

Why Growth Rates Differ

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In the professional world of Western universities, the intellectual division of labour sets economics and politics apart. In the political world of advanced capitalism, however, the two sit inexorably together. In the democratic struggle for state power, politicians regularly present themselves to their electorates as purveyors of particular and unique economic solutions; and electorates seem primarily to judge those politicians against the adequacy of their solutions when applied. Centre-left politicians these days like to present themselves as purveyors of the new—as architects of ‘third ways’ that will transcend the limits of first and second ways—and yet in truth, as Keynes saw long ago, what is presented as new in politics is often something long known and discussed in the world of economics. Now, as in the 1930s, it remains the case that ‘the ideas of economists and philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood’; and even that ‘madmen in authority who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back’.¹ Because they are, it becomes imperative for those of us concerned with the economic role of the democratic state to understand in some detail the intellectual universe from which those scribblings came.

By the same token, the world of professional economics likes to define itself as inherently non-political, and to treat its subject matter as ultimately scientific in a value-free sense. And yet in reality its central concerns, available analytical frameworks and sets of resulting policy prescriptions are inexorably concerned with questions of power. That is particularly so in the now fashionable sub-discipline of growth theory. The policy prescriptions currently on offer to Western politicians from the professional advocates of both ‘old’ and ‘new’ growth theory, as we will see, rest on a particular reading of both the actual and the desirable distribution of power in modern capitalist economies: in both cases willingly privileging the power of *market*-based institutions as triggers to growth. Their more radical colleagues may debate with them within the journals of the discipline by constructing alternative technical models which are ostensibly bereft of social analysis and value preferences, but they too carry into their analyses a view of where power lies, and blockages rest, in the determination of growth trajectories: power triggers/blockages anchored either in particular *institutional* mixes (if their inspiration is ultimately Schumpeterian or post-Keynesian) or in particular *balances of class power* (if the intellectual frame-

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work underpinning their analysis is of a more Marxist hue). Indeed, it is one of the ironies of our contemporary politics that, just when a rich vein of economic scholarship is establishing the impact of institutional and class power on the workings of market forces, the policy debate influenced by the new growth theory is urging so limited an agenda of institutional and social reform in the pursuit of enhanced economic performance.

In such a climate, it is often professionally difficult for economists to discuss the questions of power that underpin dominant orthodoxies on how best to trigger economic growth; but in such a climate too, it is vital that the entire social science community is fully briefed on the range of economic theories embodied in (or excluded by) those orthodoxies. This article offers such a briefing.

Theories of growth

The contemporary academic debate on the causes of economic growth has its own powerful orthodoxy which rests on a view of markets as optimal economic and social allocators. This orthodoxy then produces a particular mind-set: one which understands economic activity as the coming together of discrete actors or factors in a linked set of markets. It conceives of the central relationships at play in these markets as organised in distinct production functions; and it understands the process of growth as a combination of two different kinds of movement. It understands economic growth as the sum of movements along a production function (by intensifying labour processes, exploiting economies of scale, and replacing labour by capital: all in the context of a given stock of knowledge, a given technology); and of movements of whole production functions (as the stock of knowledge increases and technical progress ensues).² In such a conceptual universe, differential growth patterns are seen as the necessary consequence of differences in the workings of such production functions: as the consequence of differences in either the quantity of factors deployed or in the quality of their interaction. And the broad thrust of this approach is one that treats the untrammelled interplay of market forces as the best guarantor of both economic growth *and* the convergence of growth paths between economies, such that, if growth and convergence do not occur, analysis has to focus on inadequacies in market performance. It has to focus on the location of inadequacies in either the supply or the quality of factors of production, or on the existence of barriers or blockages to their free and unregulated interplay.

Such an approach, however, though long dominant in professional economic circles, has never been without challenge. It has long been challenged, from within the profession, by (among others) Schumpeterians and post-Keynesians, and is now once more under challenge from the 'new growth theorists'. Each of these approaches, in their different ways, questions whether the interplay of unregulated market forces automatically creates an optimal distribution of resources or eventually pulls economies to similar growth paths and levels. Neoliberal orthodoxies have been challenged too by a Marxist-inspired literature which explains differential growth performance as the product of differing class relationships and underlying structural contradictions within capitalist modes of

production, and which expects neither the convergence of growth paths nor the existence of prolonged and unbroken periods of economic growth.

The debate around neoclassical growth theory

A central reference point in the recent debate on the causes of economic growth has been the work of Robert Solow who, with others, formulated in the 1950s what is now widely referred to as 'old growth theory' or the 'neoclassical growth model'.³ Solow later described his writings in the mid 1950s as an attempt to improve on the then dominant Harrod-Domar model of economic growth. Harrod-Domar had explained economic growth as the consequence of the interplay of three variables—the savings rate, the rate of growth of the labor force, and the capital-output ratio—which were all givens/constants: one a matter of preferences, the second a matter of social demography, the third a matter of technology'.⁴ Dissatisfied with such a view, not least with its implication that growth could come by increasing the savings ratio alone, Solow replaced their notion of a capital-output ratio with what he later termed 'a richer and more realistic representation of technology' by distinguishing just three factors: 'straight labor, straight capital, and residual technical change'.⁵ Against Harrod-Domar, his model argued that the equilibrium growth rate of an economy was a function not of its saving/investment rate but 'of the rate of technological progress in the broadest sense',⁶ such that each economy had 'a unique and stable growth path determined by the growth of the labour force and of technical progress, with the latter usually assumed to expand at a regular, if unobserved, rate'.⁷ In his explanation, technology held the key to economic growth, while being itself unexplained within the model, and convergence between economies was to be expected, as diminishing returns encouraged capital to redeploy.

Robert Solow's work has had an immense impact on the recent debate on why growth rates differ, but ultimately his model was (and is) weak. It provided no explanation of its key variable—technical progress. Nor, in the event, was its assumption of convergence triggered by diminishing returns to capital sustained by the available evidence. These weaknesses ultimately stimulated a range of alternative explanations of economic growth now generally labelled 'new' growth theory or—more accurately—'post-neoclassical endogenous growth theory'. These new writings tend to depart from the assumptions and approaches of neoclassical economics only cautiously and to a limited degree, but do so nonetheless by criticising the absence of a linkage, in Solow's original model, between investment rates and growth rates. Much of the material produced by economists challenging Solow's model in this way is heavily theoretical and abstract, in the manner of modern economics, and each new growth theorist has his/her own growth model: but the approach as a whole shares a general tendency to define capital more widely than was normal in the neoclassical model and to emphasise endogenous sources of improved economic growth.

