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Anwar Shaikh

I was born in 1945 in Karachi, Pakistan, two years before the partition of India. My early years were spent in Karachi, but after my father joined the Pakistani Foreign Service in 1950, I also lived for various lengths of time in Ankara, Washington D.C., New York, Lagos, Kuala Lumpur, and Kuwait. I received a B.S.E from Princeton University in 1965, worked for two years in Kuwait (as an engineer and as a teacher of social science and physics), and returned to the United States to study at Columbia University, from which I received my Ph.D. in Economics in 1973. In 1972 I joined the Economics Department at the Graduate Faculty of the New School for Social Research, where I am presently employed.

Several factors have shaped my views. My travels led me to the view that capitalism is a powerful social force which steadily transforms all cultures and institutions in its path, bending those which will bend and breaking those which will not. It develops knowledge and technology in an unparalleled manner, yet does not abolish poverty or social misery. Old bastions of privilege and power fall, but new ones inevitably emerge to take their place. Underlying all of this is the restless quest for private gain. It is this perspective that led me to the study of economics.

Like many others in my generation in the U.S., I was profoundly influenced by the civil rights and feminist movements of the 1960's. While in graduate school, I lived and worked (as a teacher of social science and mathematics) for some time in Harlem, was active in the 1968 strike at Columbia University, in the anti-war movement, and in various attempts to create a space for heterodox views of economics.

The central concern of my work has been the attempt to understand the fundamental processes at work in advanced capitalism. How do market economies work, and why do they generate certain recurrent patterns which seem to cut

across differences in origin, in culture, and even historical epochs? Why is capitalist growth characterized by order-within-disorder, periodically punctuated by episodes of general economic crisis? Why is unrestrained capitalist development so typically uneven across nations, across regions, and across individuals? In approaching such questions, I have always found it crucial that one start from a solid theoretical foundation grounded in the actual phenomena of the object of one's investigation.

My training in conventional economics left me convinced that neither neoclassical nor Keynesian theory provided a sufficient basis for analyzing such issues. On the other hand, my exposure to the works of Harrod, Leontief, Kalecki, Sraffa, Joan Robinson and Pasinetti furnished much inspiration and solace. They also led me back to the great economists of the classical era: Smith with his deep understanding of the hidden power of market forces, Ricardo with his powerful analysis of the laws of political economy, and Marx with his trenchant analysis of the intrinsically conflictual origins, structure and reproduction of the system. I therefore set out to show that one could construct a coherent foundation for current economic analysis out of a synthesis of these modern and classical elements. My goal was to construct a framework which was capable of addressing current theoretical and empirical concerns, and which would result in a distinctive body of economic propositions which could be formalized and tested. As is always the case, this was a project in which some others were also engaged.

At the methodological level I have always emphasized the limitations of equilibrium analysis and comparative statics because such tools do not provide an adequate foundation for describing the real regulation processes of capitalist markets. The unplanned individual activities which characterize capitalist production are made socially coherent only by being forcibly articulated into a viable social division of labor, through some real process of oscillations, discrepancies, and errors around ever moving centers of gravity. It is one thing to study the properties of these centers of gravity, as the classicals do in their analysis of prices of production or of balanced reproduction. But it is quite another to assume these conditions ever exist as such, or that one may analyze the behavior of individual units beginning from some assumed state of equilibrium (as modern economists so often do). The preceding perspective leads to the notion that individual economic variables (prices, wages, profits, etc.) will have inner tendencies which are only expressed

through some average movement. The invisible hand produces its outcomes through its *turbulent regulation* of the visible.

My work has always been structured by the above project. Most recently I have developed classical explanations of the workings of exchange rates, inflation, and the stock market, and have been able to apply the theory with some success to the actual patterns in advanced industrial economies. On the whole, my overall body of work falls into 8 main areas: the determination of prices and profits, the impact of technical change on profitability, the political economy of national income accounts, the impact of state taxation and expenditures on labor income, on the macrodynamics of effective demand in a growth context, on a classical explanation of inflation, on a classical explanation of, international trade and exchange rates, and on the determination of stock prices and interest rates by means of the equalization of profit rates across sectors. In all of these areas, I use the theory being developed to explain the empirical evidence.

