

Anwar Shaikh's Capitalism – Notes on Part I,

Chapter 3

I. Introduction

As the chapter title “Micro Foundations and Macro Patterns” suggests, this chapter is concerned with what the relationship between “micro processes and macro patterns” is in a capitalist economy. This is the first chapter where Shaikh begins to present in detail his criticisms of neoclassical economics, and as an autodidact I found a good deal of the chapter intimidating in its details. That being said, Shaikh’s main points are quite easy to grasp and I will present them below.

The obsession of neoclassical economics with “micro-foundations” based on their (hyper)rational choice and expectations model is the main object of Shaikh’s criticism here. We must ask if rational choice is a valid way of discussing individual behaviour, and what that implies for macro-economic patterns. The first question of the validity of rational choice is addressed in some detail in the concluding section of the chapter, but Shaikh’s main line of attack is on the argument that “micro-foundations” have a determining influence on macro-patterns.

The way in which he does this is to model a variety of preference models and show that *any of them* can be made to conform with widely acknowledged macro-economic patterns. This implies that the assertion that rational choice is validated by macro-economic evidence is absolute nonsense, as it performs no better or worse than even the so-called “whimsical agent” model where the consumer makes purchasing decisions at random within their budget constraint (In conforming with the observable macro-economic patterns).

The neoclassical approach is in fact revealed to be doubly bankrupt, as it begins with extremely implausible assertions about individual rationality, looks at macro-economic patterns, and then tries to reconcile its model of individual behavior with the macro patterns. What this rules out is an attempt to reconcile the model of individual behaviour with observed individual behaviour. Therefore neoclassical economics not only places macro-economic analysis in a “micro-foundations” straightjacket, it also impoverishes micro analysis by demanding that it exhibit a unity with the macro-economy that is assumed to hold but does not in fact. Why make all these absurd theoretical contortions?

The real function of the notion of a hyper-rational representative agent is that it serves the mission statement of neoclassical economics, which is to portray capitalism as efficient and optimal. (77)

While the neoclassical socialists of the interwar period, or the market socialists might question this assertion, I think that it does contain a good amount of truth. Neoclassical economics is in the first place a pretension to scientific knowledge of the economy that depicts it in such a formalized and idealized manner that it removes the practitioner from any discussion of messy questions like crises or the social surplus. I agree with Till Duppe that neoclassical economics in its postwar form was

primarily an *escape* from politics into a Cold War institutional/professional legitimacy, not a direct apology for capitalism, but that its idealized and apolitical view of markets came to serve as useful fodder for neoliberal activists, and that subsequently it was the political path of least resistance for neoclassical economists to either use their theory as an apology for capitalism or to mostly remain quiet about delicate political questions. As we will see, whatever we attribute their motivation to, the neoclassicals were certainly hostile to some of the primary assertions of Marxist economics.

One final point I want to mention about Shaikh's introduction is his treatment of individual behaviour. We saw above that Shaikh views the micro and macro as conceptually distinct levels of analysis, and we will get into that in much greater detail below, but if it is true that the macro patterns are "robustly independent" of individual behaviour, then what role do individuals have other than as economic particles that gravitate towards a general pattern? Shaikh has an interesting comment here:

This does not mean that micro processes are unimportant. Micro factors come into their own in determining individual paths, can become decisive if people choose to act in concert to (say) produce a general work stoppage or consumer boycott, and are particularly important in evaluating the social implications of macro outcomes. All of this implies...that a correspondence with the aggregate empirical facts does not privilege any particular micro processes. (77)

As we saw in the case of the determination of the wage rate in the previous section, Shaikh's theory exists against a backdrop of irregular behavior, and this eruption of individual behaviors (which normally emerge into a fairly regular macro pattern) is one such irregularity. While individual behaviour may have some regularities, they are not treated as the business of the economist. At the same time, while capitalism imposes regularity on individuals in the aggregate (whether or not it does on individuals in particular is left to the sociologists) it is vulnerable to revolutionary irruptions. This irruption of the unpredictable "event" or "singularity" is something that was discussed a great deal in the post-'68 Marxian literature.

