

CHAPTER 9

DIFFERENTIAL PECUNIARY ACCUMULATION AND THE INFLATIONARY DYNAMICS OF CORPORATE SIZE

The early 1970s mark an important watershed in the post-war experience of the U.S. M&M sector: the happy combination of low inflation and low unemployment, which characterized much of the 1950s and 1960s, gave way to a far less appealing mixture of high inflation and severe stagnation, which lasted through much of the 1970s and the early 1980s. However, as the analysis in Chapter 8 indicated, this experience was not a commonly-shared one. Taking the inflationary process as a dynamic interaction between 'business' and 'industry,' we showed that the pattern of Fortune-500 "Inflation" was fundamentally different from that experienced by the 'Others.' If we limit ourselves to an aggregate perspective, the difference appears mainly quantitative: during the pre-1970 period, the 'Others' "Inflation" was higher, whereas after 1970, Fortune-500 "Inflation" took the lead. From a disaggregate perspective, however, the difference was also qualitative. In the first period, Fortune-500 "Inflation" was generated by a combination of rapid increases in sales accompanied by somewhat lower increases in employment, while for the 'Others,' "Inflation" arose from a very moderate increase in sales coupled with an actual *decline* in employment. After 1970, the situation has reversed. Both groups continued to increase their sales but, while 'Others' employment was rising, Fortune-500 employment was now falling.

This disparity is highly perplexing. How could these two groups, whose activities span the entire range of manufacturing and mining, exhibit such opposite temporal patterns? Indeed, why should the inflationary interaction between business and industry for large corporations be qualitatively different from the one generated by small firms? In our opinion, the key to these questions lies in the structural nature of "Inflation." The fact that sales and employment in each group rose at *different* rates (the 'Heterogeneity Principle') is closely related to the underlying processes of aggregate concentration. As we showed in Chapter 8, between the early 1950s and late 1960s, the Fortune-500 group managed to raise both its sales and employment faster than the 'Others,' thus leading to continuous increases in the

corresponding rates of aggregate concentration for these two variables. At the same time, since the rise in the aggregate concentration for employment was faster than that for sales, the rate of "Inflation" for the Fortune 500 during that period remained lower than the corresponding rate for the 'Others.' The post-1970 period marked a change of course. During the 1970s and 1980s, the rate of aggregate concentration for sales remained relatively stable, but the corresponding rate for employment fell sharply, causing Fortune-500 "Inflation" to rise above that of the 'Others.'

Given this intimate relationship between inflation and corporate restructuring, is it possible that they were both driven by the same cause? More specifically, is the disparity between the rates of "Inflation" for large and small firms rooted in the same process which alters the aggregate concentration for sales and employment? If there is such a mutual cause, what is it? How does it operate? In our view, inflationary restructuring stems from the fundamental process of large-scale capital accumulation, and the purpose of this chapter is to examine the analytical and empirical bases of this dependency.

Considering the detailed nature of our analysis, a brief overview may be in order. The chapter is divided into 10 sections. The first three sections develop our analytical framework, while the remaining seven examine the concrete experience of the M&M sector. We begin with the *modus operandi* of large firms. If large-scale capital accumulation is indeed the root cause of inflation and restructuring, we must first explore what it means: What exactly do large firms try to accumulate? What are the units of accumulation? And most importantly, what is the key yardstick for 'success'? These questions are addressed in the first section. We argue that, in the context of large-scale business enterprise, firms are driven by the quest for *differential pecuniary accumulation*. In other words, what is being accumulated is not congeries of physical capital goods, but a pecuniary sum of discounted future earnings. Furthermore, the main aim is not simply to accumulate, but to accumulate faster than the 'average.' Using a series of simple approximations, we define 'differential rate of accumulation' as the difference between the firm's own rate of accumulation and the 'average' rate of accumulation in its corporate universe. With this as our key variable of interest, we then move to explore the wider implications of large-scale accumulation. In the second section, we show that a positive differential rate of accumulation commonly means rising aggregate concentration; in other words, that in seeking to 'beat the average,'

large firms are in fact trying to alter the business structure in which they operate. In the third section, we carry our analysis one step forward. By what means, we ask, could the large firms achieve this double-sided goal of differential gain through structural change, and how do their restructuring ventures affect the macroeconomic patterns of inflation and stagnation? Since the pecuniary value of a corporation depends on expected earnings and risk, attempts to augment the differential rate of accumulation need to focus on the differential growth of profit and risk. Two strategic choices are explored. (1) The large firms could augment their differential *breadth* of accumulation by raising their employment per firm faster than the average, or (2) they could increase their differential *depth* of accumulation by boosting their profit per employee faster than the average firm in their universe. The first strategy is often carried out *via* mergers and acquisitions which tends to stabilize the growth of profits for the large firms, reduce risk and augment the differential rate of accumulation even further. This favourable context of rapid but stable differential pecuniary accumulation induces the large firms to maintain their rate of "Inflation" at a relatively low level. The second strategy is reverted to when there is a decline in merger activity. In this latter context, with only a limited expansion in their breadth of accumulation, the large firms must turn to their depth of accumulation and try to raise their profit per employee faster than the average. Their chief method of doing so is by raising their differential growth of sales per employee -- that is, by increasing their own rate of "Inflation" faster than the average. This is not a favoured strategy, however. First, it tends to destabilize the growth of profit and augment risk; second, it commonly culminates in an overall inflationary spiral which makes the redistributive outcome highly uncertain; and, third, the resulting inflation redistributes income from labour to capital, thus limiting the volume of mass consumption and enhancing the tendency toward industrial stagnation. Based on this reasoning, we argue that differential pecuniary accumulation gives rise to two basic patterns of inflationary restructuring: one characterized by rapid, merger-induced increases in aggregate concentration accompanied by relatively low inflation and unemployment, and another, typified by slower changes in aggregate concentration coupled with higher inflation and a more severe stagnation.

After outlining these broad analytical considerations, we examine their validity for the M&M sector. In the fourth section, we describe our basic data and outline the overall course of differential pecuniary accumulation for the Fortune-500 group. In the fifth section, we focus our attention on the

main factors affecting the differential rate of accumulation -- profit and risk -- and try to understand their historical interaction. Given the paramount role of profit in this interaction, we then turn in the sixth section to the factors affecting the growth of earnings, looking on the separate developments occurring in the breadth and depth of accumulation. Each of these areas is then examined individually in the seventh and eight sections. The results of this empirical analysis help explain the disparity between the inflationary experience of large and small firms revealed in Chapter 8. They show that the opposite evolution of employment for the two groups was rooted in the underlying pattern of merger and acquisitions. Furthermore, the analysis clearly indicates that "Inflation" for the Fortune-500 was indeed negatively related to their merger-related expansions in the breadth of accumulation. Was this a *deliberate* Fortune-500 strategy? The data seem to suggest it was. In section 9, we examine the redistributive consequences of inflation and show, firstly, that there was indeed a positive relationship between inflation and the share of profit in sales and, secondly, that this association benefited the large firms more than the small ones. The tenth section brings us to the end of our journey, where we summarize our findings and draw our conclusions.

A word of caution is necessary. Although our empirical analysis of the M&M sector tends to confirm our broad theoretical hypotheses, we should be careful not to over-generalize our findings. We are dealing here with historical, non-stationary processes which, in our view, do not reflect any immanent laws of motion. Ultimately, our concern is to raise questions more than to provide conclusive answers, so the evidence in this chapter should best be interpreted as suggestive, not definitive.

9.1 Differential Pecuniary Accumulation

Following our analysis in Chapter 6, we begin with the proposition that the basic guiding principle of big business is *differential pecuniary accumulation*. Specifically, this means (1) that the ultimate goal of large-scale business enterprise is the on-going accumulation of capital values, (2) that businessmen think about such accumulation solely in nominal terms, and (3) that they evaluate their success or failure on a purely differential scale, that is, relative to other firms. Our concern here is not with personal motives but rather with customary habits of thinking which have slowly become the

‘objective’ rules of large-scale business enterprise. The effective controllers of giant firms (professional executives or dominant absentee owners) may be animated by a variety of psychological drives, such as the quest for conspicuous consumption, public esteem, political influence, or bureaucratic authority. Yet these businessmen rarely perceive their *individual* goals as being inconsistent with the overriding *universal* tenets of ‘differential pecuniary accumulation.’ The principle of ‘differential pecuniary accumulation’ has far-reaching implications for the process of inflationary restructuring. Our purpose in this and the following two sections is to develop an analytical framework within which these implications can be explored.

In the modern system of large business enterprise, capital accumulation refers to the temporal increase in the pecuniary value of the corporation. This, however, is still an ambiguous statement. What exactly is being accumulated? What precisely do we mean by the ‘value’ of a corporation? In practice, the corporation has at least three observed values: the ‘accounting value’ of total assets reported in the financial statements, the ‘market value’ of equity and debt as determined by the current prices of stocks and bonds and, finally, the ‘transaction value’ which emerges occasionally when there is a change of effective ownership through a merger or acquisition. However, these magnitudes are rarely seen as denoting *the* value of the corporation. Instead, they are usually taken as indicators, or approximations of a more fundamental variable -- the so-called *underlying* or *true* value of the corporation.