A central theme in my work concerns the determination of relative prices. For instance, I have tried to show that the classicals had a sound theoretical basis for looking to the ultimate regulation and domination of market prices by quantities of direct and indirect unit labour costs. Indeed, it was Smith who first showed that since any price is tautologically equal to the sum of its wages, profits, and material costs, and since the last item is simply the price of a bundle of material inputs which in turn can itself be decomposed into *its* wages, profits, and material costs, and so on, one may therefore analytically decompose any observed or theoretical price whatsoever into the sum of its total (direct and indirect) unit labor costs and total unit profits. This allows us to write any price as the product of just two terms: the commodity's vertically-integrated (i.e. total) unit labor costs; and a term which depends only on its vertically-integrated profit-wage ratio. But the latter term has limited variability across industries, because in a well connected interindustrial structure *each* industry's vertically-integrated profit-wage ratio will be a convex-combination of the direct profit-wage ratios of all (or almost all) of the industries in the economy. So in the end one can show, on analytical grounds, why relative prices are likely to be dominated by relative vertically-integrated unit labour costs. If average wages are similar across industries, then just as Ricardo claimed, relative prices are largely determined by relative vertically-integrated unit labour requirements (Marx's unit labour values).

None of the preceding depends on the particular structure of prices being examined. It therefore applies with equal force to observed market prices, to theoretical prices reflecting the competitive equalization of profit rates (prices of production), and even to various sorts of monopoly prices. From this point of view, Marx's famous transformation procedure can be interpreted as an iterative procedure for moving between initial prices which are proportional to vertically-integrated unit labor values (unit labor costs with uniform wages for given types of labor) to prices which also reflect equal profit rates. While such an iterative procedure works for any positive initial prices, Marx's own starting point in labour values is dictated by considerations arising from his explanation of the source of industrial profit (see below).

The empirical evidence provides strong support for such propositions. Studies based on input-output tables in the U.S. indicate that vertically integrated unit labor costs account
for about 85% of the cross-sectional variation of prices of production (as measured by the percentage average absolute deviation), that Marx's own procedure for calculating prices of production (which can be viewed as a linear approximation technique) captures about 95% of the structure of fully transformed prices of production, that the overlap between aggregates such as the marxian value rate of profit and the Bortkiewicz-Sraffa uniform rate of profit is greater than 96%, and that all empirically estimated aggregate wage-profit curves are virtually linear even when wage shares are relatively low and actual output proportions in the economy are very different from those of Sraffa's Standard Commodity Comparisons to *market* prices reveal that vertically integrated unit labor costs account for 88%, while Marx's (partially transformed) prices of production account for 87% and fully transformed (Bortkiewicz-Sraffa) prices account for 86%. Recent theoretical and empirical investigations provide further support for this classical structural approach, and cast an entirely different light on the long standing debate about the determinants of relative prices in advanced industrial economies (Shaikh 1984, 1988, 1998a; Ochoa 1986, 1988; Petrovic, 1987; Bienenfeld 1988).

Closely related to all of this is the question of the source of profits. Here, I have emphasized that it was well known to the classical tradition that there are *two* quite