II – Micro Processes and Macro Patterns

1. Representing individual human behavior

Shaikh begins this section with a return to the topic of "hyper-rationality." As he notes, evidence from "behavioral economics, anthropology, psychology, sociology, political science, neurobiology, business studies, and evolutionary theory" (78) all points to the fact that hyper-rationality is not a good descriptor of how people behave. Finally: "...as any advertiser could tell us, our preferences are easily manipulated, our responses quite predictable."

The tendency in neoclassical economics is to admit that people are not in fact hyper-rational, but that this type of rationality can be used as an ideal standard with which to assess our real, "imperfect" rationality. Shaikh rejects this view: "It is a topsy-turvy world indeed when all that is real is deemed irrational" (79)

Weirdly, while this image of hyper-rationality as a perfect ideal beyond this world is a popular one in the neoclassical world, there is also a view of "hyper-rationality as a model of actual behavior" which

“plays an instrumental role in the depiction of capitalism as the optimal social system, because (among other things) this portrayal requires that all individuals know exactly what they want and get exactly what they choose.” Why is the absurd claim justified?

1. Because “real economists” believe it! (The “Ptolemaic” argument from authority)
2. Because it is a “good approximation” of how people actually behave!
3. Because it is a convenient way for getting “analytically tractable results!”
4. Because it “yields good empirical results!”

However as was mentioned above, getting empirical results does not imply that the theory in question is any better than other theories that *also* get the same empirical results. Furthermore the claim that neoclassical economics models what people want and how they get it is rendered dubious by the fact that “it is possible to define a person’s interests in such a way that no matter what he does he can be seen to be furthering his own interests.” The utilitarian solipsisms required by neoclassical definitions of self-interest are so extreme that any non-market interaction between individuals (such as caring about someone else) is defined as an “externality” (80). Clearly this is not a good approximation of how people behave.

Next we have the problem of the “transitivity” of preferences. This is another well known problem with the neoclassical preference model, which requires that the agent prefer x over z if they prefer x over y over z. Unfortunately, experimental evidence tells us that this is not how people think.

Another field in which very similar assumptions are dogmatically held is game theory, which has been declared to be “a framework within which one can realistically discuss what is or is not possible for a society.” Unfortunately the definition of player preferences in game theory requires “an infinite regress of entirely correct beliefs” in much the same way that is found in neoclassical economic theories.

In a similar vein, Shaikh attacks the Analytical Marxists for their “anti-dialectical and anti-holistic attempt to ground Marxist notions in neoclassical methodology” which “relies on rational choice theory, game theory, and associated neoclassical mathematical techniques to derive its conclusions” (82). The main problem here is that the Analytical Marxists follow the “micro-foundations” approach and therefore reject the existence of emergent properties, which Shaikh strongly advocates as a theoretical device.

Turning to the question of hyper-rationality as a *norm of how people should behave* as opposed to a description of how they do in fact behave, Shaikh argues that the dismissal of the social component to rationality in the hyper-rational norm does not make it ideal in any meaningful sense. The “social moron” is not much of an ideal to aspire to, except in one sense: “...it provides the foundation for the claim that the market is the ideal economic institution and capitalism the ideal social form. This is its immanent rationale.” (83) Again, the existence of market socialists and Analytical Marxists problematizes this accusation, but I do believe it contains a good deal of truth.

Using the normative argument, some groups like the World Trade Organization and the World Bank advocate programs of social engineering that will make people behave more like the “social morons” that neoclassical theory idealizes (That is as single-minded narcissistic utility optimizers) through the

creation of “market friendly” institutions. However this argument relies on the belief in capitalist market optimality, and so does not have much theoretical or practical merit. Faced with this problem, advocates of capitalism point to its real progressive role in developing the forces of production, but then have to face its history of “violence, inequality, and persistent state intervention” (84).