The ‘true’ value of a corporation is a business convention. From the businessman’s standpoint, the corporation is valuable because of its presumed capacity to appropriate future income, and its ‘true’ value is simply the present capitalization of these anticipated earnings. For simplicity, suppose we define this ‘true’ value A_i of a corporation i as equal to its capitalized earning capacity such that, for a given discounting period,

$$(1) \quad A_i \equiv EC_i / (N \cdot \Gamma_i),$$

where EC_i is some measure of the corporation's 'earning capacity' reflecting the nominal income the corporation is expected to earn, Γ_i is a multiplicative 'risk premium' for the presumable uncertainty associated with these future earnings, and N is the perceived 'normal' rate of return for the economy.¹

Clearly, the corporation's 'true' value is not an 'objective' variable. From the perspective of an individual businessman, A_i depends on how that businessman views the corporation's future earnings and risk, on what he accepts as the normal rate of return and, finally, on his preferred time-frame for these conjectures (the 'discounting period.') Thus, different businessman or impartial observers may come up with different values for A_i and, from their own individual standpoints, each of these valuations would be 'correct.' As we interpret it here, the 'correctness' of A has nothing to do with the *ex post* accuracy of anticipated income. Although the future may reveal our errors, it could not alter the present and, since the 'true' value of a corporation is a *current* magnitude, it could be based only on our *present* beliefs, not on their *eventual* accuracy. Furthermore, the multiplicity of 'correct' valuations would persist even if we considered only those based on an accurate anticipation of earnings, simply because A_i depends not only on EC_i , but also on the arbitrary values of N and Γ_i . In other words, the same accurate prediction of future earnings could lead to more than one value for A_i , depending on what is deemed to be the 'normal' rate of return and the 'adequate' provision for 'risk.' For example, an accurate prediction of \$100 million for EC_i , together with a value of 8 percent for N and 1.25 for Γ_i , would yield \$1 billion as the 'true' value of the corporation. However, a combination of this same correct prediction for earnings, but with a normal rate of return of 10 percent and multiplicative 'risk' premium of 1.5, would imply a capitalized earning capacity of only \$667 million. Similar variations in A_i may arise when we apply different discounting periods to a non-uniform flow of anticipated earnings.

In light of this inherent subjectivity and the resulting multiplicity of individual valuations, should we abandon the notion of an 'underlying' value? Not at all. Our main concern here is not with the 'objective' correctness of corporate values, but with their significance for the social process of capital accumulation. From this broader perspective, the 'underlying' value of the corporation is simply that

¹ In the financial literature, it is customary to use an additive provision for risk. Using the notations of Equation (1) and Ω_i for the additive risk premium, we can write $A_i \equiv EC_i / (N + \Omega_i)$, where $\Omega_i = N(\Gamma_i - 1)$.

which is the most *consequential* for the dynamic working of business enterprise. Since capitalized earning capacity is ultimately a matter of convention, it follows that the most important value of the corporation is its *most conventional one* -- that is, the value dictated by the 'dominant' perceptions prevailing in the business community. Given the interactive context of modern investment markets, we may reasonably argue that, at any point in time, the individual views of businessmen regarding EC_i , N , Γ_i and the 'appropriate' discounting period will be clustered around some 'conventional' or 'accepted' norms. Although these are no more objective than the individual convictions from which they ultimately arise, such 'dominant' views assume -- through the forces of conformity -- an omnipotent existence. Consequently, we suggest that the corporation's 'true' value A_i depends specifically on the 'dominant' business views regarding EC_i , N , Γ_i -- all in reference to the 'most commonly accepted' discounting period.

Note that A_i is a composite artifact. It is a weighted average of 'dominant' conventions and hence could differ from the 'dominant' view on what the corporation is worth. While the choice between these distinct interpretations may have little practical significance (after all, we are dealing here with rather imprecise magnitudes), it is important for our analytical inquiry here. The businessman's ultimate concern may be with the corporation's 'true' underlying value, but his actions derive from and seek to affect the basic *determinants* of that value. In trying to augment its pace of accumulation, the modern corporation will focus specifically on raising earning capacity and reducing risk so as to affect what the 'business community' thinks about these variables. Similarly, in coming to evaluate different undertakings, investors will be looking for these same determinants. It is this preoccupation with the right-hand side components of Equation (1) which makes this composite definition of A_i central to our discussion.

The relationship between the corporation's 'true' value and its observed values can be examined on two separate levels. The value of A_i would usually differ from its observed proxies. This is most obvious when we examine the accounting value of 'total assets' as reported in the corporation's balance sheet. Accepted accounting principles dictate that assets be quoted at historical cost, so the aggregate value of those assets would reflect a complex set of temporal valuations. Other difficulties arise when

we consider the 'current value' of a corporation as given by the combined market value of its equity and debt. Although stock and bond prices supposedly reflect the contemporaneous 'market opinion' on the various elements of Equation (1), they are in fact heavily 'contaminated' by speculation. Even when a corporation is acquired by another firm, it is still hard to establish any meaningful relationship between the 'transaction value' and the prevailing capitalized earning capacity. A merger is usually conceived, negotiated and executed by a limited group of individuals, with a specific set of perceptions, operating under a unique set of circumstances. Given the singular nature of this process, there is little reason for the resulting transaction value to be similar to the contemporaneous A_i .

These discrepancies, perhaps, become less significant when we move from levels to patterns of change. Thus, if A_i has been consistently rising, we could reasonably expect that the corporation's observed values would tend to increase as well. Similarly, if A_i has been moving on a continuous downward trend, it would be highly unlikely for the accounting, market and transaction values not to follow suit. The magnitudes of these variables will certainly be different from one another, but their general movement will follow that of A_i . In fact, it may be no severe exaggeration to say that, in the final analysis, the fate of a modern corporation hinges primarily on this composite artifact of 'prevalent' views. For example, if the 'business community' foresees a healthy increase in the future flow of low-risk profits for Microsoft, the company will find it easier to raise additional equity and debt, the price of its stock will tend to rise and, if this corporation were to become a target for merger or acquisition, its transaction price would likely increase. On the other hand, if the general business outlook for a company like Chrysler is grim, its creditors may call in some loans, the price of its shares may plummet and, if this negative outlook persisted, Chrysler could simply go out of business. In these and every other case, the 'dominant' business view acts as the primary compass showing the direction which the corporation's observed values tend to follow.

From this perspective, the process of 'capital accumulation' is really an 'amalgamation of business conventions.' Business capital is a social institution, and much like any other social institution -- such as 'money,' 'free contract,' 'democratic government,' or even 'divine kingship' -- it, too, must be ultimately based on customary habits of thinking. In that sense, the corporation's capitalized earning

capacity A is a very 'real' variable: despite its fundamental intangibility, *it is the major preoccupation of business enterprise*. For this reason it may be argued that, in the context of a large-scale business enterprise, *the goal of capital accumulation is synonymous with an ongoing increase of A_i* .

The next question is how does one evaluate the pace of accumulation? What is the principal yardstick for financial success? One common practice is to argue that the ultimate goal of accumulation is the quest for hedonic consumption, and then subtract from the rate of change of A_i the rate of change of an appropriate price index to obtain the so-called 'real' rate of accumulation. As we see it, however, the primary essence of large-scale accumulation is not the *purchasing power* of accumulated capital, but rather the *business power* conveyed by that capital. 'Power' is always a differential relationship and could be evaluated only in differential terms. Within the antagonistic/emulative culture of 'free enterprise,' the ultimate issue is not merely how many more yachts the owner could buy, but the pace at which his nominal holdings *grow relative to those of other owners*. Thus, to the extent that capital accumulation is indeed the means and end of business power, it should be measured not against a basket of commodities, but in relation to other firms. The most significant financial standard for such comparison is the *average* performance for the corporate universe in which the individual firm operates. We turn to an examination of this yardstick now.

By analogy to Equation (1), suppose we define the 'average' corporate value A_a in a specific universe of corporations, such that

$$(2) \quad A_a \equiv EC_a / (N \cdot \Gamma_a) ,$$

where EC_a is what the 'business community' considers as the average earning capacity in the corporate universe, Γ_a is the dominant perception regarding the average risk premium and N is the commonly accepted value for the economy's normal rate of return. As a composite variable, the 'average' corporate value A_a would generally differ from the arithmetic average of the A_i 's. From an analytical perspective, the former artifact is perhaps more adequate because it refers explicitly to the underlying perceived 'averages' for earning capacity and risk, that is, to the operational reference points of accumulation.

Moving from levels to rates of change, we can now define the *differential rate of accumulation* DRA_i for an individual corporation i as the difference between its own individual rate of accumulation a_i and the ‘average’ rate of accumulation a_a for the corporate universe in which it operates:

$$\begin{aligned}
 (3) \quad DRA_i &\equiv a_i - a_a \\
 &\approx [ec_i - (n + \gamma_i)] - [ec_a - (n + \gamma_a)] \\
 &\approx (ec_i - ec_a) - (\gamma_i - \gamma_a),
 \end{aligned}$$

where a_i and a_a are the respective rates of growth of A_i and A_a , ec_i and ec_a are the rates of change of earning capacity EC_i and EC_a , γ_i and γ_a are the rates of change of the risk premia Γ_i and Γ_a , and n is the rate of change of the normal rate of return.² This differential rate of accumulation, we argue, is the principal target of large-scale business enterprise; to the extent that large corporations indeed strive toward some universal end, their prime focus is not some ‘objective’ profit or wealth function, but rather *the degree to which they exceed the average pace of accumulation*.

The quest for differential pecuniary accumulation is fundamentally different from customary notions about ‘profit maximization.’ Firstly, unlike the classical and neoclassical emphasis on *material* accumulation which is bound by some physical constraints, differential pecuniary accumulation is denominated in *nominal* units. Secondly, differential pecuniary accumulation focuses on *relative* performance. Even when a large firm succeeds in affecting its own rate of accumulation, its negligible influence on the ‘average’ rate of accumulation leaves its DRA indeterminate. Finally, corporate values are a matter of subjective conjectures. They depend on anticipations for earnings, unclear notions of risk, customary beliefs about a normal rate of return and arbitrary choices of discounting periods -- all of which tend to shift and swing independently of the so-called ‘objective’ circumstances. As it stands, then, the corporation’s differential rate of accumulation DRA_i has no ‘well-defined’ properties and cannot be ‘maximized.’

² Since the normal rate of return appears in both equations (1) and (2), its rate of change is eliminated from the final expression. On ‘risk classes’ as usually associated with the earlier Modigliani-Miller literature, see Archer and d’Ambrosio (1967).