So Lucas, in one of the formative articles triggering the new approach, emphasised the importance of investment in human capital as a trigger to growth;⁸ while Romer, in another formative piece, emphasised instead the way in which capital accumulation triggers learning, which then necessarily

spills out (beyond the initial investing company) to raise efficiency across the economy as a whole.⁹ The key idea in these models is that 'social returns to investment are much higher than private returns',¹⁰ and that 'growth may go on indefinitely because the returns to investment in a broad class of capital goods—which includes human capital—do not necessarily diminish as economies develop'.¹¹ In this way, competitiveness and growth are not treated as something which is 'given' to the economy by exogenously generated technical progress, but as something stimulated 'internally' by investments—in knowledge and in people—to the point at which indeed, in the writings of Maurice Scott, the technical progress which Solow treated as an exogenous cause of economic growth is entirely subsumed within the notion of investment, such that, when demographic change is allowed for, 'all growth must result from investment' with 'no room left for some third, quite separate, factor called "technical progress"'.¹²

For our purposes here, the writings of the new growth theorists contain two strong messages. One is that, *even between advanced capitalist economies, growth trajectories can differ permanently*. Since technical progress can be created internally, there are no automatic diminishing returns and no necessary convergence between growth paths, even in core capitalisms. The second message coming from the new growth theory is that *state policy has a role to play in determining whether growth paths continue to diverge or to align*. There is none of neoclassical theory's principled antipathy to state action in the new growth theory. Since 'a general implication of the new growth economics is that institutions and policy may have stronger effects on the growth rate than would have been predicted using the traditional neoclassical growth model',¹³ a case can be made from within new growth theory 'for subsidies, or other policy interventions, to raise investment or R&D or human capital (or perhaps all together)' to trigger in various ways 'the accumulation of knowledge'.¹⁴ New growth theorists are not, however, advocates of extensive state planning, or of substantial public investment in specific industries or sectors. Theirs is an enthusiasm for a more nuanced and more targeted form of industrial policy, one that demands only discrete and limited injection of public resources into research and development, into education and training, and into the reform of institutional structures in labour and/or capital markets.

Schumpeterian and post-Keynesian theories of growth

The new growth theorists are not alone in their unease with neoclassical growth theory; nor are their writings the only source of prescriptions available to policy makers keen to encourage better growth performance. Mainstream economics also has space for, among others, both Schumpeterian and post-Keynesian theories of growth. Schumpeterian economics posits a quite different definition of efficiency from that dominant in neoclassical economic circles. In neoclassical economics, the benchmark against which to judge economic activity—Pareto-optimality—is invariably applied in a static and short-term manner. This will not do for Schumpeterians, for whom the test of an economy's efficiency has to be more dynamic and long term than that. In a Schumpeterian growth model, it is

not competitive pressures *per se*, but the possibility of temporarily replacing competitive relationships with oligopolistic ones which 'provides the bait that lures capital on to untried trails',¹⁵ and which is in consequence the key endogenous source of technical progress. And for Schumpeterians it is invariably the large company which these days is the institutional focus for such entrepreneurial or innovative behaviour.

In such a model, the key to successful economic growth—and by implication to differences in patterns of growth—is risk-taking or entrepreneurship. At the heart of a Schumpeterian explanation of growth lies the distinction between two kinds of capitalist activity: enterprise and management. This makes the difference between 'innovation' and 'adaption' central to a Schumpeterian understanding of why some economies flourish and others do not: and because it is, the agenda of issues relevant to the Schumpeterian understanding of the causes of economic growth stretches out far beyond the restricted terrain of neoclassical growth models. It stretches out, at the very least, to the study of institutional structures likely to generate innovation, and even to the social determinants of technology diffusion and transfer. Schumpeterian-inspired theories of growth, while being as sensitive as new growth theories to the endogenous origins of technical change, deepen and widen the range of materials relevant to any understanding of why growth rates differ. They add a more dynamic notion of economic efficiency. They attribute key causal weight to the oligopolistic struggles of large firms; and they emphasise the importance of entrepreneurship as the key to 'the rate of technological progress in the broadest sense' which Solow's original growth model located as vital but could not explain.

To that supply-side list of growth determinants, post-Keynesian economics then adds the role of demand, increasing returns and dynamic differences between sectors of the economy. The key theoretician here has been Nicholas Kaldor. Kaldor's own initial model of growth broke with neoclassical growth theory in a number of critical ways:¹⁶ eschewing the use of the production function in favour of a 'technical progress function', making rates of investment the key determinant of technical progress (and as such, an endogenous trigger to innovation), and tying such investment rates not to personal savings but to corporate rates of retained profitability (that is, to company rather than to individual rates of saving).¹⁷ In his later writings on growth (and in particular on differential growth performance) Kaldor placed heavy emphasis on the special role of the manufacturing sector as 'the engine of growth' and on the tendency of 'a fast rate of growth of exports and output ... to set up a cumulative process, or virtuous circuit of growth, through the link between output growth and productivity growth'.¹⁸ In this way, post-Keynesian growth theory became highly sensitive to the possibilities of self-sustaining, as well as endogenously generated, economic growth; became sensitive, that is, both to the way in which a fast growth of demand, translated into a fast growth of supply, could effect a rapid growth of productivity (and thus increasing returns to scale in many sectors of the economy, particularly manufacturing), and to the way in which the rate of technical progress could be affected by the action of firms (via their rate of investment) and by the rate of growth in general (through learning-by-doing).¹⁹

At the heart of a post-Keynesian understanding of economic growth stands the notion of cumulative causation. To post-Keynesians, economies, once weakened and if left to themselves, weaken further still. For their poor profit levels generate low investment, low investment produces diminished competitiveness, diminished competitiveness guarantees poor profits, and the cycle begins again. The resulting balance of payments deficits require high interest rates, to hold in foreign capital; and high interest rates deter domestic investment, eventually to produce further balance of payments deficits of a progressively more serious kind. On this argument, and quite contrary to neoclassical growth theory, market forces on their own will not break cumulatively self-sustaining cycles of underperformance and therefore will not automatically trigger either economic growth or economic convergence. And if they will not, then the adequacy of Solow's original growth model is much in doubt. Those doubts may be slightly assuaged by new growth theory's tentative explorations of internal sources of technological change, and more robustly by the self-confident Schumpeterian specification of large companies as that indigenous source. What post-Keynesians have then added is the importance—in triggering growth and preventing cumulative decline—of favourable conditions in the product markets of those innovating corporate giants, so raising issues around the realisation of profits also missing from the original Solow model.