In the final instance, the advocates of neoclassical theory will defend it on the ground that abandoning hyper-rationality implies falling back on “a hodgepodge of ad-hoc hypotheses” (84) but as has been amply demonstrated, neoclassical theory is itself based on just such a hodgepodge! This is an interesting point, because it gets at the issue of economics’ “scientific” status. In addition to generally being supportive of capitalism, economists are also attached to the idea of the scientific character of their work. I believe that this has to do with their institutional interest as a discipline and desire to maintain their social status. While acting as a slavish defender of the actions of the capitalist class certainly can reward an intellectual with a degree of wealth and social status (See for example the writings of Thomas Friedman) it cannot afford them the degree of social recognition *among intellectuals* and the institutional stability it implies. In order to achieve this stability, economists stake their claim to legitimacy on the scientific character of their arguments. This is just as true of Marx as it is of Walras or indeed of Shaikh. As we will see in the next section, Shaikh will explicitly attack neoclassical economics through a reference to scientific methodology, in an attempt to unseat the neoclassicals’ claim to science and the social prestige it implies.

2. Representing aggregate behavior

In this section Shaikh details his objections to the neoclassical idea of a “representative agent” that acts as the bridge between micro and macro economics. He begins by noting that neoclassical macroeconomics rests on two assumptions. The first, that hyper-rationality is a useful way to model individual behaviour, has been addressed in the previous section. The second assumption is that “...aggregate outcomes can be treated as the behavior of a single ‘representative’ hyper-rational agent.” (84) Shaikh dismisses this idea as “simply false,” but then proceeds to discuss the matter in considerable detail.

Shaikh’s primary argument is that “The behavior of a whole cannot be characterized by that of any of its constitutive elements because a whole is more than the sum of its parts” and therefore aggregate behavior “...is generally insensitive to variations in the individual behaviors...*Aggregation is robustly transformational*” (84). If this can be shown to be true, then “micro-foundations” will be simply unacceptable under any circumstances as a method for economic inquiry.

Drawing on physics, Shaikh now gives the example of the Ideal Gas Law. The Ideal Gas Law describes the relationship between a number of properties of gases, and was originally obtained empirically. The advent of the view that gases are in fact made up of microscopic molecules lead to a reconceptualization of the Law. The result was to think of gases as made up of careening, colliding particles within some container. Describing each molecule’s motion would be next to impossible, yet the aggregate of molecule motion can be described statistically, arriving at the same results as the old empirical method. “The aggregate Gas Law now appears as an ‘emergent’ property of the shaped (i.e., contained) ensemble itself and cannot be reduced to, or deduced from, any single ‘representative’

particle.” (85) This is because the properties that are related in the Gas Law are related as a result of the interaction of the ensemble of particles, with the container as a limit. Measuring any one particle would tell you nothing about the properties described by the Gas Law.

According to Shaikh, “[e]xactly the same conclusion applies to economic processes” (85); in the case of consumer theory, instead of a container acting as the “shaping structure” of a gas, the “...budget constraint defined by the level of an individual’s income” provides the constraint that defines the emergent consumption pattern. Studies into consumption patterns in models based on hyper-rational neoclassical agents with varying budget constraints have shown that the simple existence of a variation of income distribution among agents is enough to produce an “emergent” effect, where “the shape of the aggregate consumption function is generally completely different from that of individual functions.” In other words, every agent (even) in the neoclassical model must be exactly identical in order for “micro-foundations” to obtain, but in that case there is in fact only one agent and describing a one-agent model as “macroeconomic” is obviously absurd. Shaikh cites the economist Kirman, who writes that it is “illegitimate [to]...infer society’s preferences from those of the representative individual, and use these to make public policy choices.” Another support taken out of the neoclassical house of cards!

From consumer theory, we turn to production theory, which brings us to the question of the [Aggregate Production Function](#) and the so-called [“Cambridge Capital Controversy”](#). In its particulars this is a very complicated topic, but I would first like to state what is at stake in the issue. One assertion that neoclassical economics makes is that the owners of each of the “factors of production” (basically: land, labor, and capital) receive exactly the value of their economic contribution in a competitive market. In this view, the Marxist assertion that workers are exploited through the extraction of surplus value is *a priori* wrong. Any existence of “exploitation” must be a result of imperfections in competition, not a constituent element of capitalist production as such. As you might imagine, this is a very politically charged issue because it provides a theory of “who gets what and why.” This tenant of neoclassical theory has been used, for example, to justify both the extremely high salaries (if we include “bonuses”) that are paid to high-ranking financiers and executives, and the extremely low salaries that are paid to oppressed groups (e.g. Wal-Mart employees, factory workers in the Global South, social workers, etc.) and has been used to justify the gender gap in salaries as well. This is the sense in which neoclassical economics can be called without any exaggeration “bourgeois economics.” In earlier times, the French liberal de Toqueville wrote that it was necessary:

to diffuse among the working classes ... some of the most elementary and certain notions of political economy, which would make them understand, for example, what is constant and necessary in the economic laws that govern the wage rate. Because such laws, being in some sense of divine law, in that they derive from the nature of man and the very structure of society, are situated beyond the reach of revolutions.