distinct sources of aggregate profit. The first of these arises from the net transfer of wealth or value into the circuit of capital. This source of profit provided the motive force for merchant capitalism long before the rise of industrial capital. Nonetheless, its basic principles can easily be exemplified in a modern context. Imagine, then, that a television set is stolen from a particular location and ends up being sold by a firm for a profit (which for simplicity in exposition is assumed equal to the selling price). The loss of the original owner is the gain of the final seller, so that from the point of view of total wealth, there has merely been a transfer. But whether or not aggregate profits increase depends on the economic role of the original owner. If the owner happened to be another business, then the business loss will be charged against its profits, which will offset the gains in profit to the seller, so that aggregate profit will be unchanged. But if the owner happened to be a private individual, the loss will not be recorded in any profit-account, whereas the gain will be. In this case, aggregate profit will rise, precisely because the passage of wealth across the boundary of the circuit of capital has involved an *unequal exchange*: getting cheap outside the circuit of capital and selling dear inside of it. It makes no difference to the objective determination whether this is a reward to entrepeneurship, to dishonesty, or to superior force. Historically, force was just as important as guile and wile in 'transferring' wealth from pre-capitalist societies into merchant-capitalist ones.

Like Steuart, Marx was perfectly well aware that unequal exchange gives rise to what he called profit-on-alienation, which was the foundation of merchant capitalism (Marx 1975: pp. 41-43). It is for this very reason that he begins his analysis of industrial capitalism on the initial assumption that all exchange is *equal*, which he takes to mean exchange at prices proportional to labor values. This allows him to show that industrial profit is grounded in the extraction of surplus labor, not in the transfer of wealth via unequal exchange. But then, when we move on to the consideration of prices which are no longer proportional to labor values (e.g. prices of production), unequal exchange is once again part of the issue, and aggregate profit now reflects both profit-on-alienation as well as profit-on-surplus-value. It is possible on this basis to explain the famous 'transformation problem' puzzle in which aggregate surplus value and profit differ when we move from labor values to prices of production, holding the value of money (sum of prices) constant. It can be shown that this difference is strictly limited, and arises from transfers into or out of the circuit of capital flows. Moreover, such a difference will arise when

we compare the effects of *any* two distinct sets of prices. Thus even the deviations of market prices (or monopoly prices) from prices of production will give rise to differing measures of the rate and mass of profit. The phenomenon is perfectly general (Shaikh, 1984, 1992a, 1998).

I use the preceding analysis of price and profit determination to criticize certain key constructions in opposing schools of thought. For instance, neoclassical economics contemptuously rejects any form of the labor theory of value. Yet Garegnani (1970) showed that the neoclassical aggregate production function, supposedly the very antithesis of the classical approach, is theoretically valid only if Ricardo's labor theory of price is strictly true! In the face of this devastating result, neoclassicals have generally taken refuge in the argument that even though marginal productivity theory and "well behaved" aggregate production functions are impossible to justify at a theoretical level, they appears to have considerable empirical strength. In a series of essays on the "Humbug Production Function", I show that this purported empirical strength is simply an algebraic artifact (Shaikh 1974). For instance, the marginal product of labor and capital cannot even be defined in a (Robinsonian) economy with a single fixed proportions technique undergoing Harrod-neutral technical change. Yet, even this completely anti-neoclassical case is perfectly consistent with an aggregate pseudo-production function with pseudo-marginal products equal to so-called factor prices. It follows that a fitted aggregate production function tells us very little about the underlying economic processes (Shaikh 1986).

At the other pole, the branch of neoricardian economics exemplified by Steedman's work attempts to "modernize" Ricardo and Marx by restating them in conventional terms. In spite of its Sraffian roots, this school also rejects any connection between labor time and prices. Here, I argue that even though this approach clarifies some important issues, its basic framework is far too dependent on neoclassical constructs such as perfect competition, long run equilibrium prices, and associated notions of capitalist choice of technique (Shaikh 1981). These neoclassical roots are apparent in its static equilibrium approach to prices, and in its consequent inability to grasp the theoretical and empirical connection between prices and labor times. They also surface in its analysis of the process whereby new methods of production enter into competition with existing ones. Marx argues that individual capitalists with new lower-cost methods of production "make room