Marxist theories of economic growth

By this point we are on territory long familiar to Marxist critiques of capitalist growth performance, critiques which combine assertions about the necessary conditions surrounding capital accumulation (of the sort explored by new growth theory and by Schumpeter) with assertions about the conditions necessary for the realisation of profit (of a post-Keynesian kind).²⁰ Of course, there is no single Marxist theory of growth any more than there is a single neoclassical growth theory; but like neoclassical growth theory, it is legitimate to speak of the existence of a general Marxist approach to the question of capitalist growth. It is an approach which breaks with the language of neoclassical economics and departs from its preoccupation with the production function—by talking instead of capital and its accumulation, and by conceptualising economic growth as the extended reproduction of circuits of capital.

Marxists understand the origins of economic growth to lie, not in the *technical* interplay of discrete factors of production, but in the *social* interaction of producing classes. In a capitalist mode of production, where commodity production is general and labour power has itself become a commodity ('wage labour'), the basic classes in play are capitalists and proletarians. Growth occurs (in Marxist terms, the forces of production are developed) through the systematic expropriation by the capitalist class of the surplus product of proletarian labour, a surplus realised by capitalists in the form of profits and held in the form of capital. On a Marxist understanding of the origins of capitalist economic growth, profits are *realised* in the sphere of exchange but are *created* in the sphere of production; and demand and supply are but moments in a single circuit of

economic activity whose reproduction depends on the systematic extraction of surplus value.

In such a system, growth is triggered by the struggle to generate and realise profits. This growth struggle is necessarily, perpetually and simultaneously played out on two class fronts: through a competitive battle between capitalists for market advantage, and in a class confrontation between capital and labour over surplus extraction. The competition between capitalists alters the relative weight of types of capital over time, normally shifting centres of gravity of whole capitalist classes initially from trade to industry and eventually from industry to finance. It also builds in a tendency to monopoly as winners swallow losers in the rise and fall of business cycles. At the same time, the class struggle between capital and labour stimulates enhanced productivity and eventually technical innovation, as the inability of the capitalist class indefinitely to extend the working day and intensify the work process eventually induces individual capitalists to invest in new machinery—in Marxist terms, to shift from processes of capital accumulation based on the appropriation of absolute surplus value to those based on the appropriation of relative surplus value, by altering the organic composition of capital. On this understanding, economic growth then comes in waves: as new technology first drastically increases labour productivity and surplus extraction, increases the rate of profit and eases the relationship between capital and labour, before eventually undermining that rate of profit (and slowing capital accumulation) as the productivity gains of the new technology are fully realised, the rate of increase of surplus extraction no longer keeps pace with the growth rate of the stock of capital, and basic class antagonisms intensify again. Different Marxist (and post-Marxist) edifices are then built on (or even away from) this classical base; but they all share a common point of origin in a broadly Marxist discourse that understands economic growth as ultimately a question of capital accumulation achieved through market competition between capitalists as they collectively dominate and subordinate labour.

Explanations of Growth Differences

In the light of the prior existence of so extensive a debate on the determinants of growth, it is perhaps not surprising that there should also exist a parallel set of disagreements on why growth rates differ. Among the key players in that second debate are Edward Denison, Angus Maddison, Mancur Olson, Michael Porter and William Lazonick; and in its popular dissemination, Francis Fukuyama and Will Hutton.²¹ Theirs is a debate in which many of the less powerful contributions are characterised by either eclecticism or confusion: but it is also a debate in which the arguments of the key players gather their force in part through their loyalty to one coherent theory of growth, or through their self-conscious exploration of the need to synthesise distinct intellectual positions. Intellectual continuities of the clearest kind link classical growth theory to the writings of Denison, Maddison and Olson; and there are clear similarities of approach between new growth theory and what is often referred to as 'the new institutionalism'. Schumpeterian influences are evident (and acknowledged) in the work of both Porter and Lazonick, and there are clear post-Keynesian

influences on the work of commentators such as Hutton. There is even a variety of Marxist explanations of why growth rates differ: a range of left-wing scholarship stretching from the semi-regulationist approach of the American 'social structure of accumulation' school, through the post-Fordism of Best and of Lash and Urry, to the world-systems approach of Giovanni Arrighi.²² Among the key modalities in this debate are the following.

The debate around growth accounting

Approaches to the question of why growth rates differ that are inspired by neoclassical economics concentrate on the supply side of economies. Characteristically, they understand those supply sides in terms of production functions, seeing output as 'a function of the inputs of labour, accumulated capital and land, and of the productivity of these factor inputs'. The issue facing growth theorists with such a mind-set in the 1950s was to determine 'how much [of any pattern of economic growth] was due to an increase of each of the inputs and how much to that of their productiveness'.²³ The seminal initial answer to that question, from an approach now generally known as 'growth accounting', was the 1967 study by Edward Denison of *Why Growth Rates Differ*. A large number of other studies of a similar kind have subsequently become available. In each case, the approach taken has been broadly the same: the isolation and measurement of discrete factors influencing economic performance, whose differential presence and quality is then used to explain growth differences. The characteristic form of analysis adopted by growth accountants is one which begins with a long and careful explanation of how the size and impact of each factor in turn is to be calculated, and of how indexes of factor productivity are to be constructed. Tables are then produced giving each factor a weight or number for each economy in turn, so that, by comparing the numbers, it becomes possible to impute the contribution of each factor to an economy's growth performance. By examining the list of factors, it becomes possible to impute a general explanation of the forces underlying economic growth. The result is a series of lists of pertinent growth sources. Denison listed 23 such sources in his 1967 work, plus a residual estimate—which he termed 'a basket containing the effects of many different influences whose effects could not be isolated'.²⁴ Among his key sources of economic growth were 'advances in knowledge' and 'increases in the stock of non-residential structure and equipment'; and among his key barriers to the full realisation of growth potential were inadequacies in market size and 'obstacles ... deliberately imposed by government, business or labour unions'.²⁵

As Denison's work illustrates clearly, growth accounting gives some weight (as an explanation of growth in per capita wealth) to factor inputs (to actual additions to the stock of capital and the supply of labour); but the bulk of any such growth is explained as the product of increases in total factor productivity (as the product of increases, that is, in the output/factor inputted). What growth accounting then does is to go in pursuit of the causes of such increases in total factor productivity; it does so by isolating, and attempting to measure, the impact of each cause in turn (hence Denison's list). But what is striking is how little of the total growth pattern even the totality of these causes

is then found to explain. There is always a residuum, a big unexplained chunk of economic performance, which Denison (following Solow) 'explained' by attributing it to technical progress, to the advance of knowledge incorporated into production;²⁶ even in Denison's 1985 study, that final residuum, as Abramovitz called it, was still 'by far the most important source (51 per cent) of labour productivity growth in the post-war period'.²⁷ Later growth accountants (including Denison himself) have worked hard to reduce the size of that residuum, largely without success, leaving at the heart of this form of explanation a variable which growth accounting can *label* but which ultimately it cannot explain. New growth theory can be seen, in part at least, as a response to this problem, offering endogenous explanations of technical progress that link it back to other variables in the Denison list: to rates of capital accumulation, or to investments in knowledge and training.²⁸ Both Schumpeterian and post-Keynesian explanations of growth differentials (as we will see) also have much to say about the roots of the technical progress that growth accounting has such difficulty in explaining.