We can see in the way that [neoclassical theory was used to browbeat Thomas Piketty](#) after the publication of his modestly critical (and largely in conformance with neoclassical theory) book, that de Toqueville’s sort of thinking still survives in the economics of our day.

So how can this neoclassical just-so story be justified? One way is with the Aggregate Production Function (APF). As Shaikh notes, Paul Douglas, its creator wrote that “the approximate coincidence of the estimated coefficients [of a Cobb-Douglas APF] with the actual shares received...strengthens the competitive theory of distribution and disproves the Marxian” (86). That is, of course, if the APF is in any way plausible, and this is what the Cambridge Capital Controversy and subsequent debates was all about.

Essentially the APF is intended as a model that describes how each of the “factors of production” receive back what they put into the production process through market distribution. If the APF were generally accepted, it would exclude the Marxist theory of exploitation. The difficulty that the APF encounters is in trying to specify what the “capital” factor of production is, and how it is employed. As the [Wikipedia entry](#) states:

...the rate of profit...is supposed to equal the marginal physical product of capital. (For simplicity, abbreviate “capital goods” as “capital.”) A second core proposition is that a change in the price of a factor of production will lead to a change in the use of that factor – an increase in the rate of profit (associated with falling wages) will lead to more of that factor being used in production. The law of diminishing marginal returns implies that greater use of this input will imply a lower marginal product, all else equal: since a firm is getting less from adding a unit of capital goods than is received from the previous one, the rate of profit must increase to encourage the employment of that extra unit, assuming profit maximization.

Piero Sraffa and Joan Robinson, whose work set off the Cambridge controversy, pointed out that there was an inherent measurement problem in applying this model of income distribution to capital. Capitalist income (total profit or property income) is defined as the rate of profit multiplied by the amount of capital, but the measurement of the “amount of capital” involves adding up quite incomparable physical objects – adding the number of trucks to the number of lasers, for example. That is, just as one cannot add heterogeneous “apples and oranges,” we cannot simply add up simple units of “capital.” As Robinson argued, there is no such thing as “leets,” an inherent element of each capital good that can be added up independent of the prices of those goods.

So while labour in theory can be reduced to the common unit of unskilled labour, “capital goods” *cannot* be reduced to a common unit of homogeneous “capital.” The neoclassical response was to argue that capital goods *are* rendered homogeneous in their money form. The problem then arises that the money value of capital is in part determined by the rate of profit, and the rate of profit is in turn affected by the employment of capital. Because the money value of capital is not independent from the rate of profit it cannot serve as a proper independent measure of the capital “factor of production.” We therefore have an “aggregation problem” in both physical and monetary terms.

The other major problem with the APF is the “reswitching problem.” Again, quoting Wikipedia:

Reswitching means that there is no simple (monotonic) relationship between the nature of the techniques of production used and the rate of profit. For example, we may see a situation in which a technique of production is cost-minimizing at low and high rates of profits, but another technique is cost-minimizing at intermediate rates.

Reswitching implies the possibility of capital reversing, an association between high interest rates (or rates of profit) and more capital-intensive techniques. Thus, reswitching implies the rejection of a simple (monotonic) non-increasing relationship between capital intensity and either the rate of profit, sometimes confusingly referred to as the rate of interest. As rates fall, for example, profit-seeking businesses can switch from using one set of techniques (A) to another (B) and then back to A. This problem arises for either a macroeconomic or a microeconomic production process and so goes beyond the aggregation problems discussed above.