But how could the quest for differential pecuniary accumulation tell us something about inflationary restructuring if Equation (3) has no well-defined properties and DRA_1 cannot be optimized? Is this elusiveness not detrimental to our inquiry? Not at all. With the growth of large distributional coalitions and collective action, the element of *choice* assumes a crucial significance, leaving the *eventual* course of events inherently uncertain. In this *historical* context, finding ‘optimal solutions’ for determinate logical systems may not be very helpful. Consequently, we seek not to predict business behaviour but rather to assess the evolution of business strategies; we do not wish to explain equilibrium and structural stability but rather to explore the dynamics of structural change. In short, we look for the unfolding of *historical alternatives*. If we are right and economic development is *not* predetermined, the notion of differential pecuniary accumulation becomes a very useful analytical tool. As we argue below, the relationship between inflation and restructuring is multidimensional and this is precisely what the principle of differential pecuniary accumulation helps us unveil. Instead of misleading us toward looking for the *inevitable*, it points out the *possible*.

9.2 Differential Pecuniary Accumulation and Aggregate Concentration

The emphasis on differential pecuniary accumulation has two far-reaching implications. It implies, firstly, that the goal of large-scale business activity is *inherently dynamic* and, secondly, that the successful realization of this goal is commensurate to *continuous business restructuring*. Let us examine these implications more closely. We started in the previous section by suggesting that large corporations were concerned not with the ‘real’ purchasing power of their assets, but with their nominal position relative to other firms. We then argued that, in a dynamic ‘forward-looking’ context, the main issue is not how the corporation’s holdings compare with those of other firms, but rather how much faster they tend to expand. In other words, that the chief preoccupation of big business is not so much with *relative levels* as with *relative rates of change*. Now, if this emphasis on relative dynamics is warranted, it calls into question the traditional practice of building macroeconomic models on inherently static microeconomic foundations. The problem is fairly simple. In trying to exceed the ‘average’ pace of accumulation of their corporate universe, large firms are in effect seeking to *increase* their relative share in the aggregate

assets of that universe. In other words, their prime goal of differential pecuniary accumulation is akin to a *continuous restructuring of business relations and institutions*. But if this is indeed the *modus operandi* of the dominant firms in our economy, how could we assume that such an economy functions within a stable microeconomic structure?

These methodological issues are particularly significant because the ‘drive to restructure’ is, in effect, part of the business creed itself. We have already emphasized in Chapter 6 that, under the new order of mature capitalism, business success depends on ceaseless restructuring. Here, we go even further, suggesting that continuous structural change is not only the *means* of large-scale accumulation, but also its *most fundamental goal*.³ Large firms do not operate within a stable economic environment, nor do they treat their environment as given. On the contrary, the broad consequences of their actions and, most importantly, their very *aims*, could be understood only in terms of incessant structural change. Indeed, as we have illustrated in the previous chapter and demonstrate further below, dynamic restructuring is the principal link between microeconomic behaviour and macroeconomic phenomena. To assume that, ‘for the purpose of analysis,’ structure is somehow static, is to divorce that analysis from one of the most crucial features of modern capitalism.

The most important structural manifestation of differential pecuniary accumulation is the *process of aggregate concentration*. The nature of this link becomes evident as we broaden our focus from the single giant corporation to the ‘big economy’ as a whole. Suppose we adopt an operational definition for the ‘core’ of a given corporate universe as comprising the L largest firms in that universe, such as the 500 largest firms of the ‘industrial’ sector. The aggregate concentration ratio for this universe could then be given by the proportion of total assets controlled by the L core firms, such that

$$(4) \quad ACR_A \equiv A_L/A ,$$

³ This view is closer to Veblen, who saw the large corporation as an *active* destabilizing force, than to Olson, who interpreted the actions of such firms as *passive* responses to changing circumstances.

where A_L is the total value of the L core corporations and A is the aggregate value of entire corporate universe. This ratio can be approximated by Equation (5):

$$(5) \quad ACR_A \approx (A_L \cdot L) / (A_a \cdot NUM) ,$$

where A_L is the value of a 'typical' core firm, L is the fixed number of core firms, A_a is the 'average' corporate value, and NUM is the number of firms in the corporate universe. [The value of a 'typical' core firm is analogous to that of the 'average' corporation as defined in Equation (2).] Moving now from the *level* of aggregate concentration to the *process* of aggregate concentration we get

$$(6) \quad acr_A \approx (a_l - a_a) - num ,$$

or

$$(7) \quad acr_A \approx DRA_l - num ,$$

where acr_A is the rate of aggregate concentration ($\Delta ACR_A / ACR$) and num is the rate of change of the number of firms ($\Delta NUM / NUM$). The rate of aggregate concentration, then, is approximately equal to the differential rate of accumulation for a 'typical' core firm less the relative change in the overall number of firms. If we rewrite Equation (7), such that

$$(8) \quad DRA_l \approx acr_A + num ,$$

we can see that the differential rate of accumulation for a 'typical' core firm depends positively on both the increase in aggregate concentration, as well as on the rise in the total number of firms. Since core firms have little control over the total number of firms in their universe, their effort to 'out-perform' the average would tend to raise the rate of aggregate concentration. Thus, to the extent that large firms are indeed driven by the principle of differential pecuniary accumulation, their composite goal would call for *an ever-increasing rate of aggregate concentration!*

If these conjectures are valid, they imply that, contrary to common conceptions, the process of aggregate concentration is not merely a *consequence* of modern economic development but, indeed, its very *raison d'être*. What we claim here, is that the on-going increase in the share of assets controlled by the largest firms in our economy is neither a strategic means of accumulating 'real' wealth, nor a Darwinian corollary resulting from the competitive pursuit of that hedonic end. Instead, we submit that the order of significance must be reversed: the increases in the amount of 'real' wealth controlled by the large corporations should be viewed as coincidental to the ultimate redistributive goal of increasing aggregate concentration.

This shift of focus from the static realm of tangible variables to the dynamic arena of nominal distribution raises several fundamental questions. Given the primacy of differential pecuniary accumulation, we must now ask what determine the differential rate of accumulation DRA_l for a 'typical' core firm? Under what circumstances will this rate be positive, zero or negative? What could large firms do to increase this rate? And most significantly, what are the consequences of differential pecuniary accumulation for the macroeconomic dynamics of inflation and stagnation? We turn to address these question now.

9.3 The Core's Differential Rate of Accumulation and Macroeconomic Dynamics

To reiterate, as defined in Equation (3), the differential rate of accumulation for a 'typical' core firm l is given by

$$(3) \quad DRA_l \approx a_l - a_a \\ \approx (ec_l - ec_a) - (\gamma_l - \gamma_a) .$$

The level of DRA_l thus depends on the differential growth of earning capacity ($ec_l - ec_a$), as well as on the differential growth of the risk premia ($\gamma_l - \gamma_a$). These two differences are not independent of each other, of course. Both expected earning capacity as well as its associated 'risk' premium depend on what

happens to actual earnings and, given this link, we may expect that there also be some relationship between $(ec_1 - ec_a)$ and $(\gamma_1 - \gamma_a)$. Let us examine these interrelated components more closely, beginning with the differential growth of earning capacity.

As defined in the first section, earning capacity EC refers to anticipated corporate income -- including both interest on debt and net profit on equity. While the magnitude of this variable depends on past and current conditions, the exact nature of that dependency is unfortunately obscure and probably quite unstable. We can reasonably conjecture, however, that the most important factor affecting earning capacity EC is the corporation's actual net profit Π and that, *over a sufficiently long period of time*, the two variables will tend to move more or less in the same direction. Indeed, a rising trend for net profit is usually accompanied by expectations that the trend will continue and also that this will enable the corporation to service a larger debt load. Similarly, an ongoing decline for net profit commonly raises fears for further decreases and it also tends to downgrade expectations about the corporation's debt-service capacity. Businessmen could, of course, anticipate an upturn or a downturn in earnings before it actually occurs so, for a while, EC and Π would move in opposite directions. This, however, would constitute only a short-term aberration. Sooner or later, net profit Π would change direction, or, if that failed to happen, there would be a reversal in the course of earning capacity EC . Over an extended period of time, the two magnitudes are still likely to follow the same general path.

Suppose, then, that for both a 'typical' large corporation l , as well as for the 'average' firm a , earning capacity EC and net profit Π move together, and suppose further that the ratio of their earning capacities EC_l/EC_a moves together with the ratio of their net profit Π_l/Π_a , so

$$(9) \quad (ec_1 - ec_a) = \psi (\pi_1 - \pi_a) ,$$

where ψ is a non-stationary positive parameter. In conventional business terms, Equation (9) means simply that the faster the expansion of the firm's net profit relative to the average, the more rapidly will its expected earning capacity grow relative to the average. This need not always be the case, of course, but it is the 'common sense' which guides business action: future expectations are affected by current

developments and, in order to raise the differential growth of earning capacity, you must strive to increase the differential growth of current profits.

In what ways could the corporation affect this latter differential? Conceptually, the net profit of a firm (Π) could be viewed as depending on both the *breadth of accumulation*, denoted by the number of employees working for the firm, and the *depth of accumulation*, designated by the level of net profit per employee, such that

$$(10a) \quad \Pi = E \cdot \Pi E ,$$

where E is the number of employees, and ΠE is net profit per employee as given by the ratio Π / E . This could be decomposed further by writing the depth of accumulation ΠE as a product of sales per employee SE and the markup K , such that

$$(10b) \quad \Pi = E \cdot SE \cdot K ,$$

where SE is the ratio of sales revenues to employment (S/E) and K is the ratio of net profit to sales revenues (Π/S).

If, by analogy, we use these equations to describe the sources of net profit both for a 'typical' core firm as well as for the 'average' firm, we can then approximate the *differential* rate of growth of net profit ($\pi_1 - \pi_a$) for a 'typical' core firm, such that

$$(11a) \quad (\pi_1 - \pi_a) \approx (e_1 - e_a) + (\pi e_1 - \pi e_a)$$

or

$$(11b) \quad (\pi_1 - \pi_a) \approx (e_1 - e_a) + (se_1 - se_a) + (k_1 - k_a) ,$$

where, for each type of firm, e is the rate of growth of employment per firm, πe is the rate of growth of net profit per employee, se is the rate of growth of sales per employee and k is the rate of change of the markup. Thus, the extent to which the net profit of a 'typical' core firm grows faster than the 'average' depends on two principal factors: (1) the differential increase in the *breadth* of accumulation given by $(e_1 - e_a)$, and (2) the differential increase in the *depth* of accumulation denoted by $(\pi e_1 - \pi e_a)$. This latter magnitude is, in turn, the approximate sum of two separate differences: (2a) the differential rate of growth of sales per employee $(se_1 - se_a)$ (which is simply the difference between the respective rates of "Inflation" for the large and 'average' firm), and (2b) the differential rate of change for the markup $(k_1 - k_a)$.

