynesian approach and its various stages (Mankiw 214-217). The respective stages of each of the two approaches had many conflicts with

one another which the author spends the rest of the article attempting to reconcile. This entire explanation was done in relatively simplistic terms for an economics paper, though it did delve into some difficult topics. The paper explained all of the terms used and the history involved leading this to seem like a paper for someone interested in the field of economics to read.

"The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model" focuses on economic models and their creation, as well as the history leading up to our modern approach. Athreya starts off with some history, going through "*Eléments d'économie politique pure*' the first formal model of an economy" (Athreya 11) and the cotton trade. He follows these examples and shows data and methodology behind studying markets, analyzing supply and demand, and showing the reasons economists work the way they do. The explanation of most of these concepts requires decent economic knowledge and seems to be targeted at aspiring economists, because while the topic requires economic knowledge, it is still educative; looking to teach.

"Macroeconomic Shortcuts" is a relatively simplistic article that seeks to explain to the layman how macroeconomics is done. It starts with an explanation of various economic ideas before going into strategy and the ideas behind the methodology of creating economic models. Using simple devices and rules such as "the four sins": "These are the sin of "aggregation," the sin of studying primarily rational decision makers, the sin of studying "equilibrium" outcomes, and finally the sin of having adopted (a while ago now) mathematics as the main way to communicate." (Athreya 158) These varied rules and shortcuts make the topic of creating economic theories digestible to the average reader who would look for certain concepts to hold on to and understand.

These articles seemed to all focus on a different section of economics but they all had a commonality in their audience which seemed to be aspiring economics students. Acknowledging this, the levels of education that the presumed student would have are quite different between the articles. "The Macroeconomist as a Scientist and Engineer" looked like an article aimed at someone who wanted a rundown of economic history so that they may see if they would like to study economics. "The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model" seemed like an article that was for well-established economic students wondering what a career as an economist may look like. "Macroeconomic Shortcuts" seemed like it had a similar topic, but for a person looking at a career in economics with little education in it. It seems as if all three articles look to attract more students to economics with an explanation of what economists do and what they've done. This is because what you learn in economics in your education of it is very important, but an actual career in economics wouldn't have that great of a use of that knowledge; more like a background on what has already been discovered while you are out to find what hasn't. You can easily make out that "The Macroeconomist as a Scientist and Engineer" is a summary of what has already happened in economics. The other two articles touch on history briefly before going into detailed descriptions and instructions for a modern economist. The focuses of all three articles can be quite similar but when examined their target audiences vary in their levels of education and interest.

The presentation of "The Macroeconomist as a Scientist and Engineer" was rather simple, not really following any established standards, only really organizing the paper by subheadings. This simplistic style, however, resulted in a complicated article becoming easier to digest. The article has a narrative style, which mixed in with some of the author's humor keeps the article interesting and perhaps more accessible to readers. You can see an example of this

humor when the author writes “If God put macroeconomists on earth to solve practical problems, then Saint Peter will ultimately judge us by our contributions to economic engineering.” (220)

The calm, casual, and funny approach to writing makes it seem like the author is very confident in his beliefs and knowledge resulting in greater trust from the reader. This shows the author’s attitude as economics being simple, but also requiring plenty of historical context to understand. This comes in stark contrast to the other articles where economics is a difficult, scientific field where many processes and calculations must be made. Overall the article is mostly presented in a way to make it more accessible as well as make economics seem easy.

On the other hand, “The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model” was extremely dry and explanatory in comparison. It doesn’t dwell, or attempt to be very accessible to the average reader. It focuses on its topic: explaining what economists do and how they do it. Oftentimes it goes into terminology and concepts completely foreign to those without economic backgrounds, and doesn’t bother explaining much about them assuming that the reader already understands them. The article has a single graph in it, which spread out over 45 pages means very little. Essentially, the article is text explanations of economic models with historical examples for reference (similar to the first article). This type of explanatory writing, shows the work of economists and the field of economics as a field where much work and innovative thinking is required to create models and solve problems. It attempts to teach some basics, but realizes that describing all the work an economist does is out of the scope of the book.

“Macroeconomic Shortcuts” has a similar style to the others, but is rather simplistic in comparison to the second article. In its essence, this article is an explanation; there were only four ideas presented; Aggregation, Rationality, Equilibrium, and Mathematics. These concepts

however were explained thoroughly. There was little doubt that if one could read and understand the terms used by the author, then they would understand the ideas presented. Written in an extremely similar vein to the second article, it attempts to teach prospective economists about four major concepts. This presented economics as rather simple, divided into four sections, though each section was extremely detailed.