As we saw above: “A second core proposition is that a change in the price of a factor of production will lead to a change in the use of that factor – an increase in the rate of profit (associated with falling wages) will lead to more of that factor being used in production. The law of diminishing marginal returns implies that greater use of this input will imply a lower marginal product, all else equal...” but because the relationship between the techniques of production and rate of profit is not “monotonic” (As one goes up so does the other, without reversing direction) the stability of the whole system is undermined. The long and short of the issue then is that the APF does not provide a reasonable model that can grant legitimacy to the neoclassical story of distribution.

The only case in which neoclassical economics can provide a production function is when “all firms have the same capital-labor ratio and the same wage and profit rates.” (87) But in this case there is no “aggregate” production function at all because it is in fact a one-agent model. Just as with the neoclassical consumer theory, the neoclassical production theory is a “...trivial [case], because by construction there is effectively only one agent in each domain.” Therefore even if we accept the “hyper-rational” model, neoclassical economics cannot provide anything more than a trivial one-agent model that is completely static and utterly unrealistic.

3. Aggregate relations, micro foundations, and the question of rigor

In this section Shaikh attacks the methodological assumptions of the “micro-foundations” approach. To begin, Shaikh points out that “micro-foundations” is not an accepted standard of rigour in physics, the ur-reference for almost every school of economic thought. He offers the example of the Gas Law, which was accepted before it was derived from statistical thermodynamics, the laws of hydrodynamics, crystallization, and magnetism, which have never been derived from “micro-foundations,” and indeed the theory of General Relativity, which is accepted as rigorous despite not being derived from quantum mechanics.

Next, it is not clear that micro-scale theories are in any sense superior to macro-scale theories. Shaikh points out that a minority of physicists have persisted in attempting to abolish quantum mechanics *in favour of* a physical theory based on the “macro-level” general relativity. It is not as a matter of course assumed that the micro-level theory is superior to that of the macro level.

Shaikh then returns to the example of the Gas Law, pointing out that “it is perfectly possible to derive empirically supported macro patterns *from micro foundations that are known to be false.*” (88) The Gas Law is commonly said to be derived from a micro-theory of Newtonian collision of atoms “like billiard balls,” but we know that atoms are not anything like billiard balls, but instead “ethereal quantum-

mechanical entities lacking the most central of all properties of an object – an identifiable position.” This derivation of a correct law from false premises is possible because “...the Gas Law is an emergent property which is ‘robustly insensitive to details’.” The interaction of micro entities give rise to the emergent stable properties of the Gas Law at the macro level. As we saw above in the case of consumer theory, macro level patterns can persist wildly different, and often absurd micro-level assumptions. To support his argument in the realm of economics, Shaikh points to Keynes’ argument in favour of “...the unimportance of the assumption of individual rationality for the derivation of economic patterns at the macro level” (89) and points to research by other economists that mirror his own previous demonstration in the realm of consumer theory.

Shaikh concludes the section by writing:

In each of these cases, economic shaping structures create limits and gradients that channel aggregate outcomes: the positive profit survival criterion in the case of the firm, individual economic characteristics in the case of income distribution, and the budget constraint in the case of individual consumer choice. Each of these gives rise to stable aggregate patterns which do not depend on the details of the underlying processes. And precisely because many roads can lead to any particular result, we cannot be content with considering a model valid simply because it yields some empirical pattern. Other facets of the model may yield conclusions which are empirically falsifiable, for which the model must be held responsible.

So the agreement of a theory with some set of empirical facts is not enough to hold it up as a standard of rigour - broader considerations are necessary. In the face of broader considerations, neoclassical economics clearly does not pass muster.

III – Shaping Structures, Economic Gradients, and Aggregate Emergent Properties

Having thoroughly attacked the notion of the “representative agent” based on “micro-foundations,” Shaikh now attempts to describe what his method based on emergent properties will look like. As was described above, these emergent properties are given their particular characteristics in interaction with “shaping structures.” Here Shaikh returns to the question of consumer behaviour, (See Section II – 1) and investigates two shaping structures:

1. “A given level of income which restricts the choices that can be made...”
2. “A minimum level of consumption for necessary goods that introduces a crucial nonlinearity”

Shaikh argues that these two structures provide a basis for explaining the following empirically observable patterns:

1. “Downward sloping demand curves”
2. “Income elasticities of less than one for necessary goods and more than one for luxury goods”
3. “Aggregate consumption functions that are linear in real income in the short run and include wealth effects in the long run”

As in the discussion in Section II – 1, the discussion is supplemented by a simulation involving the following types of agents:

1. “A standard neoclassical model of identical hyper-rational consumers in which a representative agent obtains”
2. “A model of heterogeneous hyper-rational consumers in which a representative agent does not obtain”
3. “A model with diverse consumers in which each one acts whimsically by choosing randomly within the choices afforded by his or her income”
4. “A model...in which consumers learn from those around them (their social neighbourhood) and also develop new preferences (mutate) over time.”