for themselves" by cutting selling prices. This is also how the business literature generally sees competition. Yet the neoclassical-neoricardian notion of perfect competition rules out such behavior altogether, by simply assuming that individual capitals take existing prices as "given" even in the face of technical change. The difference in the two conceptions of competitive behavior has profound implications for the movements of the general rate of profit. The problem can be thought of in the following way. Both sides agree that investments are evaluated on the basis of estimates of their future rates of return. This requires estimates of both probable costs and also probable selling prices, since it is the difference between the two which determines the probable streams of profit. The crucial difference arises in the treatment of selling prices. In keeping with their assumption of perfect competition, neoclassicals and neoricardians assumes that even new competitors take prices as given at pre-existing levels. Under this assumption profit-rate maximizing behavior necessarily leads to a *rising* general rate of profit for any given real wage. This is the Okishio Theorem. On the other hand, if it is assumed that firms can engage in price-cutting behavior, then firms with new lower-cost methods of production can always force down selling prices to a point where their own expected rate of profit is higher than those of their higher cost competitors. Under these circumstances, profit-rate maximizing behavior will favor techniques which have lower unit costs, and the Okishio theorem does not hold. Then the movements of the general rate of profit turn out to depend on whether or not the capital-output ratio is rising. If it is, as Marx argued, then the rate of profit will tend to fall over the long run, regardless of what is happening to the profit-share (Shaikh 1992b).

The second area of my work analyzes develops the impact of technical change on profitability and tests the theory against empirical evidence. The locus classicus, so to speak, is Marx's theory of the falling rate of profit. I argue that the struggle of capital against labor manifests itself as the continual **mechanization** of production. But the benefits of this process can only be realized in the struggle of capital against capital if mechanization also lowers unit productions costs. On average, such lower unit costs are achieved by tying up greater amounts of fixed capital tied up per unit output (a process which I call the increased **capitalization** of production). To put it in the language of microeconomics, capitalist production displays an inherent tendency towards lower average variable and average total costs, at the expense of higher average fixed costs. I show that such tendencies

are sufficient to account for a rising aggregate capital-output ratio. And this rising capital-output ratio, which from a marxian point of view represents a rising materialized composition of capital C/(v+s), is sufficient to produce a secularly falling rate of profit even when the profit-share (rate of surplus value) is rising. Finally, I establish that such a secularly falling rate will necessarily produce a "long wave" in total real profit, which accelerates, then decelerates, stagnates, and even falls. On the empirical side, I develop measures of profitability and its determinants for the U.S. from 1899-1987, separate out the underlying trends from cyclical and conjunctural factors, and show that these trends mirror the patterns outlined above. I have argued that both the Great Depression of the 1930's and the great global stagnation which began in the early 1970s can be analyzed from this perspective (Shaikh 1987, 1992b).

A third area of my work has to do with the relation between theoretical categories and the macroeconomic "facts". Clearly, any attempt to test an economic theory must be grounded in a body of data which reflects the categories appropriate to that theory. Existing national economic accounts are based on neoclassical and Keynesian categories, in which the activities of such as those of military personnel, government administrators, sales workers, and production workers are all presumed to add to the wealth of a nation. But classical and marxian theory distinguish between useful *effects* and new products. For instance, police and soldiers guard the nation and property, government administrators oversee the redistribution of state revenues, and sales workers distribute existing goods and services. All of these activities are necessary for social reproduction in some form, but they do not result in the production of new wealth. On the contrary, like the equally indispensable activity of personal consumption, they are part of overall social consumption rather than of production. As defined here, production includes both goods and services, but the category of production services does not encompass all things conventionally classified as a ‘service’: for instance, a musical group and its stage crew produce a concert, whereas the sales people take money in return for access and the guards prevent the unmoneyed from attending. All are providers of ‘services’, but not all are producers of the concert. Orthodox economics restricts the definition of consumption to *personal* consumption, and defines all else (except for transfer payments) as production. In contrast to this, classical economists define consumption to include not only personal consumption but also various forms of *social* consumption such as government administration,

legislative and judicial activities, the military, etc. This implies a correspondingly reduced definition of production. In conventional accounts, an increase in the government bureaucracy or in the size of the military is treated as an addition to national wealth. In classical accounts, it is treated as an increase in social consumption. This is based on an evaluation of the objective impact of different activities, not on any notion that one is more desirable than the other. At a concrete level, a difference such as this profoundly affects the measures of national production, surplus, productivity, etc. It also changes the way in which we analyze any concrete outcome, since it changes our understanding of the underlying causal factors (Shaikh and Tonak, 1994).