In order to assess the significance of this decomposition, we assume for the rest of this chapter that all variables pertaining to the 'average' and typical 'large' denote simple arithmetic averages for the corporate universe and its core, respectively. Because of aggregation problems, these approximations may not be very accurate but, since our concern here is only with very general trends, the potential imprecision need not be a major matter for concern.

The Breadth of Accumulation. Core firms can expand their breadth of accumulation either internally, by creating new industrial capacity and hiring new workers to operate it, or externally, by buying other companies and taking over their existing capacity and labour force. While the effect of both methods on e_1 is identical, their impact on e_a -- and, hence, on the *differential* increase in the breadth of accumulation $(e_1 - e_a)$ -- is different. To explain this difference, consider the rate of growth of average employment e_a as given by Equation (12)

$$(12) \quad e_a \approx e - num ,$$

where e is the rate of growth of overall employment in the corporate universe and num is the rate of change of the total number of firms. By inspecting this relationship, it is clear that both internal and external growth for core firms have a positive impact on e_a . Internal growth raises e but has no effect on num . External growth *via* mergers and acquisitions, on the other hand, lowers num but leaves e

unchanged. (We refer here only to intra-universe mergers and acquisitions which merely transfer employees between different firms of the same universe. The effect on e_a of acquiring firms from *outside* the corporate universe is identical to that of internal growth.) Note, however, that while the impact on e_a of both methods of expansion is positive, there is an important difference in magnitudes: since core firms tend to acquire relatively *large* firms, the effect of their external growth on *num* will tend to be significantly smaller than the impact of a comparable internal growth on e . Now, in practice, the specific choice of any *individual* firm between internal or external expansion has only a negligible impact on $(e_1 - e_a)$ simply because, in a large universe of corporations, even the **biggest** firm is still too small to significantly affect e_a . That could not be said, however, for the experience of the entire core. Everything else remaining the same, if *most* large firms chose to expand externally by buying other firms, the differential increase in their breadth of accumulation would be higher than if they decided to expand internally by creating new capacity.⁴

The Depth of Accumulation. Net profit per employee ΠE could be augmented by cutting cost per employee which raises K , by generating "Inflation" which increases sales per employee and boosts SE as well as K , or through some combination of both. These two methods are nevertheless different in that cost-cutting could be achieved independently by the individual firm, while raising sales revenues per employee through "Inflation" usually necessitates the cooperation of other firms. Specifically, since the ability to increase productivity and reduce factor cost is often independent of corporate size, we may reasonably argue that cost-cutting alone could have only a limited impact on $(k_1 - k_a)$. The simultaneous augmenting of SE and K via "Inflation," on the other hand, requires collective action and hence depends largely on the *initiative of large firms*. Unlike cost-cutting, then, the *concurrent rise of SE and K must start*

⁴ To illustrate the potential significance of these differences, consider a universe of 200,000 firms and 40,000,000 employees in which there is a core of 500 large corporations, each employing 40,000 workers. Suppose first that a single core firm raises its employment by 50 percent to 60,000. If the expansion takes place internally, it will increase the average employment by 0.05 percent (from 200 to 200.1), so the $(e_1 - e_a)$ differential will be 49.95 percent. If the firm chooses to expand externally by acquiring another firm with 20,000 employees, there will be a reduction of 0.0005 percent in the number of firms (from 200,000 to 199,999), so the $(e_1 - e_a)$ difference will be marginally higher, at 49.9995 percent. Suppose now that every core firm adds 20,000 employees and that all of them do it in the same way. Achieving this through internal growth will raise average employment by 25 percent (from 200 to 250), so the $(e_1 - e_a)$ differential will be only 25 percent. Adding the same number of employees through external growth, on the other hand, will reduce the number of firms by 0.25 percent (from 200,000 to 199,500), so the differential expansion $(e_1 - e_a)$ for core firms will be almost twice as high, at 49.75 percent.

at the core. These initial inflationary increases may be subsequently followed by smaller firms. Furthermore, workers may respond by demanding and receiving higher wages, so cost will rise as well. Yet, the initial spark would usually stem from the big economy and, *at that point in time*, since the depth of accumulation for large firms is rising faster than the average, the "Inflation" impetus would have the effect of raising $(\pi e_1 - \pi e_a)$. In the modern context of mature capitalism, with an already ongoing inflation, the mere increase in *SE* is of course no longer sufficient to assure a distributional gain. Under these latter circumstances, the key toward raising the differential depth of accumulation shifts from the rate of "Inflation" itself, to *changes* in the rate of "Inflation." Thus, within the inflation-prone environment of large-scale business enterprise, the 'inflationary spark' from the core means not simply a higher *SE*, but a higher *se*.

These considerations may help explain certain patterns in the historical interaction between corporate restructuring and macroeconomic stagflation. To begin with, note that core firms are strongly disposed toward external growth. As we elaborated in Chapter 6, the evolution of U.S. capitalism since the end of the 19th century was characterized by the chronic spectre of excess capacity. With technological progress continuously outpacing population growth, profits depended crucially on the 'strategic limitation of industry.' Existing industrial operations had to be ceaselessly rationalized which meant that, for the large firms, increases in the breadth of accumulation had to depend mainly on external growth through mergers and acquisitions. Moreover, business amalgamation was in many cases a primary prerequisite for industrial rationalization which made large firms even more inclined toward external expansion.

Now, as long as core firms continue to expand externally, their breadth of accumulation is likely to grow faster than the average, so $(e_1 - e_a)$ will tend to be positive. That means that, even if their profits per employee grow only as fast as the average -- that is, even if $(\pi e_1 - \pi e_a)$ is approximately zero -- these corporations will still be able to expand their overall net profit faster than the average firm in their universe, and maintain a positive value for $(ec_1 - ec_a)$. Large firms are not prevented, of course, from also trying to exceed the average growth of sales per employee but, as long as $(e_1 - e_a)$ is deemed to be 'sufficiently' high, that additional course of action is not very likely.

The rationale behind this strategic choice is fairly simple. The ultimate goal of large-scale business enterprise is the differential accumulation of *capital* and, as can be seen from Equation (3), this depends not only on earning capacity, but also on risk. External growth through mergers and acquisitions consolidates the power of corporate coalitions, which facilitates cooperation and stabilizes the growth of profit. In many cases, external growth also leads to higher product diversification which tends to stabilize the growth of profit even further. The strategy is highly beneficial for it enables the large corporation not only to exceed the average growth of profit, but also to curtail its relative risk premium. It is under these advantageous circumstances of external growth -- and usually only under these circumstances -- that large firms find it feasible to establish a so-called 'target' rate of return and follow 'markup pricing' to achieve it. As we argue below, attempting to boost the differential growth of profit with higher "Inflation" tends to destabilize the growth of profit and adversely affect the associated risk premium. With 'healthy' increases in the differential breadth of accumulation, however, there is no need to 'rock the boat.' Net profit and, hence, earning capacity tend to grow faster than the average, while the stability of net profit reduces the relative risk premium which augments the differential rate of accumulation even further.

External growth may not always be feasible or even desirable, however. Mergers and acquisitions depend on a host of factors -- such as the prospects of enhanced monopolistic control, speculative gains, tax savings, overhead rationalization, and changing attitudes of policy makers and regulators -- and when these or similar factors reduce the external growth of core firms, they also tend to lower the corresponding value of $(e_1 - e_a)$. In fact, even if mergers and acquisitions were to continue unabated, adding every year to the ranks of each large firm a given number of relocated employees, the impact of these transfers on the rate of growth e_1 would gradually diminish with the growing magnitude of E_1 .

When their breadth of accumulation no longer grows faster than the average, core firms reluctantly try to alter their depth of accumulation. At such times, the apparently passive practices of markup pricing are no longer useful and must give way to inflationary initiatives toward raising ΠE . The

eventual benefit for core firms from perusing this alternative strategy is uncertain, however. An inflationary spark emanating from the core creates a ripple effect of rising prices and wages throughout the economy. This raises costs per employee for the core firms, as well as the average net profit per employee in the corporate universe, which, together, tend to reduce the initial differential gains of large firms. Furthermore, the heightened instability increases the relative risk premium associated with the earnings of large firms, which tends to adversely affect their overall rate of accumulation. Finally, and perhaps most importantly, in the context of a 'closed' market with little population growth, expanding the depth of accumulation commonly means stagflation -- that is, not only inflationary increases in sales, but also stagnating or even falling employment and output (see below). These considerations explain some of the self-expressed 'dislike' of large firms for inflation. They would much rather rely on external employment growth but, when that is infeasible, raising sales per employee remains their only alternative option.

In the context of large-scale business enterprise, there is then an intimate link between stagflation and the differential pecuniary accumulation of core firms. As we have argued in Chapter 6, persisting excess capacity and growing profits could coexist only with managed stagnation and ongoing inflation, and that necessitates the collective action of corporate coalitions. The role of large firms in the inflation process is crucial. Inflation could certainly arise without the collective action of large corporations but it could rarely *last* without it. Under the 'unfortunate' combination of rapid technological advances and limited population growth, an ongoing increase in prices could not be maintained without the strategic limitation of industrial output, and that could be administered only by the large corporate coalitions. In this sense, we could say that the large corporations are the modern *inflation makers*, while the smaller firms operate as *inflation takers*. This dichotomy does not imply that periphery firms must somehow 'abide' by the core's rate of inflation. Indeed, as our analyses in the previous chapter suggested, small firms raised their prices faster than the large corporations during much of the 1950s and 1960s, and then increased them more slowly during the 1970s and 1980s. The crucial point here is not that one group of firms experiences a more rapid inflation than the other, but rather that without the strategic cooperation among the large firms, mature capitalism would have very little inflation to begin with. Firstly, there is a certain minimum rate of inflation which emanates from the very

process of coalition formation: the increasing capitalization of progressively larger business alliances has to be 'supported' by higher profits which, in the context of excess capacity, can be achieved only with rising prices. Secondly, substantial changes in the overall level of inflation could be sustained only with the 'consent' of the large core coalitions. Inflation, then, is an integral part of the growth and restructuring of large-scale business enterprise. It emanates from the big economy and that is why we view the large core firms as 'inflation makers.'