While we might expect such widely varying models to yield widely different results, in fact “all of the models give rise to the very same aggregate patterns. The essential point is that the same macroscopic patterns can obtain from a great variety of individual behaviors” (90).

Sections III – 1..4

In these sections Shaikh outlines a simple mathematical model to demonstrate his ideas about consumption. In the first section he establishes a two good economy of luxuries and necessities, with a budget constraint that all individuals will have to consume within. In the second section he establishes that according to this constraint demand curves will be “downward sloping.” As the price of a good rises, the budget constraint will move “inwards,” restricting the quantity of the good consumed. In the third section Shaikh accounts for Engel’s Law: “...that people buy proportionately less of necessary goods, and hence proportionately more of other (luxury) goods as their income increases.” (92) Shaikh provides a number of assumptions within his model that could “derive” Engel’s Law, according to whether the minimum consumption of necessities varies with income, the slope between necessities and luxuries varies, or neither varies. Finally he provides a formal definition of his consumption model, and notes that the results are “robustly insensitive” to models of individual behaviour because they are defined by the “shaping structures” of the budget constraint and minimum level of consumption.

5. Simulations: Insensitivity of aggregate relations to micro foundations

In this section Shaikh provides the details for his simulation of various agent behaviour types, with the introduction of various behaviours, both plausible and wildly implausible having little to no effect on the resulting consumption patterns, which remain determined by the shaping structures as he has claimed.

Section IV – Methodology for Economic Analysis

Shaikh begins this section by introducing the question of the importance of heterogeneity among individual agents. He notes that the heterogeneity of agents *does* “[invalidate] any notion of a representative agent” (101) but it is not sufficient to explain aggregate consumption behaviour. Shaikh explains the reason why heterogeneity invalidates the notion of the representative agent as follows:

Individual actions underlie market, industry, national, and regional macro patterns. But more aggregate sets have properties not possessed by the individual agents, which means that we cannot model the whole ‘as if’ it were merely one large individual. The representative agent is a convenient untruth.

So in the first place agents are not homogeneous, and modelling them as if they were would be illegitimate. However, beyond this point heterogeneous agents give rise to emergent aggregate patterns that diverge from the representative agent. Yet beyond the point of heterogeneity Shaikh adds that of “shaping structures” such as those that we saw in the previous section (e.g. The budget constraint) that give a form to the aggregation of heterogeneous agents. Out of the selection of agents we saw in Section III, three of the agent types were heterogeneous, while only one was homogeneous, but under the influence of the shaping structures that Shaikh specified: “...all four simulation models yield the same demand and Engel curves and associated elasticities” (101). If heterogeneous and homogeneous agents yield the same patterns then the explanatory factor must lie elsewhere – namely in the shaping structures.

Shaikh then notes that even agents whose consumption patterns vary at the micro level converge at the macro level *using the same relevant variables* – in this sense the macro pattern is precisely emergent. He finally notes that while some “information” is destroyed in the transition from the micro to macro level (The assumptions of what it is that makes heterogeneous agents different, such as variation in income) what is really important is “...the existence of a theoretical connection between consumption and the particular variables that affect it, and some understanding of which of the latter count at the aggregate level” (102).

With this background in mind Shaikh goes on to “...specify five characteristics of rigorous aggregate analysis” (102).