The fourth area of my research concerns the relation between state taxation of wage income and corresponding state expenditures on items which enter into the standard of living of wage earners. This question had surfaced in the guise of the argument that the social expenditures of the welfare state constitute a large and growing net "social wage" which workers receive over and above their apparent wages. But an examination of this argument reveals that it either ignored the taxes paid by workers or else seriously underestimated them. My earliest estimates for select postwar years in the U.S. showed an entirely different pattern (Shaikh 1978). Namely, that workers paid more in taxes than was spent by the state on items which entered into their standard of living (e.g. transfer payments, health, education, welfare, housing, roads, recreation, postal services, etc.). That is to say, there was a net tax (negative net "social wage") imposed on U.S. workers. Subsequent studies confirmed this pattern for the U.S. (Tonak, 1984; Shaikh and Tonak, 1987b, Miller 1989). However, similar studies by others (in collaboration with myself) on Britain, Australia, Canada, Sweden, and Germany over the postwar period reveal that the U.S. is exceptional, in the sense that all other welfare states end up transferring a positive (albeit modest) social wage to wage earners. But by far the most striking finding of these studies is that the international range of variation of the net social wage is relatively narrow (seldom varying beyond ±6% of wages and salaries), and that for the combined working population of the six countries studied so far the average net social wage over the postwar period seldom ranged beyond ±3%. It would seem that principal contribution of the welfare state in this regard is to recirculate within the working class (and to dampen the effects of recessions). It certainly does not induce any sustained net transfer to workers.

A fifth area of my work centers around the theory of effective demand implicit in a classical approach to growth. The classicals focused on the fact that, except in times of crisis, growth normal feature of a capitalist economy. Smith and Ricardo took this for granted, and Marx formalizes this (for the first time in economic theory) by showing the conditions that supply and demand must fulfill to be consistent with growth. Harrod picks up the same theme from a Keynesian perspective, only to find that the warranted path appears to be knife-edge unstable. Marx's schema imply that actual supply and demand orbit around a path of expanding output, but Harrod seems to show that they would in fact fly away from such a path. This, combined with the influence of Keynes and Kalecki, shifted the focus in heterodox economics away from the notion that accumulation is driven through the reinvestment of profits. In my own work, I try to show that the classical approach to capitalist reproduction provides the foundation for an alternate, dynamic nonequilibrium approach to the theory of effective demand. One important factor is the link between aggregate excess demand and the deficit finance which fuels it, because the two have opposite impacts on growth. On this basis, it is possible to show that a given discrepancy between aggregate demand and supply can react back upon both in such a way that they end up cycling erratically around each other in a growing system. A rough balance is therefore achieved between aggregate demand and aggregate supply, but only over the average cycle. There is *state* of equilibrium. Moreover, the path defined by this average balance is a growth path, so that growth is intrinsic to the system even in the "short run". The economic structure of such a theory is quite simple and intuitive, but its formalization requires an excursion into the world of nonlinear dynamical analysis in order to prove the generality of its results. The picture of turbulent cyclical growth which emerges resolves Harrod's instability-puzzle, and is very much in line with both classical theory as well as with historical experience. By the same token, it is quite different from the essentially static equilibrium frameworks developed by Keynes and Kalecki. As in Harrod and the classicals, growth is internally driven, and factors such as technical change or government spending *modify* this trend (in particular, the falling rate of profit eventually undermines the trend altogether). By contrast, in Kalecki technical change and government spending are needed to induce a growth trend, because the system's intrinsic tendency is toward stagnation. Such theoretical differences have important

policy implications for the analysis of capitalist accumulation (Shaikh 1989, Moudud 1999).