Given this paramount role of 'inflation makers,' we can say that the overall rate of inflation prevailing in any corporate universe depends first and foremost on the *inflation consensus* at the core of that universe. On the face of it, the inflation consensus seems a rather innocent variable: it is simply what the largest corporate coalitions regard as an 'adequate' rate of inflation under the circumstances. Since the 1960s, economists have paid considerable attention to the notion of inflationary expectations. In our opinion, it is mostly in the corporate core, among the effective controllers of the large 'inflation makers,' that these expectations become a significant inflationary force. For the small, inflation-taking firms, inflationary expectations are at most a *guide for reaction*. In the core, on the other hand, such expectations constitute a *plan of action*. For core firms, the main question is not only how to survive in a changing world, but also how to alter it. For these companies, the real issue is not how to *maintain* their relative position despite the oncoming inflation, but how they should use inflation to *improve* that position. To do that, however, they must act collectively and that requires that they share similar inflationary expectations. In other words, the core's rate of inflation depends not simply on the inflationary plans of individual large firms, but on their *common* inflation consensus.

Although this consensus rate could not be predicted with any scientific accuracy, it is probably related -- though only in a very rough way -- to the distributional path chosen by the large corporate coalitions. A positive differential rate of accumulation for these groups could be achieved in one of two ways: either directly through a redistribution of profit between large and small business firms, or indirectly through a redistribution of income from labour to business. By raising their differential *breadth* of accumulation -- usually during a merger wave -- core firms achieve their differential goal *directly*, without altering the overall distribution between labour and capital income. This business-to-business

redistribution is likely to limit the inflation consensus at the core and, thus, the overall rate of inflation in the corporate universe. Without mergers and acquisitions, however, direct business-to-business becomes insignificant, thus driving core firms toward increasing their differential *depth* of accumulation. This latter strategy works *indirectly*, hinging on the ability of core firms to redistribute labour income faster than the average firm in their universe. To achieve this end, the large firms usually need to raise their inflation above the average. The consensus rate of inflation increases and an inflationary spiral gets under way.

Clearly, this relationship between inflation and corporate restructuring could not be reduced to any mathematical or statistical expression. First, while the inflation consensus may hinge on the actual value of $(e_1 - e_a)$, it also depends on what the large firms deem 'satisfactory' or 'appropriate' -- and that may vary across time and place. For example, when the value of this differential drops significantly, say at the end of a long merger wave, large firms may regard the resulting differential rate of accumulation as 'intolerably' low by recent historical standards. Following a decade of relatively moderate differential accumulation, however, this same rate may become more acceptable. Secondly, the overall rate of inflation depends not only on the initial spark from the core, but also on the response of smaller firms and workers, which in turn may alter the inflation consensus at the core. Thus, when the inflationary response of smaller firms and workers is belated and moderate, core firms will find their inflation strategy effective and that will keep their inflation consensus low. When the overall inflationary reaction is rapid, however, the initial inflationary gains may be reduced, prompting the large firms to upscale their inflation consensus even further.⁵ These qualifications limit our ability to *predict* the rate of inflation. Fortunately, however, they do not diminish our understanding of its underlying *causes*.

Most conflict theories of inflation (such as Rowthorn, 1977 and 1980 for example) see the struggle between labour and capital as the root cause of inflation. While this overall conflict certainly affects inflation, in our opinion, the more crucial conflict is the one raging between firms through their

⁵ A similar negative association between the overall rate of inflation and the extent to which inflation redistributes income in favour of the large firms was already suggested by Kotz (1982). His inflation theory, however, is rooted in the notion of limit-pricing which is fundamentally different from our analytical framework here (see Chapter 4).

quest for differential pecuniary accumulation. The ultimate goal for the inflation makers is to exceed not the rate of growth of wages, but the average pace of accumulation. From their limited perspective, the redistribution of income between labour and capital is merely a means by which that goal could be achieved. From a broader point of view, however, these two modes of redistribution carry drastically different implications. Direct firm-to-firm redistribution does not alter the labour share of income, so as long as core firms succeed in expanding the breadth of accumulation faster than the average, the process of business restructuring leaves a relatively little mark on the effective demand for wage goods. This, of course, does not imply full-capacity utilization and price stability. In order to increase profits despite growing productivity, the large firms must still rationalize their industrial operations through a combination of unemployment and price inflation. But as long as the overall distribution between capital and labour income remains relative stable, this stagflation will remain stable and low as well.

All of this changes when large firms try to achieve a differential rate of accumulation by raising their prices and markups faster than the average. The ultimate goal is still to redistribute profit between firms, but the means of achieving it is by reducing the share of labour income in their own sales. The likely outcome of this core strategy is a universal business drive toward higher prices which, as we show below, tends to reduce the overall share of labour income. The eventual consequence of this labour-to-business redistribution is stagnating wage-good consumption with obvious detrimental consequences for the general level of industrial activity. It is under these circumstances, when the area of contention shifts from the breadth to the depth of accumulation, that we tend to get a stagflationary crisis.

With this overall framework in mind, we can now return to the inflationary experience of the U.S. M&M sector. Our goal is to examine whether inflation and restructuring in that sector were indeed related to the differential pecuniary accumulation of the Fortune-500 core of firms in the manner suggested here. The following questions will be addressed in sequence: (1) What was the nature of differential pecuniary accumulation in the M&M sector? How did the pace of accumulation for the large firms compare with the M&M average? (2) What was the underlying pattern of interaction between profit and risk? (3) What factors contributed to the differential expansion of profit? Specifically, what

were the relative contributions of the breadth and depth of accumulation? (4) In the breadth of accumulation, what were the roles of external and internal growth? How were these affected by the changing patterns of mergers and acquisitions? (5) What happened to the depth of accumulation? How was it influenced by the differential rate of "Inflation" and the differential growth of the markup? (6) Does the inflation strategy of the Fortune 500 core appear consistent with our broad hypothesis? That is, did the large firms maintain a relative low inflation when their breadth of accumulation was rising faster than the average, but pushed it up when the relative increase in employment was no longer sufficient? To what extent was this strategy beneficial?

9.4 Differential Pecuniary Accumulation in the M&M Sector: Beginnings

Our analysis for the U.S. manufacturing and mining sector is based on five principal variables. In addition to sales and employment which were defined in Chapter 8, we also use data on assets, net profit and the number of corporations, as described below.

Assets figures are those which are reported in the corporations' end-of-year balance sheet statements, inclusive of consolidated domestic and foreign subsidiaries when reported. Data for all M&M firms are published by the Internal Revenue Service (IRS) in its *Statistics of Income, Corporations Income Tax Returns*. For Fortune-500 corporations, data are from the *Fortune 500* annual directory. Data for the 'Others' are computed as a residual between the M&M and Fortune 500 totals.

Net Profit refers to the overall annual profit net of taxes, including reported income of consolidated domestic and foreign subsidiaries. Figures for all M&M firms are computed from the IRS's *Statistics of Income, Corporations Income Tax Returns*, as the sum of income less deficit (pre-tax), wholly tax-exempt interest on government obligations, foreign tax credit, investment credit, and other credits -- less income tax.⁶ Data for the Fortune-500 firms are from the *Fortune 500* directories and those for the 'Others' are again calculated as a residual.

⁶ Non-available data for the following years were imputed as an average of adjacent (preceding and trailing) observations: wholly tax-exempt interest on government obligations (1962, 1965), foreign tax credit (1952, 1957, 1961, 1965) and investment credit (1962, 1965).

Number of Corporations in the M&M universe is from the IRS's *Statistics of Income, Corporations Income Tax Returns*. The number of 'other' firms is given by subtracting from this total the Fortune-500 corporations.

With these basic data, we compute three sets of variables as in Table 9-1 -- both in levels (upper-case notations) as well as in rates of change (lower-case notations). There are five aggregate variables which approximate the overall size of the M&M universe, the Fortune-500 core and the periphery of 'other' firms. Then, there are four corporate-size indicators which provide different measurements for the average corporate size in each group (these are derived by dividing each aggregate variable by the corresponding number of firms). Finally, for each group of firms we calculate three different ratios. (As we indicated earlier, the corporate-size variables in each group may differ from the corresponding values for the so-called 'average' corporation in that group. However, since our analysis is concerned only with broad tendencies, the potential inaccuracies need not concern us here.) In Table 9-2, we list our operational variables for the various *differential* rates of change pertaining to a 'typical' Fortune-500 corporation. These are calculated by subtracting from the rate of change for a Fortune-500 firm the corresponding rate of change for an 'average' M&M firm (the differential-risk index listed at the bottom of the table is defined in the following section). We turn to consider these now, beginning with the differential rate of accumulation.

Our first question concerns the overall historical record of differential pecuniary accumulation. How did the pace of accumulation for the large Fortune-500 firms compare with the M&M average? What was the temporal pattern of their *DRA*? How did it change over time? Because there are no data on the 'true' value of a corporation, the answers to these questions must be indirect. As we have argued in the first section, it is reasonable to expect that, over a sufficiently long period of time, the corporation's accounting value of total assets will move together with its underlying 'true' value. This positive association is liable to be even stronger when we focus not on any particular firm, but on the average for a group of firms. So as long as we restrict our analysis to the general movement of averages, we could use the value of total assets as a reasonable approximation for capitalized earning capacity and as a basis for assessing the pace of differential pecuniary accumulation.