1. “It should be rooted in some theory of the relevant factors at the micro level”
2. “It should allow for the fact that only a few of these factors may be relevant at the macro level”
3. “It should recognize that the aggregate functional form will be quite different from corresponding microscopic ones, which implies that there is no such thing as a representative agent”
4. “Rigorous macroeconomists will also keep in mind that there will be many micro foundations consistent with any given aggregate pattern”
5. “...rigorous economic theory must always keep in mind that equilibration is a hypothesis whose existence, stability, speed, and manner of operation must be explicitly addressed”

So in simplified terms, we need to maintain an awareness of the distinction between micro and macro levels of analysis, the problematic relationship between the two, and we have to think about the real implications of economic dynamics over time. Shaikh concludes the chapter by pointing out how certain aspects of “old-fashioned” macroeconomics does satisfy his requirements for rigorous analysis, using the examples of Keynes, Kalecki, and Friedman.

Section V – Turbulent Gravitation

1. Equilibration as a turbulent process versus equilibrium as an achieved state

Here we return to the issue of dynamics that was brought up as point 5 in the previous section. The main distinction, which was also discussed in the previous chapter, is between the “classical” notion of equilibration as a turbulent process versus equilibrium as an achieved state, which is “the most

prevalent notion of equilibrium in both orthodox and heterodox economics” (104). The classical notion is “gravitational” and recognizes that any “exact balance is a transient phenomenon because any given variable constantly overshoots and undershoots its gravitational center.”

2. Statics, dynamics, and growth cycles

Shaikh here is trying to explain how the growth rate can actually be dynamic, but the equations he is referring to are completely foreign to me and I was not able to follow his point.

3. Differences in the temporal dimensions of key economic variables

This section focuses on specifying the length of various economic cycles. The first cycle addressed is that of profit rate equalization between industries. This is a phenomenon that occurs over four to five years, and:

...is driven by the reaction of industrial investment to profitability. The higher the profit rate, the greater is the incentive for firms to accelerate the expansion of output and capacity... Industries with higher profit rates will experience growth acceleration until their output begins to grow faster than their demand, at which point their prices and profit rates will begin to decline. The opposite holds for industries with lower profit rates. Two things follow from this. Individual industry profit rates on new investment will fluctuate around the corresponding overall average rate. This is the equalization of profit rates. But as the average profit rate on new investment itself fluctuates, so too will the overall growth rates of output and investment in the economy as a whole. (106)

Therefore the profit rates of individual industries are equalized around a moving average over time. There is no achieved state of rest at any point.

Shaikh next turns to business cycles:

1. Inventory cycles (3-5 years)
2. Equipment cycles (7-11 years)
3. Long waves (45-60 years)

The inventory cycle is related to the balance between supply and demand, while the equipment cycle is related to the balance between capacity and actual output (That is, how much is that capacity used in production). Equipment purchases are made in anticipation of future sales, and inventories of raw materials and work in progress are needed to maintain continuous production. Then there are the inventories of finished goods needed for continuous supply for sale. There are normally divergences between expected/desired sales and inventories, and with these divergences come divergences between production capacity and the amount of production required to maintain inventories. The inventory cycle is the most responsive to supply and demand, and with a length of roughly three to five years, Shaikh takes it as a measure of the economic “short run.”

The equipment cycle is taken as representing “the time it takes for actual capacity utilization to cycle around the normal level” (108) and therefore as representing the economic “long run.”

Next we turn to other cycles. While the financial markets are largely trading in “futures” and other virtual entities, instead of labour intensive goods, they seem to follow long term bubbles. Shaikh

unfortunately does not have any more to say about this subject here. Labour markets are “...complicated because of the special nature of labor power as a commodity,” a point that appeared earlier, but which we get more information on this time. Because (except in some kind of slavery) humans aren’t generated in response to labour demand “the global supply of labor hours is not demand determined” (108). This is a very obvious point in countries like Japan, where the population is aging visibly before my own eyes despite capital’s protests that this will have dire implications for the Japanese economy! There are some ways that the “local effective supply of labor hours” can be increased however:

1. Changing workers from the inactive to the active labor force (e.g. Encouraging women to work outside of the home, hiring from the “reserve army of the unemployed”)
2. Changing workers’ geographical location through emigration
3. Changing the length and intensity of the working day through overtime or speed-up of the labour process

These offer capital “wide limits” in employing labour, but they are not infinitely wide, as the Japanese situation has demonstrated. We will see more about the labour market a long time from now in Chapter 14, but for now we will have to accept that “...the labour market is likely to be the slowest of all the aggregate markets” (109). Shaikh therefore arrives at the following adjustment speed schema:

- Short Run (3-5 Years): Commodity markets, inventory cycle, profit rate equalization
- Long Run (7-11 Years): Capacity utilization, equipment cycle, labor market

This scheme varies from that commonly accepted in the literature, which is longer and has other determinants.