The profit-driven classical growth framework finds a direct application in the sixth area, which involves the explanation of inflation. In both neoclassical and Keynesian theory, inflation basically arises when the system is stimulated beyond some level of effective full employment. From this (static) point of view, there should be a tradeoff between inflation and unemployment. But history shows otherwise, since in the 1960s-1980s inflation and unemployment increased hand in hand throughout the world. This 'paradox' stimulated an ever more complex series of attempts to explain the empirical evidence by making expectations central to the story, ranging from expectation-augmented Phillips Curves to the NAIRU. The classical approach does not require such a reliance on expectations, because within this framework the limit to growth comes from the rate of profit, not the supply of labor. In Marx's schema of expanded reproduction make it clear that the maximum sustainable growth occurs when all profits are reinvested. Von Neumman proved the same thing more generally half a century later. In either case, the maximum growth rate is the rate of profit. That being the case, one can interpret the ratio of the actual growth rate to the maximum growth rate as an indicator of the degree to which the growth-potential of the economy is being utilized. I call this the throughput ratio. The greater this ratio, the greater the likelihood that excess demand will end up accelerating inflation rather than growth. This makes it directly possible to explain why inflation and unemployment rose and fell together in the US in the 1960s-1980s. During that period the rate of profit fell substantially, and this reduced the rate of growth, albeit to a lesser extent. The fall in the growth rate increased unemployment, but the fact that the growth rate fell *less* than the rate of profit simultaneously increased inflationary pressure by increasing the throughput ratio. After 1982, the US profit rate recovered more rapidly that the growth rate, so the throughput ratio and hence inflation declined, even as unemployment fell. Data for the US show a very striking correlation between the throughput ratio and the inflation rate (Shaikh 1999a) and preliminary studies on many other OECD countries bear this out.

A seventh area concerns the theory of international trade. Classical economics emphasized that technical change lowered unit costs, and that lower cost producers generally beat out higher cost ones. Thus, *within any one*

country, more developed (i.e. technologically advanced) producers of a given set of products would have an absolute advantage over their less developed competitors. This is precisely why capitalists are impelled to continually cut costs. On the surface, it seems plausible that the story would carry over to the case where the more advanced producers happened to be in one country and the less advanced ones in another. Indeed, this is what Smith and Marx implicitly assume. Yet from Ricardo onward, orthodox economics has always assumed just the opposite: namely, that when it comes to international trade, the laws of competition are overturned because the law of international comparative advantage replaces those of absolute advantage. Ricardo provides the key argument, which begins with the acknowledgement that a country with higher production costs will initially run a trade deficit, which will give rise to money outflows to pay for the deficit. But at this point Ricardo argues that the money outflow from the deficit country will lower its price level, via the Quantity Theory of Money, thereby making the country's imports relatively more expensive and reducing their demand. The opposite effect is said to obtain in the rest of the world, so that the country's exports to the rest of the world rise. In this manner, the initial trade deficit of an internationally uncompetitive country is supposed to automatically reverse itself, until trade is eventually balanced. Within such a framework, backwardness is no detriment because trade ensures that the backward country or region will share in the advantages of the advanced ones. Indeed, the greater the differences between countries or regions, the greater the potential benefits claimed for free trade. This theory remains dominant in the profession and in policy, in spite of the fact that its empirical validity is known to be weak.