Table 9-1 Variable definitions and names: levels (upper-case) and rates of change (lower-case)

Variable Definition	Variable Name		
	All M&M Firms	Fortune 500	"Others"
<u>Aggregates</u>			
Assets (\$ billion)	<i>MA ma</i>	<i>FA fa</i>	<i>OA oa</i>
Sales (\$ billion)	<i>MS ms</i>	<i>FS fs</i>	<i>OS os</i>
Net Profit (\$ billion)	<i>MΠ mπ</i>	<i>FΠ fπ</i>	<i>OΠ oπ</i>
Employees (million)	<i>ME me</i>	<i>FE fe</i>	<i>OE oe</i>
Number of Corporations	<i>MNUM mnum</i>	500 --	<i>ONUM onum</i>
<u>Corporate Size</u>			
Assets per Firm (\$ billion)	<i>MAZ maz</i>	<i>FAZ faz</i>	<i>OAZ oaz</i>
Sales per Firm (\$ billion)	<i>MSZ msz</i>	<i>FSZ fsz</i>	<i>OSZ osz</i>
Net Profit per Firm (million)	<i>MΠZ mπz</i>	<i>FΠZ fπz</i>	<i>OΠZ oπz</i>
Employees per Firm	<i>MEZ mez</i>	<i>FEZ fez</i>	<i>OEZ oez</i>
<u>Ratios</u>			
Sales per Employee (\$)	<i>MSE mse</i>	<i>FSE fse</i>	<i>OSE ose</i>
Net Profit per Employee (\$)	<i>MΠE mπε</i>	<i>FΠE fπε</i>	<i>OΠE oπε</i>
Markup (Net Profit/Sales, %)	<i>MK mk</i>	<i>FK fk</i>	<i>OK ok</i>

Table 9-2 Differential rates of change for a Fortune-500 firm: operational variables

Assets per Firm (Differential Rate of Accumulation, <i>DRA</i>)	$faz - maz$
Net Profit per Firm	$fπz - mπz$
Employees per Firm (Breadth of Accumulation)	$fez - mez$
Net Profit per Employee (Depth of Accumulation)	$fπε - mπε$
Sales per Employee Markup	$fse - mse$ $fk - mk$
Differential-Risk Index (Normalized Deviations from Average)	$ fπzn - mπzn $

Consider then Figures 9-1a and 9-1b, which describe the evolution of different size-indicators for assets over the 1950-1989 period. In Figure 9-1a, we plot the value of assets for an average Fortune-500 firm (*FAZ*), for an average 'other' firm (*OAZ*) and for an average M&M firm (*MAZ*). As the data indicate, the assets size of a typical Fortune-500 firm grew continuously between 1954 and 1989. The average asset size for the 'Others' remained more or less stable during the late 1950s and early 1960s, after which it, too, started to rise. Finally, the average assets per firm in the M&M universe grew only moderately between 1950 and 1965 and then began to increase more rapidly.

The relative pattern of development for the Fortune-500 firms is indicated in Figure 9-1b and summarized in Table 9-3. (In order to minimize cross referencing, we will be using this same table format repeatedly, with additional estimates being added as we proceed.) The Assets-per-Firm Ratio (*FAZ/MAZ*) denotes the ratio between the assets of a Fortune-500 corporation and those of an average M&M firm, and is charted in the upper part of this figure. In 1954, when Fortune-500 firms had an average asset level of \$216 million and the corresponding value for an average M&M firm was \$1.5 million, this ratio stood at 144. By 1970, the average asset size of Fortune-500 firms quadrupled to \$864 million, and since the assets of an average M&M firm only doubled to \$3 million, the Assets-per-Firm Ratio rose to 288. This ratio continued to climb, reaching a peak of 347 in 1981, and then declined to a level of 324 in 1986, when Fortune-500 firms had average assets of \$3,122 million as compared with \$9.6 million for an average M&M firm.

The rate of growth of the Assets-per-Firm Ratio *FAZ/MAZ* could be approximated by the differential rate of accumulation (*faz-maz*), as described by the bar chart at the bottom of Figure 9-1b. The overall pattern emerging from these data is one of a positive but *declining* differential rate of accumulation for the core firms. During the 1955-1970 period, this rate averaged 4.5 percent and, with the exception of 1968 and 1970, was positive throughout. This seems to have changed in the subsequent period between 1971 and 1986. The average value for (*faz-maz*) dropped to a meagre 0.8 percent and there was a marked increase in its year-to-year fluctuations, with many negative observations.

Figure 9-1a Total assets per firm

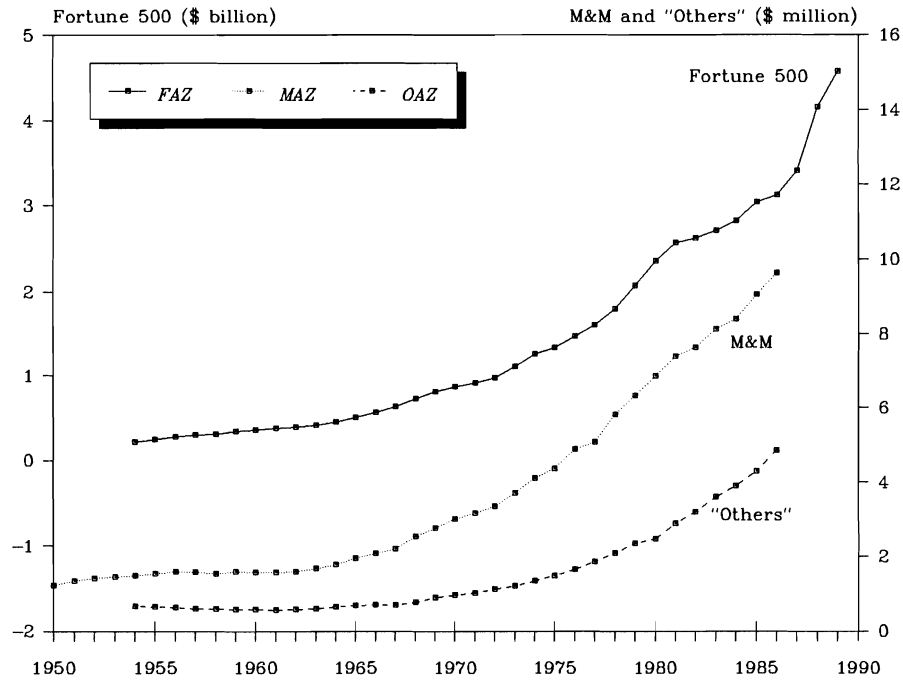


Figure 9-1b Differential pecuniary accumulation

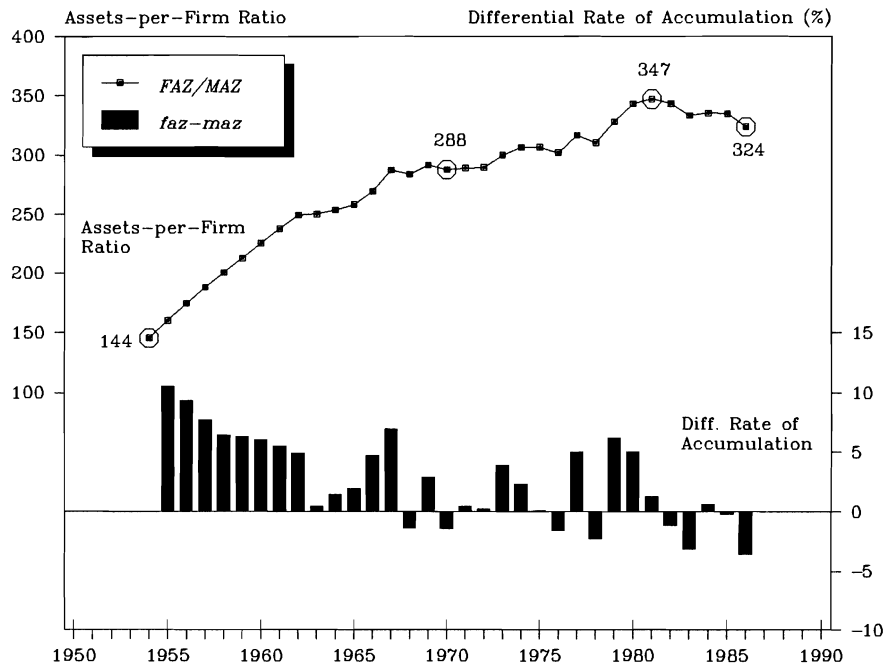


Table 9-3 Differential rates of change for a Fortune-500 firm (annual averages, percent)

Differential rate of change of:		1955-70	1971-86
Assets per Firm (Differential Rate of Accumulation, <i>DRA</i>)	$faz - maz$	4.5	0.8
Net Profit per Firm	$f\pi z - m\pi z$		
Employees per Firm (Breadth of Accumulation)	$fez - mez$		
Net Profit per Employee (Depth of Accumulation)	$f\pi e - m\pi e$		
Sales per Employee Markup	$fse - mse$ $fk - mk$		
Differential-Risk Index (Normalized Deviations from Average)	$ f\pi zn - m\pi zn $		

In summary, over the past three decades, Fortune-500 firms found it increasingly difficult to 'beat the average': despite an ongoing expansion of their *own* assets, their *differential* rate of accumulation was slowly falling, approaching a near-zero average during the 1970s and 1980s. What were the causes behind this relative decline? How were these causes related to the *modus operandi* of the large firms? And what was the impact of these developments on the inflationary experience of the M&M sector? We turn to consider these issues now.