Even the key advocates of growth accountancy are aware of its limitations as a full explanation of why growth rates differ.²⁹ What growth accounting produces is, at best, a suggestive taxonomy, a listing of what Maddison terms only 'proximate' causes. Maddison's own list of the 'proximate causes' of differential patterns of economic growth overlaps and extends that of Denison. He adds such things as 'structural change', 'foreign trade' and 'economies of scale' to the more conventional growth accounting list of 'natural resources', 'labour input', 'education and skills', 'physical capital stocks/levels of investment' and 'technical progress'. But it is Maddison's attempt to locate ultimate causal forces that has set his work apart from Denison's. Here we find two new lists: one, a description of the key institutional features of Western European and North American economies that initially triggered and sustained economic growth; the other, focused on the causes of the post-1945 economic acceleration. Maddison's first supplementary list runs the whole gamut of post-Enlightenment Western European history and includes the rise of science, the replacement of feudal property relations with modern ones, the creation of nation-states, the unique character of the Western family system and the rise of democratic pressures. His post-1945 acceleration list emphasises the importance of 'enlightened international economic policy' by the USA (starting with the Marshall Plan) and a once-and-for-all exploitation by some (but only some) economies of technological opportunities hitherto blocked by wars and protectionism.³⁰

This move from the proximate to the ultimate level of causality by a leading growth accountant does not, in the end, escape from growth accounting's propensity to substitute taxonomies for explanations. However, it does represent an important shift of focus, moving the debate away from the measurement of discrete and quantifiable economic variables towards the institutional and historical analysis of the differential distribution (in space and time) of what Moses Abramovitz called 'social capability' and William Baumol 'ancillary variables' (variously listed by them as educational capacities, political, commercial, industrial and financial institutions, openness of the economy and political stability).³¹ If Abramovitz and Baumol are right, the crucial issue to be settled, if we are to

understand why growth rates differ, is not the relative weightings of particular growth factors but the nature of the factors limiting their deployment—blocking what Abramovitz elsewhere called ‘the plasticity ... of relevant social structures’³²—particularly those blocking the diffusion of knowledge and the rate of structural change. For economists and economic historians trained in (or sympathetic to) neoclassical economic theory, those ‘blocking’ factors have to be market-distorting ones, and they have to be unevenly distributed between societies if growth rates are to differ. Abramovitz listed a number of key analysts convinced of the growing role of such barriers to growth: ‘Olson, Fellner, Scitovsky, Kindleberger, Lindbeck and Giersch’.³³ For our purposes, the work of Mancur Olson can be taken as illustrative.

Olson stands full square with the working premises of (and indeed positions himself unambiguously within) neoclassical political economy. The whole purpose of his 1982 study of *The Rise and Decline of Nations* was to take further (to deepen and complete) Denison’s original listing of the institutional barriers to growth, by drawing heavily on public choice theory—on what he termed elsewhere ‘familiar behavioural assumptions that have proven to be robust and useful in economic analyses generally’.³⁴ The main institutional barrier to growth, according to Olson, and the key to differential growth performances even among advanced capitalist economies, is the special interest pressure group. The hard core of his argument is that such ‘interest groups develop modes of collective action to further their particular interests, [which] increasingly over time ... distort the efficiency of resource allocation to a very important degree’.³⁵ Implicit in his theory is the proposition that the countries with the lowest rates of growth of total factor productivity are those which suffer the most from the pernicious effects of special interest groups. Explicit in his theory is the proposition that political stability can be bought at too high a price: that the more established a democracy becomes, the more likely it is to acquire such special interest groups, which then limit growth by blocking innovation and efficiency-savings and by focusing political activity disproportionately on the distribution of wealth, rather than on its creation.

Olson’s writings on growth differences are now widely cited in the relevant academic literatures, where his has become one voice in a wider argument about the general impact of institutional variables on the functioning of the modern economy. The other key text widely cited as inspirational to this ‘new institutionalism’ is Douglass North’s *Institutions, Institutional Change and Economic Performance* which, like Olson’s work, is a conscious attempt to supplement neoclassical growth models by the addition of institutional analysis. Indeed, North and Olson agree on the propensity of political institutions to atrophy under the impact of vested interests, but what in Olson is offered as an entire explanation of growth differentials is, in North’s work, simply treated as one example of the more general impact on growth performance of institutional variables. For North, like Olson, believes that growth paths are fixed by more than the distribution and quality of discrete factors of production. They are fixed by the impact on those factors of dominant institutions, ideas and ideologies, and the necessary interplay of the polity and the economy. For North, growth rates differ because of the impact of institutional variables on the supply and quality

of factor inputs, in interactions which trigger different self-sustaining growth trajectories (or, in his terminology, path-dependent growth); and in consequence for him path dependency becomes 'the key to an analytical understanding of long-run economic change', while the polity (political choices, initiatives and programmes) becomes a key variable moving economies from one path-dependent trajectory to another.³⁶

Schumpeterian and post-Keynesian explanations of growth differences

Yet, as we noted earlier, new growth theory is not the only route forward from neoclassical models of economic growth. Nor in truth is it the most obvious. For once Solow and others had 'extended the neoclassical theory of growth by including technology as a third factor of production', the logical need—if our understanding was to go beyond their treatment of 'technology as a free good, growing at a constant exponential rate,³⁷—was to find a body of economic writings which effectively privileged the creation and diffusion of technology as the key to growth. Schumpeterian growth theory was already available for that purpose, effectively understanding economic growth as the combined result of two conflicting forces: innovation which tended to increase technological gaps between national economies, and imitation or diffusion which tended to narrow them. The whole formulation of the growth issue by those from a Schumpeterian background predisposes them to privilege corporate behaviour and managerial quality as triggers to innovation, and economic and social arrangements as facilitators of technology diffusion. Such predispositions are particularly evident in the writings on growth differences of two major players in the recent debate: one touched lightly by Schumpeterianism (Michael Porter) and one heavily influenced by Schumpeter's later writings (William Lazonick).