The presentation of the three articles was rather similar; being mostly written, few diagrams and such, but the underlying assumptions and views of economics had clear differences. The narrative style shows Mankiw as viewing economics as a field where knowing your history, and the mistakes others have made is more important than knowing all the intricacies of models and things such as that. It looks at economics from an outsider's point of view; possibly a politician's who looks to make broad economics strokes that shape their policy and follow their beliefs. "The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model" seemed to view economics from a completely different perspective; possibly an actual economist. It looked at problem solving while the others did not. While a politician can make broad strokes, an economist has to look into small intricate, and seemingly unimportant details in order to create systems that work. "Macroeconomic Shortcuts" sees the field from the perspective of someone who needs to understand economics, but not necessarily work and create policy; more like understand how systems work and how one should act based on the system one is working under. For example, a small business owner may want to understand how to run his business based on the economy, but he can't really do much to effect the systems already in place. The article's explanatory style gives good understanding of economics, though it provides little history or problem solving help.

“The Macroeconomist as a Scientist and Engineer” wasn’t organized neatly into an obvious order. The author of the article seemed to meander on about various topics, providing examples and historical analyses of the field of Economics and the like. All the topics discussed in the article were given to help the reader understand the history of Economics as well as convince them the author’s conclusions about the field were correct. There was no obvious research done, it seemed as if the author was reciting the history of economics from memory. It did however have a clear conclusion which tied together the various strings the article weaved into a few coherent ideas. Again, economics was presented as a story by Mankiw when looking at the organization of the essay. It shows clearly that he saw the various mistakes made in history as the best way to do and learn economics.

Athreya wrote “The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model” without a strict organizational structure, but a structure existed nonetheless. First, the purpose of the concepts presented was given, allowing the reader to see the importance of learning the concepts presented. Second an elaborate example of using the problem solving methods this article was meant to teach was given and how to solve the problem was also written. The explanation of how to solve the problem was itself complicated, so the author divided each important part up and explained everything thoroughly. Once again economics is shown as very complicated and requiring of models and many explanations. The extremely long and detailed example and explanation clearly shows the author’s attitude of economics being scientific and very rigid in problem solving procedure. The article and his presentation of the field in conjunction together make his views regarding economics extremely clear.

“Macroeconomic Shortcuts” was very simple but a bit disciplined in organizational style. First was the introduction, then the presentation of the four concepts. This was followed by an

explanation and analysis of the four concepts before a final section which combined the concepts into a single comprehensible message. Organized simplicity is the way the economics is presented yet again in this article showing the clear view that economics, though based on understanding concepts, can be easy once you understand the key concepts and have the ability to utilize them.

The articles were organized somewhat fluidly, with different ideas and concepts floating around (though “Macroeconomic Shortcuts” was rather rigid, it did combine the ideas at the end), but the slight differences between the articles showed their differing attitudes towards economics. “The Macroeconomist as a Scientist and Engineer” was a free-flowing historical tale of economics that saw the field itself in a similar vein. If one could understand all the strings of economic history, then they wouldn’t be doomed to repeat old mistakes. As mentioned before this was a broad view of economics that seemed to be for beginners and people who wouldn’t really have to create economic models or implement policy. “The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model” was fluid just like Mankiw’s article but it also did much more explaining into the intricacies of economics that a regular person just wouldn’t be interested in. Tiny details and problem solving is what is important to this article, where economics is a field of numbers and complications. This is a view that an actual economist may have, though it would be uninteresting to most others. “Macroeconomic Shortcuts” was once again presented as an explanation of concepts that should easily come to people and help them understand economics. Organized simply because there was no need of the free flow of several concepts this article looks at economics as an easy field where you just have to understand a few things.



Economics isn't a single field that can be summed up easily. These three articles have very different views on what the field is, and they are all valid in their own way. For a beginner in economics or a politician who needs to simply and broadly understand economics, "The Macroeconomist as a Scientist and Engineer" would provide a good understanding and view of economics. For the aspiring economist, "The Modern Macroeconomic Approach and the Arrow-Debreu-McKenzie Model" would make a good read. Finally, for a basic student of economics who wants to understand it better to aid in a different career, "Macroeconomic Shortcuts" is a useful article for those limited needs.

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