9.5 Profits and Risk

Recall that, in its abstract form, the differential rate of accumulation ($a_1 - a_a$) for a 'typical' large corporation l is given approximately by the differential rate of growth of the firm's earning capacity ($ec_1 - ec_a$), less the differential rate of change for its risk premium ($\gamma_1 - \gamma_a$). In Section 9-3 we also suggested that the magnitude of both of these differences depended on the temporal behaviour of *net profit*: the differential growth of anticipated earning capacity was affected by the differential rate of growth of net profit, while the differential rate of change in the risk premium was influenced by the relative variability in the growth rates of profits for the large and 'average' firm. Now, if our estimated differential rate of accumulation ($faz - maz$) which is based on the accounting value of total assets is proportionate to the underlying differential rate of accumulation ($a_1 - a_a$) which is based on the

corresponding 'true' values, it follows that both differentials will be affected by the temporal behaviour of net profits in a similar way. Specifically, we would expect $(f_{az} - m_{az})$ to be influenced positively by the differential rate of growth for net profit $(f_{\pi z} - m_{\pi z})$, where $f_{\pi z}$ and $m_{\pi z}$ are the respective rates of change of net profit per firm for the Fortune 500 and the M&M universe, and negatively by the differential risk index $(|f_{\pi zn}| - |m_{\pi zn}|)$, where $f_{\pi zn}$ and $m_{\pi zn}$ are corresponding measures of profit-growth variability which we shall define later. Let us examine these distinct influences, beginning with the rate of growth of net profit per firm.

Figures 9-2a and 9-2b chart relevant profit data for the 1950-1989 period. In Figure 9-2a, we contrast the annual profit per firm for the Fortune 500, the 'Others' and the M&M universe as a whole. In general, we distinguish between two main periods: the 1950s and 1960s which were characterized by relative stability, as opposed to the 1970s and 1980s in which there were marked fluctuations in all three series. During the first period, the average net profit for a Fortune-500 firm rose more or less continuously, from \$17 million in 1954, to \$43 million in 1970. Profits for the 'Others,' however, did not change by much, fluctuating around an average level of \$23,000. For the M&M universe, profit per firm rose only marginally, from \$75,000 in 1954, to \$95,000 in 1970. The 1970s brought substantial changes. Within a decade, Fortune-500 firms more than tripled their average profits, which reached a level of \$156 million by 1979. The relative increase for the 'Others' was even more spectacular: from an average loss of \$6,800 in 1970 to an average net profit of \$229,000 in 1979. Net profit per firm in the M&M universe was also rising rapidly, increasing five-fold to a level of \$529,000 by 1979. Further changes in direction occurred in the early 1980s. While profits for the large core firms fluctuated around \$150 million, those for the 'Others' as well as for the average M&M firm dropped sharply. (For the 'Others,' average net profit fell to pre-1970 levels.) During the late 1980s, there was a marked increase in the Fortune-500 series, but we have no comparable data for the two other series.

These relative changes are summarized in Figure 9-2b, as well as in Table 9-4, where they are contrasted with period averages for the differential rate of accumulation. In the upper part of Figure 9-2b, we plot the Profit-per-Firm Ratio PIZ/MIZ , while in the lower part we chart the $(f_{\pi z} - m_{\pi z})$ differential which is approximately equal to the rate of change of PIZ/MIZ . During the

Figure 9-2a Net profit per firm

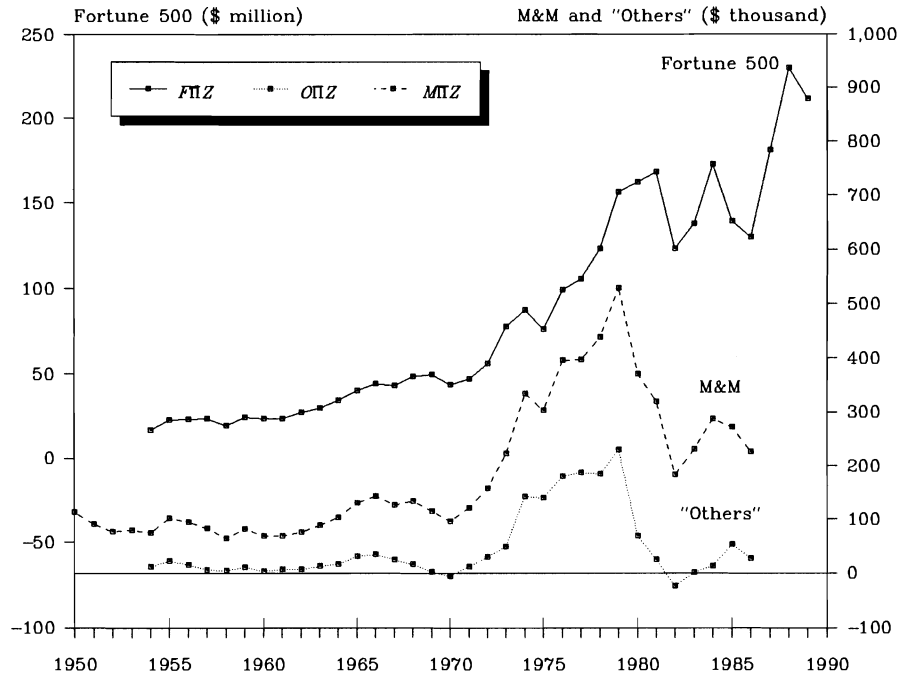
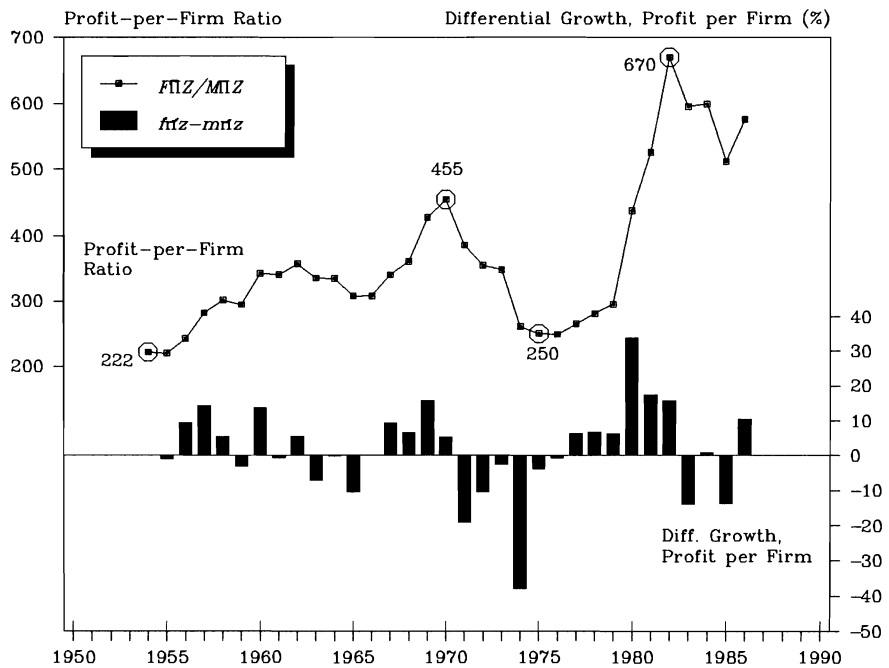


Figure 9-2b Net profit per firm: differential indicators



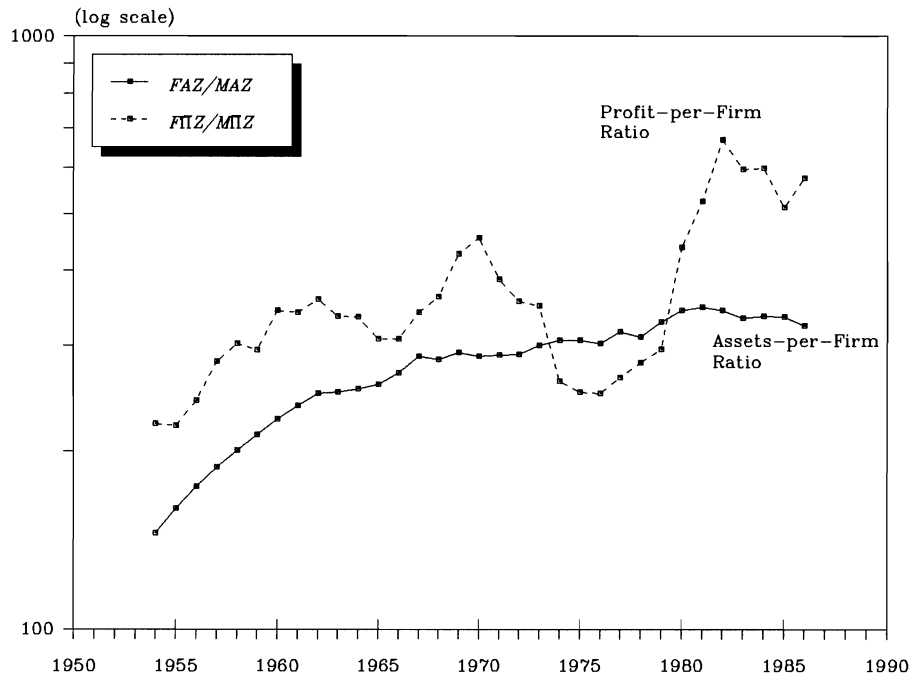
1950s and 1960s, Fortune-500 firms enjoyed a generally positive differential rate of growth for their net profits. The Profit-per-Firm Ratio FIZ/MIZ followed an upward trend and, with an annual average of 3.9 percent for $(f\pi z - m\pi z)$, this ratio more than doubled from 222 in 1954, to 455 in 1970. The early 1970s brought a sharp reversal of trend. While profits for Fortune-500 firms were increasing rapidly, those for the average M&M firm rose even faster and, so, within half a decade (by 1975), FIZ/MIZ has been reduced to a level of 250. Then came another turnaround. The rapid increase of MIZ was lessened somewhat, $(f\pi z - m\pi z)$ became positive once again and the Profit-per-Firm Ratio started to rise. After 1980, with the sharp drop in MIZ , the ascent intensified, bringing FIZ/MIZ to a new peak of 670 in 1982, which was subsequently followed by some decline.