In true Schumpeterian fashion, in Porter's explanation of why growth rates differ 'entrepreneurship and innovation prove central to national advantage', and the question of why the growth rates of national economies differ is reset to one of 'why some firms and individuals innovate in particular industries, and why they are based in particular nations'.³⁸ The trick, for Porter, is then to explain why and how a particular nation becomes a site for such internationally competitive companies, why and how 'a nation provides the environment in which its firms are able to improve and innovate faster than foreign rivals in a particular industry'.³⁹ The answer, for him, lies (as it did for Denison) in the quality of a whole string of separate factors—but factors now understood as interacting in a systematic and mutually reinforcing way. Porter's growth variables are grouped in four broad categories ('factor conditions', 'demand conditions', 'related and supporting industries', and 'firm strategy, structure and rivalry') and they interact in Porter's famous diamond, where their interplay is supplemented by 'government policy' and the role of 'chance'.

Within such an approach to the question of differential growth performance, the key process to study becomes that of *factor creation*: the ways in which an economy creates and upgrades labour, capital, knowledge and infrastructure. For Porter the key triggers to such upgrading are 'domestic rivalry', 'the presence of supporting and related industries' and 'the quality and sophistication of demand';

and the key to growth is the way in which successful industries cluster together in mutually reinforcing ways, clustering both vertically (buyers and sellers) and horizontally (common customers, shared technology, infrastructure). For Porter, economic decline is then similarly diamond-triggered. Decline begins if factor conditions deteriorate, if local needs fall out of sync with global demand, if home buyers lose sophistication, if technological change leaves gaps in the local portfolio of factors and support industries, if goals limit rates of investment, and if locally based firms lose flexibility to adjust. And, in fact, Porter (like Schumpeter before him) thinks such decline in the rate of innovation is generally likely over time, as one stage of development necessarily gives way to the next. Porter's analysis thus introduces the notion of stages of development ('a factor driven' stage being replaced in turn by an 'investment driven' one, an 'innovation driven' one and finally a 'wealth driven' one), so opening the possibility that differential growth rates might be explained, not simply by deficiencies in particular factor mixes, but additionally by the fact that, at any particular point in time, different economies will occupy different positions on a growth trajectory which ultimately applies to them all.

This sensitivity to the question of stages, time, and the fit between factor deployment and dominant technological paradigms, is very much a feature of William Lazonick's work too, although there it has been used to sustain a much stronger sense of different 'models' of capitalism—whose differential growth patterns are then explained in terms of the appropriateness or otherwise of particular forms of corporate governance and activity to particular stages of capitalist development. Lazonick is an enthusiastic 'late Schumpeterian' whose work draws on other intellectual sources as well (including that of Alfred Chandler); but he remains centrally committed to the superiority (for the understanding of economic growth) of a Schumpeterian sensibility to the social structures generating and sustaining innovative entrepreneurs over what he takes to be neoclassical economics' more restricted focus on the marginal calculations of the adaptive manager. In fact, Lazonick is highly critical of the dominant paradigms in professional economics, seeing them as outmoded by processes of industrial change to which neoclassical intellectual frameworks are necessarily blind.⁴⁰

Running through the Lazonick corpus is a strong sense of the way in which the social arrangements in and around production that give dominance in one period of growth prove both difficult to shed and increasingly inappropriate for high performance in the next. The characteristic Lazonick move—following Chandler—is to differentiate stages of capitalist development by specifying the form of corporate organisation which is competitively dominant in each. Lazonick has regularly distinguished three such stages—'proprietary capitalism', 'managerial capitalism' and 'collective capitalism'—and then treated the theoretical systems of neoclassical economics as appropriate to the first of those stages but not to the third. Lazonick attributed the decline, first of the UK during the period of US ascendancy, then of the USA itself in the face of Japanese competition, to the consequences of deeply entrenched 'institutional rigidities'. According to him, each dominant economic power settled into particular forms of corporate organisation and governance in its period of dominance, forms

which became progressively less appropriate over time, but which nonetheless were only slowly and partially replaced. This view of the rise and fall of dominant economies (and associated organisational paradigms) provides Lazonick with an argument that patterns of corporate governance hold the key to successful economic growth, and that differential capacities for flexibility in corporate governance hold the key to why growth rates vary.

This capacity for flexibility is also an element in a number of post-Keynesian explanations of growth differentials, explanations developed by, among others, Posner, Gomulka and Cornwall⁴¹—all of whom, in their different ways, see a relationship between growth and technology, recognise the ability of economies to ‘catch up’ through technology transfer, and emphasise that ‘the rate at which a country exploits the possibilities offered by the technology gap depends on its ability to mobilise resources for transforming social, institutional and economic structures’.⁴² And there now exists a considerable body of literature which is broadly in agreement with Lazonick’s underlying view of certain models of capitalism as competitively, perhaps even morally, superior to others; and with his dissatisfaction with intellectual traditions that treat market modes of resource allocation as unproblematically superior and universally applicable.⁴³ Much of that literature is also post-Keynesian in inspiration, with Will Hutton its most prominent UK exponent. In his hands, and in the hands of many centre-left academics and politicians, explanations of why growth rates differ are now linked to an argument about the economic (as well as the moral) superiority of *trust*-based models of capitalism. The claim is that cooperation between workers and managers holds the key to contemporary economic success; and that economies rise and fall to the degree that their institutional structures, cultural systems and political leaderships recognise and value such cooperation.

Marxist explanations of why growth rates differ

This takes us to Marxism, to an as yet largely underdeveloped body of radical scholarship which explains growth differences in terms of class relationships, structures of accumulation and inherent contradictions of modes of production. The Marxist material available to us on why growth rates differ is patchy. It is somewhat patchy in coverage, in that the best of it either has a single-country focus or is concerned to analyse world capitalism as one system, and in doing so has only occasional insights to offer on the differential growth rates of its parts.⁴⁴ It is also somewhat patchy in quality, in that much of the comparative material on offer here as ‘Marxist’ proves on inspection to be a somewhat eclectic resetting, in Marxist (or *marxisant*) categories, of fairly conventional centre-left arguments.