Heterodox writers have generally reacted to the discrepancies between comparative cost theory and the historical facts by fashioning alternate explanations based on historically specific factors such as monopoly capital (Hilferding/Lenin) or on the existence of substantial international wage differentials (Emmanuel). Interestingly enough, they seldom question the peculiar manner in which orthodox economics extends its theory of competition to the trade between nations. But I take a different tack, by showing that one can extend the classical theory of national competition directly to competition between nations, i.e. to international trade. The key step in all of this concerns the impact of international monetary flows on national economic variables. And it is exactly here that Marx and Harrod argue the money outflow arising from a trade deficit will tighten liquidity at home

and raise *interest rates*, not price levels. These higher relative interest rates will in turn attract foreign capital inflows. Therefore in a regime of free trade, a country at a *competitive* disadvantage in international trade due to its higher costs would exhibit persistent trade deficits covered by foreign borrowing and mounting foreign debt. In the developing world, this implies that a country which remains technologically backward would have to rely on low wages and/or rich resource deposits to sustain its exports. But these same factors can attract powerful foreign capitals, which not only displace local capitals but also help keep a tight lid on wages. Low wages in turn favor relatively more labor-intensive methods of production. Therefore, the normal result of capitalist free trade is to exacerbate uneven development on a world scale. It is only through an extraordinary social effort aimed at technological modernization that a poor country can break out of the gravitational well created by modern free trade. And even here, other problems such as unemployment can arise if the export led growth of the country does not compensate for the displacement of labor by advanced technology. These results provide a basis for a critique of both orthodox trade theory and its marxian and neomarxian counterparts (Shaikh 1980). In more recent work, I have been able to show that the preceding argument provides an excellent empirical foundation for the explanation of exchange rate movements in advanced countries. Real exchange rates are simply international relative prices expressed in common currency, and like all relative prices, their long run movements are regulated by relative total unit labor costs of the dominant producers of those commodities. Shorter run movements, on the other hand, are determined by other factors, most notably surges in foreign capital flows (Shaikh 1999b, Shaikh and Antonopoulos 1998)

The final area of my research focuses on the patterns which arise from the mobility of capital across sectors. The classical economists, particularly Adam Smith, emphasized that the movements of capital in search of higher profits will tend to equalize rates of return across sectors. Since then, this notion has become enshrined in all theories of competition and in the theory of finance (in the form of the principle of arbitrage). But as usual, the trouble is that the empirical evidence does not appear to support this claim. Although interindustrial profit rates tend to move together, they do not appear to cross back and forth in the manner expected from the classical notion of turbulent equalization. A similar problem appears in the comparison between corporate profit rates and the rate of return in the stock or bond markets. And it is here that an important clue emerges: the rate of return

which is equalized by the mobility of capital will be the return on investment, i.e. *new capital*, not on average capital. Since all stocks of a particular type have the same price and earn the same dividends regardless of the date of their issue, the average and incremental rates of return in the stock market are always the same. But the same is not true of industrial sectors, since new plant and equipment will not generally have the same rate of return as older ones. With this in mind, I developed a simple approximation to the rate of return on new investment in the corporate sector, and found that the rate of return in the US stock market closely parallels the corresponding corporate rate over most of the postwar period. The two rates fluctuate substantially, yet they display the essentially the same mean and standard deviation, with the stock market rate anticipating and tracking the corporate rate in a striking fashion (Shaikh 1998). This leads directly to an explanation of the stock prices, which appear to be strongly governed by this measure of their 'fundamentals'. Applying the same methodology to manufacturing sectors across OECD countries results in the striking finding that the rates of return on new investment do indeed 'cross over' a great deal of the time, as can be formalized in various statistical measures (Christodoulopoulos 1995). Finally, linking the rate of return on new investment in the 'real' sector to that in the bond market and in the banking sector provides a means to exlain interest rates through this very same mechanism.

Although some of my work has been published, a good portion remains to be written up. It is my hope to do so in the form of a book on a modernized classical analysis of advanced capitalist economies. All in all, my central concern has been to show that the capitalist system is regulated by powerful built-in forces which account for a great deal of its characteristic patterns. Conjunctural factors and historical events play an important role, but the very stage upon which they are played out is itself constantly in motion. Although is has long been ideologically convenient to portray capitalism as manageable and static, *e pur si mouove.*

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