Section VI – Summary and Central Implications

As in the previous chapter, much of this section is summary, as I have provided in this post! My summary is of course more extensive, but Shaikh does add some new points in his own. There are two points that I think are worth mentioning. The first is Shaikh’s survey of popular approaches to human behaviour in economics. He lists four:

1. Behavioral theory
2. Evolutionary theory
3. Agent-based computational economics (ACE)
4. Stochastic approaches

Shaikh accuses behavioural economics of “[accommodating] some of the knowledge derived from [broader] behavioral within the framework of standard economic theory” (115). In other words behavioural economics cherry picks “disciplines such as psychology, sociology, anthropology, and neurobiology” for ideas that will not rock the boat.

Evolutionary economics is praised for noting “...that the whole can have characteristics that differ from those of individual elements” and for attacking the Spencerian notion of the “survival of the fittest” used to propagandize in favour of “the superiority of market outcomes,” but is accused of not offering

much of an alternative to the neoclassical paradigm and hewing far too close to it in the case of evolutionary game theory. In particular Shaikh accuses it of assuming that too many evolutionary processes are equivalent to calculation, when in fact they are something quite different.

ACE is attacked for being far too arbitrary and “ad-hoc,” (117) and so falling into the same sort of fallacies that we saw with the representative agent earlier in this chapter.

Unsurprisingly, the “econophysics” stochastic approach is the one that Shaikh approves of the most, as its emphasis on macro patterns and physical metaphors most closely resembles his own work found in this chapter.

One final point of interest is the divide that Shaikh highlights between consumers and businesses in “the classical approach”:

...capital is the dominant force and profit the veritable bottom line of capitalism itself. This leads them back to production, to the surplus product as the objective foundation of profit, and to competition as the means by which profit regulates exchange. It is important to note that profit is a potentially objective measure, subject to constant scrutiny by the firm’s managers, by the stock market, by the banks, and by the public in general. Profit is the survival condition for firms. Individual firms are punished by extinction if they make persistent losses, and can be threatened even if they merely make lower profits than their competitors. Hence, the constant pressure to cut costs so as to improve their odds of survival. In turn, these individual imperatives give rise to a series of ordering mechanisms such as the tendency to equalize profit across industries. Competition is a war among firms, and it is this, the imposed rationality of warfare, which [is] their objective guiding principle. Individual consumers face no such objective winnowing process. They are, of course, subject to social influences which form the the ‘macro foundations’ of their microeconomic behavior. But within these confines they can operate out of habit, out of tradition, or even out of whimsy. Theirs is the domain of the social-subjective. Hence, in the classical approach, there is a great asymmetry between the treatment of businesses and that of consumers. (119)

This might seem like a great deal of common sense, but it is in stark distinction to the “Walrasian” (i.e. neoclassical) approach, which “insists the consumer and the firm be treated in a perfectly symmetrical manner.” (118) As we saw above, the neoclassical approach can only really deal with one agent at one point in time, and this homogenizing approach is evident in the consumer/business divide as well.

Shaikh’s “classical” view does seem to capture more of how life as a consumer is actually lived, with a certain amount of freedom experienced by the consumer as to their choices (limited by their budget).

The choices we make as consumers are not a matter of strict ranking and optimization, but they are still limited. However it should be emphasized that this freedom is one that is not only limited by how much of the social surplus we can spend as personal income, it is also limited by the fact that we are shut out of the world of production, finding ourselves embroiled in the “imposed rationality of warfare” that is characteristic of capitalist competition and unable to freely act in this sphere. Capitalist consumer freedom, based on “consumer choice” is therefore the free part of a economic split that runs right through us as individuals. This is part of the limitation that Marx recognized in the capitalist system, and demanded be overcome.

In the next chapter we will turn to a discussion of production.