So, for example, in Lash and Urry’s two volumes, *The End of Organised Capitalism* and *Economies of Signs and Space*, and in Best’s *The New Competition*, the general explanatory framework on offer is similar in kind to Lazonick’s ‘stages of capitalism’. As we saw earlier, Lazonick had three stages: Best made do with just two: ‘the old competition’ and ‘the new’. The early Lash and Urry began with ‘organised’ and ‘disorganised’ capitalism; the later Lash and Urry uses three forms of what they now term ‘reflexive accumulation: collective,

practical and discursive'. But regardless of the number of stages specified and the terminology used to describe them, the effect is the same. The UK, the USA and Japan rose and fell in dominance as one stage gave way to another, and as the forms of corporate organisation prevailing in each fit (or failed to fit) with the technological and competitive imperatives of each new stage.

However, two things tend to distinguish the post-Marxist material here from the more Schumpeterian formulations of Lazonick. One is its willingness to use the language of regulation theory to describe or explain that change (and hence to put more 'social' depth and range into the explanation on offer): to conceive of the postwar capitalist world as in some sense first 'Fordist' and now 'post-Fordist' in character, rather than as merely first 'managerial' and then 'collective' in its forms of corporate governance. The second is a propensity, not simply to explain the differential performance of successful capitalist economies within each stage in terms of the dominant relationships of capital and labour evident in each (Lazonick does that too), but to see in those relationships the persistence of irreconcilable class contradictions which leave even dominant economies vulnerable to ultimate slowdown and decay.

In fact, the more orthodox the Marxist scholarship, the greater is the propensity to treat the different models which preoccupy the new institutionalists as simply differing versions of a common mode of production, and to see each model as just as prone as the rest to run into internal contradictions and eventually decline and decay. The sources of that decay are differentially described by a variety of Marxist scholars, but ultimately rest in contradictory class relationships: between sections of the dominant capitalist class, and/or between capitalists and proletarians. There are, for example, Marxist scholars who point to weaknesses in social classes as the key to differential performance. Anderson uses such an approach to explain UK economic underperformance ultimately as a 'failure' of the industrial bourgeoisie;⁴⁵ and other Marxist scholars have used the weakness of the working class to explain differential economic performance in economies as disparate as the UK, the USA and Japan.⁴⁶ In fact, Marxist scholarship is sharply divided on the role of the working class in the performance of capitalist economies between those emphasising the weakness of workers as a contributory factor in capitalist decline and those—more orthodox—who emphasise the contribution of proletarian strength to the productivity fall and profits crisis that signalled the end of capitalism's long postwar boom.⁴⁷ But the general tendency of all forms of Marxist scholarship is to explain differential growth rates of particular national capitalisms by examining the character of their dominant rather than their subordinate classes, looking in particular at the relative weights of industrial, commercial and financial bourgeoisies, and at the nature of the relationships between them; and linking those dominant class patterns back to arguments about the place occupied by each particular national capitalism within the developing matrixes of world capitalism as a system. David Harvey does that briefly, in his explanation of what he calls 'capitalism's spatial configurations';⁴⁸ and Giovanni Arrighi does it at length in his widely discussed *The Long Twentieth Century*.

Arrighi's work actually makes explicit much of what in other Marxist studies is often less obvious, namely the centrality of the character of the world

capitalist system to the performance of any national capitalism within it. For him, the growth of individual economies has to be analysed at the global level, since it is the articulation of national economies with the emerging world system which explains their trajectories, and the nature of their internal class systems which explains why some economies temporarily articulate more successfully than others. That success is 'temporary', and each period of dominance by one economy is necessarily more temporary than the one before, because of central contradictions in the capitalist accumulation process. There is—according to Arrighi—always a moment of overaccumulation, when successful capitalists retreat from the financing of production and trade. Such moments come more quickly (each 'long century' of dominance shrinks) as the enhanced capacity of each hegemonic power to penetrate more and more of the world economy runs more quickly than its predecessor into the necessary limits of the markets that its expansion creates. In the hands of Arrighi, therefore, as in those of many scholars, it is not a matter of counterposing successful and unsuccessful models of capitalist growth, and explaining the relative sluggishness of the latter in terms of their dissimilarity to the former. It is a matter rather of understanding the specific historical conjunctures and class formations that enable particular national capitalisms briefly to flourish, while retaining a clear sense of the inevitable perishability of even the most apparently dominant and secure capitalist hegemon. Japan may now be in the ascendancy, but not for long.

Even so, it would be wrong to create the impression that we yet possess a fully worked through Marxist explanation of why growth rates differ. We do not. Instead, for the moment all that is available to us is a series of discrete studies of particular growth experiences, and a number of general explanatory probes at the level of the world system as a whole, of which Arrighi's is the most recent and sophisticated. But, even in its underdeveloped form, Marxist scholarship still brings to the potential armoury of those in pursuit of the political economy of modern capitalism a sharper sense of the role of class relationships in the moulding of economic performance than is common in centre-left analysis, and a clearer insistence on the ultimate fragility of economic success when attained. Marxism, no less than other intellectual traditions, has as yet no fully worked through answer to the pattern of capitalist growth; but it does have its own way of posing the appropriate question. For each intellectual tradition examined here has shifted the focus of the question somewhat, and Marxism is no exception. In the debate between neoclassical and post-Keynesian economists, the emphasis shifted subtly from one of *why growth rates differ* to *whether particular models of capitalism are superior to others*. Marxist scholarship then adds an extra shift—to the question of *whether successful growth paths are sustainable*, and *whether the determinants of their success or failure lie at the national level or beyond*.

Conclusion

Moving between the various explanations that are currently available to us on why growth rates differ is, in one sense, like peeling an onion: when you remove the outer skin it then becomes possible to slice the onion deeper and deeper

depending on the size and character of the knife. As we have already seen, the outer skin of neoclassical growth theory—the source of its faith in the one-to-one relationship of market processes to successful economic performance—is the belief that long-run diminishing returns eventually trigger resource deployment to a point of Pareto-optimality. But once that premise of inevitable diminishing returns is challenged or removed, it becomes possible to anticipate the existence of self-sustaining growth paths of a permanently differential kind, and growth paths moreover which even in the long term have no built-in propensity to move to any point of Pareto-optimality. It becomes possible to do at least one of three things. It becomes possible to understand optimality in a more dynamic and long-term sense, and to see the role of imperfect competition in its generation and sustenance. It becomes possible to anticipate the existence of virtuous and vicious cycles of economic growth and decline, with the cycles sustained by patterns of cumulative advantage and disadvantage. It even becomes possible to see the world in terms of combined and uneven development, to see the world as one in which the underdevelopment of some economies is a vital prerequisite to the growth of others. It becomes possible, that is, to offer not simply minor modifications of neoclassical explanations of growth, of the new growth theory kind. It becomes possible to formulate instead qualitatively distinct explanations of why growth rates differ—explanations rooted in either Schumpeterian, post-Keynesian or Marxist theories of growth.

There are, of course, other ways of telling this intellectual story, and of mapping the theoretical underpinnings of the contemporary policy debate.⁴⁹ Perhaps the most obvious alternative method is a chronological one, which would certainly point up (as perhaps this does not) the growing sophistication of the debate around growth theory—from its initial clash of demand and supply side models to the contemporary awareness of the importance of history, institutions and classes. But one advantage of tracing traditions over time, rather than debates through time, is the clarity it brings to the present conjuncture of theoretical argument and policy prescription. That conjuncture is one characterised by extreme theoretical narrowness and policy moderation, and is best read as a movement from an older (and wider) consensus to a new and a depleted one. The old consensus took in Keynesianism on the left, and developmental statism of a loosely Schumpeterian variety on the right. Both are now somewhat out of fashion—left-wing social democracy certainly is—in both university departments and Western corridors of power. There the debate has largely been narrowed down to a technical discussion between an old and a new face of liberalism: between neoclassical growth theory on the one side, and the new growth theory on the other. In the process many of the explanatory variables and policy levers which enjoyed legitimacy in the old consensus have been set aside and a new convergence promoted—one that shuts down models of capitalism (not to mention models of socialism) that deviate from the predominant market capitalism form.

In Tony Blair's New Britain, just as much as in Bill Clinton's America, the questions being asked in the corridors of power (and the policy agenda being pursued there) have narrowed imperceptibly, and the language of choice has been drained of any social or moral content. The policy issue at the centre of

Why Growth Rates Differ

TABLE I. Different approaches to the study of growth rates

Growth theory	Sources of growth	Triggers to growth	Barriers to growth	Expected growth paths	Why growth rates differ
Neoclassical	labour force and exogenous technical progress	interplay of market forces	limits on market processes imposed by trade unions and governments	convergence through technology diffusion, as capital experiences diminishing returns	uneven distribution of multiplicity of growth sources
New	factor quality, partly endogenously generated	strategic public/private investment in human capital and knowledge	excessive state intervention	permanently differing growth paths, similar growth rates	uneven distribution of social capacities, rooted in institutional and cultural differences
Schumpeterian	'gale of creative destruction' stimulating technical change	innovation by large corporations in search of temporary market advantage	inappropriate structures of corporate governance and market behaviour	shifting foci of growth in world system as technology changes	differential quality of factor creation and upgrading, rooted in institutional rigidities
Post-Keynesian	size of manufacturing sector, level of demand	processes of cumulative causation exploiting economies of scale	restrictive government policies and unregulated markets	virtuous and vicious cycles of growth	differential distribution of institutional arrangements triggering long-term trust relationships between industrial and financial capital
Marxist	labour exploitation and capital investment	competition within the capitalist class and between capital and labour	contradictions released by incompatible class interests	combined but uneven development, inexorable undermining of successful economies	differential balance and character of class forces

contemporary debate is whether economic growth is, in the new language of the day, 'exogenously' or 'endogenously' triggered; whether market forces must be treated as given, or given and created—with the old growth theorists saying leave well alone, and the new growth theorists cautiously arguing for limited state action. Even among the new growth theorists, however, there are marked degrees of difference on which factors to create (and how to do it); and differing attitudes to the scale and scope of industrial policy. But none of these new policy gurus are major economic (or social) engineers. Not for them the strengthening of state controls over industry, or the strengthening of the rights of labour in relation to capital. In their hands, the old agenda of the centre-left has been marginalised; and that of the more radical left has been written out of the script entirely—forgotten, ignored or, if seen, dismissed as either anachronistic or fanciful.

But such fashions in dominant policy circles need not, and should not, constrain us either intellectually or politically. For fundamental disagreements remain—over detailed explanation and underlying theoretical approach—both within the dominant policy consensus and between it and those it currently excludes, as the text has indicated and as Table 1 tries to summarise. As academics, our responsibility is to evaluate the competing claims of the various positions within that wider debate, and so help to formulate a more sophisticated understanding than we currently enjoy about the dynamics of growth in capitalist economies. As participants in the political process, our responsibility is to inform and shape the contemporary policy debate with the insights gleaned from that deepening understanding. For, in my judgement at least, if the policy debate remains as narrowly set as it currently is, a series of ostensibly well-meaning centre-left governments will preside over the steady erosion of the material base for even existing levels of employment, income growth and welfare provision. If the intentions of those politicians are as progressive as they claim, among the things they need now to absorb is a wider understanding of how capitalist economies grow and a stronger sense of the importance of political action and fundamental social reform to the achievement of that growth.

Notes

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3. On this, see Robert J. Barro & Xavier Sala-i-Martin, *Economic Growth* (McGraw-Hill, 1995), pp. 16–37; and Philippe Aghion & Peter Howitt, *Endogenous Growth Theory* (MIT Press, 1998), pp. 11–17.
4. Robert Solow, 'Growth Theory and After', *American Economic Review*, Vol. 78 (1988), p. 307.
5. *Ibid.*, pp. 308, 314.
6. *Ibid.*, p. 309.
7. Andrea Boltho & Gerald Holtham, 'The Assessment: New Approaches to Economic Growth', *Oxford Review of Economic Policy*, Vol. 8, No. 4 (1992), p. 2.
8. Robert E. Lucas, 'On the Mechanics of Economic Development', *Journal of Monetary Economics*, Vol. 22, No. 1 (1988), pp. 3–42.

Why Growth Rates Differ

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11. Barro & Sala-i-Martin, *Economic Growth*, p. 12.
12. Maurice Scott, *A New View of Economic Growth* (Oxford University Press, 1989), p. 15.
13. Nick Crafts, 'Post Neoclassical Endogenous Growth Theory: What are its Policy Implications', *Oxford Review of Economic Policy*, Vol. 12, No. 2 (1996), p. 41.
14. Boltho & Hotham, 'The Assessment: New Approaches to Economic Growth', p. 11.
15. William Lazonick, *Business Organization and the Myth of the Market Economy* (Cambridge University Press, 1991), p. 123.
16. On this, see Nicholas Kaldor, 'A Model of Economic Growth', *Economic Journal*, Vol. 57 (1957), pp. 591-624; Kaldor 'Capital accumulation and economic growth', in: F. Lutz & D.C. Hague (Eds), *The Theory of Capital* (Macmillan, 1961), pp. 177-222.
17. On this, see Marjorie S. Turner, *Nicholas Kaldor and the Real World* (M.E. Sharpe, 1993), pp. 113-25.
18. Anthony P. Thirlwall, *Nicholas Kaldor* (Wheatsheaf, 1987), pp. 185-6.
19. On this, see Anthony P. Thirlwall & Gianluca Sanna, 'The macro-determinants of growth and "new" growth theory: an evaluation and further evidence', in: Philip Arestis (Ed.), *Employment, Economic Growth and the Tyranny of the Market* (Edward Elgar, 1996), pp. 135-6.
20. Skott & Auerbach have even gone so far as to assert a similarity of growth analysis between Kaldor, Myrdal and Marx around issues of instability and path dependency. For this, see Peter Skott & Paul Auerbach, 'Cumulative Causation and the "New Theories of Economic Growth"', *Journal of Post-Keynesian Economics*, Vol. 17, No. 3 (1995), pp. 382-3.
21. Edward Denison, *Why Growth Rates Differ* (Brookings Institution, 1967); Angus Maddison, *Explaining the Economic Performance of Nations* (Edward Elgar, 1995); Mancur Olson, *The Rise and Fall of Nations* (Yale University Press, 1982); Michael Porter, *The Competitive Advantage of Nations* (Macmillan, 1990); Lazonick, *Business Organization and the Myth of the Market Economy*; Francis Fukuyama, *Trust* (Free Press, 1995); and Will Hutton, *The State We're In* (Cape, 1994).
22. David M. Kotz, Terence McDonough & Michael Reich, *Social Structures of Accumulation* (Cambridge University Press, 1994); Scott Lash & John Urry, *The End of Organized Capitalism* (Polity Press, 1987); Scott Lash & John Urry, *Economies of Signs and Spaces* (Sage, 1994); Michael H. Best, *The New Competition* (Polity Press, 1990); and Giovanni Arrighi, *The Long Twentieth Century* (Verso, 1994).
23. Moses Abramovitz, *Thinking about Growth* (Cambridge University Press, 1989), p. 13.
24. Denison, *Why Growth Rates Differ*, p. 315.
25. *Ibid.*, pp. 317, 319.
26. On this, see Moses Abramovitz, 'The Search for the Sources of Growth: Areas of Ignorance, Old and New', *Journal of Economic History*, Vol. 53, No. 2 (1993), p. 219.
27. Abramovitz, *Thinking about Growth*, p. 17.
28. On this, see Nicholas Crafts & Gianni Toniolo, 'Post-war growth: an overview', in: Crafts & Toniolo (Eds), *Economic Growth in Europe since 1945* (Cambridge University Press, 1996), pp. 14-16.
29. On this, see Denison, *Why Growth Rates Differ*, p. 315; Maddison, *Explaining the Economic Performance of Nations*, pp. x, 38; and Adam Szirmai, Bart Van Ark & Dirk Pilat (Eds), *Explaining Economic Growth* (Elsevier Science, 1993), pp. 37-167.
30. Maddison, *Explaining the Economic Performance of Nations*, pp. 91-132.
31. Moses Abramovitz, 'Catching up, Forging ahead and Falling behind', *Journal of Economic History*, Vol. 66, No. 2 (1986), pp. 389-90; and William Baumol, 'Multivariate growth patterns: contagion and common forces as possible sources of convergence', in: William J. Baumol, Richard R. Nelson & Edward N. Wolff (Eds), *Convergence of Productivity: Cross-national Studies and Historical Evidence* (Oxford University Press, 1994), pp. 71-2.
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33. Abramovitz, 'Catching up, Forging ahead and Falling behind', p. 404.
34. Mancur Olson, 'The political economy of comparative growth rates', in: D.C. Mueller (Ed.), *The Political Economy of Growth* (Yale University Press, 1983), p. 13.

35. Angus Maddison, 'Ultimate and proximate growth causality: a critique of Mancur Olson on the rise and decline of nations', in: Maddison, *Explaining the Economic Performance of Nations*, p. 86.
36. Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press, 1990), pp. 11, 110–12.
37. Jan Fagerberg, 'A Technology Gap Approach to why Growth Rates Differ', *Research Policy*, Vol. 16, Nos. 2–4 (1987), p. 87.
38. Porter, *The Competitive Advantage of Nations*, pp. 18–20.
39. *Ibid.*, p. 20.
40. Jazonick, *Business Organization and the Myth of the Market Economy*, pp. 9–13.
41. The key readings here are M.V. Posner, 'International Trade and Technical Change', *Oxford Economic Papers*, Vol. 13, No. 3 (1961), pp. 323–41; Stanislaw Gomulka, 'Britain's slow industrial growth—increasing inefficiency versus low rate of technical change', in: Wilfred Beckerman (Ed.), *Slow Growth in Britain: Causes and Consequences* (Oxford University Press, 1980), pp. 185–8; Stanislaw Gomulka, *The Theory of Technological Change and Economic Growth* (Routledge, 1990), pp. 149–68; and John Cornwall, 'Diffusion, Convergence and Kaldor's Law', *The Economic Journal*, Vol. 85, No. 3 (1976), pp. 307–14.
42. Fagerberg, 'A Technology Gap Approach to why Growth Rates Differ', p. 88.
43. Including Gosta Esping-Andersen, *The Three Worlds of Welfare Capitalism* (Princeton University Press, 1990); Hutton, *The State We're In*; Lane Kenworthy, *In Search of National Economic Success* (Sage, 1995); David Marquand, *The Unprincipled Society* (Cape, 1988); and Robert Wade, *Governing the Market* (Princeton University Press, 1990).
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45. Anderson, 'The Figures of Descent', pp. 75–7.
46. See David Coates, *The Question of UK Decline* (Harvester-Wheatsheaf, 1994), pp. 27–40, 89–127.
47. See Philip Armstrong, Andrew Glyn & John Harrison, *Capitalism since World War II* (Fontana, 1984), pp. 235–68; and the earlier Andrew Glyn & Bob Sutcliffe, *British Capitalism, Workers and the Profits Squeeze* (Penguin, 1972).
48. David Harvey, *The Limits to Capital* (Blackwell, 1982), p. 373.
49. I am indebted for this point, and much else, to Greg Albo.