Table 9-4 Differential rates of change for a Fortune-500 firm (annual averages, percent)

Differential rate of change of:		1955-70	1971-74	1975-86
Assets per Firm (Differential Rate of Accumulation, DRA)	$faz - maz$	4.5	1.7	0.5
Net Profit per Firm	$f\pi z - m\pi z$	3.9	-17.5	5.4
Employees per Firm (Breadth of Accumulation)	$fez - mez$			
Net Profit per Employee (Depth of Accumulation)	$f\pi e - m\pi e$			
Sales per Employee	$fse - mse$			
Markup	$fk - mk$			
Differential-Risk Index (Normalized Deviations from Average)	$ f\pi zn - m\pi zn $			

How have these relative changes in profits affected the differential growth of assets for Fortune-500 firms? To consider this question, we plot in Figure 9-3 the Assets-per-Firm Ratio FAZ/MAZ , alongside the Profit-per-Firm Ratio FIZ/MIZ . (Average growth rates for both ratios are given in Table 9-4.) During the 1954-1970 period, the two series followed a similar trend: the Assets-per-Firm Ratio grew at an average annual rate of 4.5 percent, while the Profit-per-Firm Ratio expanded at an only marginally slower average rate of 3.9 percent. In the subsequent post-1970 period, the general association between the two ratios was no longer apparent. From 1971 to 1974, FIZ/MIZ dropped at an average annual rate of 17.5 percent, while the growth of FAZ/MAZ merely slowed down

Figure 9-3 Differential pecuniary accumulation and relative profitability



to an average of 1.7 percent. Then, between 1975 and 1986, when FIZ/MIZ was rising at an average rate of 5.4 percent per annum, the annual growth of FAZ/MAZ dropped further, to an average of 0.5 percent. All in all, from 1970 to 1986, the Profit-per-Firm Ratio rose by 27 percent, whereas the Assets-per-Firm Ratio increased by only 13 percent.

One possible explanation for this shifting relationship is a changing balance between the growth of profit and risk. During the 1950s and 1960, Fortune-500 firms enjoyed a rapid but relatively *stable* differential growth in their net profit. That had a positive impact on their differential growth of earning capacity while keeping risk premiums low -- a happy combination which fuelled the brisk differential accumulation evident in Figure 9-3. The situation was no longer as favourable during the 1970s and 1980s, when substantial variations in the differential growth of profits were associated with much smaller changes in the differential growth of assets. The reason may be traced to the heightened instability of profit growth and its effect on risk premiums, which we now examine more closely.

Consider Figures 9-4a and 9-4b, and Table 9-5 which provide some indications for this growing instability and its potential implications for risk premiums. In Figure 9-4a, we contrast the rate of growth of net profit per firm for the Fortune 500 ($f\pi z$) with the comparable rate for the average M&M firm ($m\pi z$). A visual inspection of this figure confirms that the variations in both series increased considerably after 1970. The data also reveal changes in period averages. As we can see in Table 9-5, between 1955 and 1970, the average rate of growth of net profit per firm was 7.0 percent for the Fortune-500 firms, but only 3.1 percent for the M&M universe. During the subsequent 1971-1986 period, the average rate for Fortune-500 firms rose marginally to 8.6 percent, while the corresponding rate for the M&M universe almost tripled to 8.9 percent.

What was the effect of these changes on relative risk premiums? The common approach to risk is to look on the variability of the *rate of profit on capital*, but that may not be wholly adequate when the magnitude of capital is, in itself, a function of profit. The problem is that, with forward-looking capitalization of earning capacity, the value of a corporation would tend to grow and contract together with profit, thus moderating the fluctuations in their ratio. This effect is partially concealed when we use

Figure 9-4a Growth rates of profit per firm

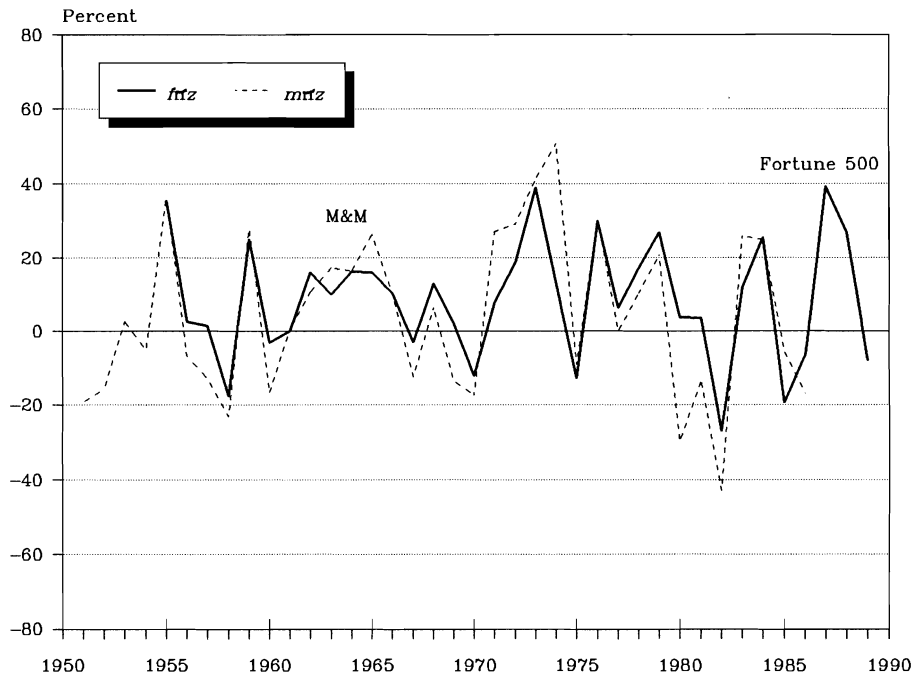
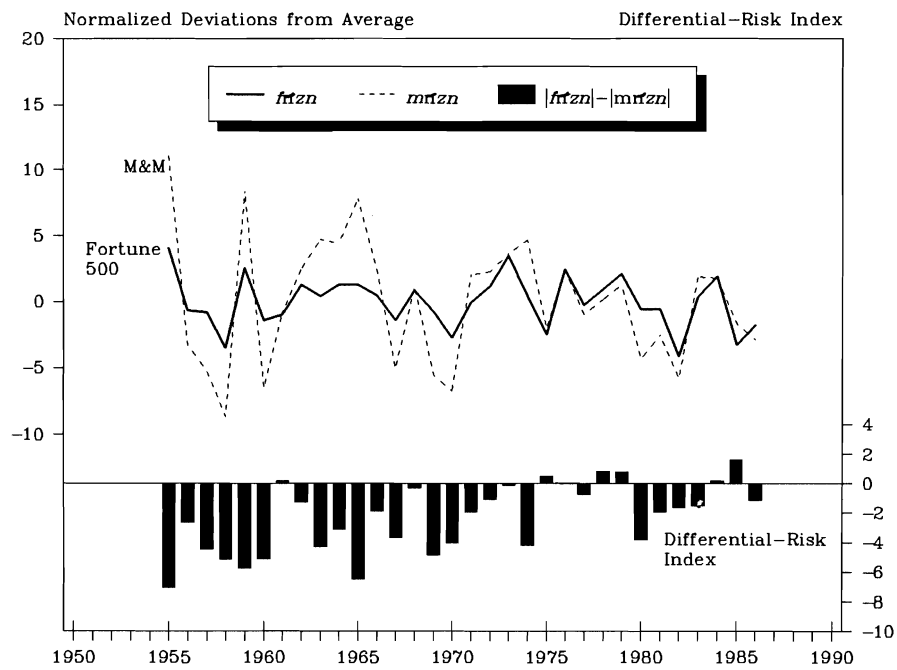


Figure 9-4b Risk indicators



historical values for assets, but is clearly evident when we deal with current values as quoted on the stock and bond markets. In order not to blur the picture, we focus only on profits. If the goal is a rapid growth of profit, the risk stems from fluctuations in that growth, so instead of looking at variations in the rate of profit, we should deal directly with variations in the *rate of growth of profit*.

Table 9-5 Net profit per firm: selected variability indicators (annual averages)*

Period	Rates of Growth (%)		Normalized Deviations from Period Average		Differential-Risk Index
	Fortune 500 ($f\pi z$)	M&M ($m\pi z$)	Fortune 500 ($f\pi zn$)	M&M ($m\pi zn$)	($ f\pi zn - m\pi zn $)
1955-1970	7.0 (13.6)	3.1 (18.6)	0 (1.9)	0 (6.2)	-3.7
1971-1986	8.6 (18.3)	8.9 (26.7)	0 (2.1)	0 (3.0)	-0.9

* Standard deviations in brackets

To quantify these variations, let us define $f\pi zn$ as the normalized deviation of $f\pi z$ from its period average, such that

$$(13) \quad f\pi zn \equiv (f\pi z - \overline{f\pi z}) / \overline{f\pi z}$$

and $m\pi zn$ as the normalized deviation of $m\pi z$ from its own period average:

$$(14) \quad m\pi zn \equiv (m\pi z - \overline{m\pi z}) / \overline{m\pi z},$$

where $\overline{f\pi z}$ and $\overline{m\pi z}$ are the average values for $f\pi z$ and $m\pi z$, respectively, over a given time interval. In order to account for changes in the average rates of growth, we computed $f\pi zn$ and $m\pi zn$ in stages: first for the 1955-1970 period (using the appropriate period averages $\overline{f\pi z}$ and $\overline{m\pi z}$ listed in Table 9-5), then for the 1971-1986 period (with its own values for $\overline{f\pi z}$ and $\overline{m\pi z}$) and, finally, we concatenated them to create 2 continuous series for the entire 1955-1986 period which are plotted in the upper part of

Figure 9-4b. In the bottom of the figure we chart the difference between the *absolute* values of these two normalized series. This latter difference could be interpreted as a differential-risk index: the annual values of $(|f\pi zn| - |m\pi zn|)$ indicate the extent to which the normalized deviations of $f\pi z$ from its period averages fell below or above the comparable normalized deviations of $m\pi z$ from its own period averages. Negative values for this index would signify that the growth of net profits for a Fortune-500 firm is more stable than the corresponding rate for the average M&M firm, while positive values would suggest it is more unstable.

The data indicate that, during the 1955-1970 era, net profit per firm in the Fortune-500 group not only grew much faster but was also far less risky than the M&M average. Indeed, while the standard deviation for $m\pi zn$ amounted to 6.2, it was merely 1.9 for $f\pi zn$. This greater stability of profit-growth is illustrated by the large negative values for the differential-risk index $(|f\pi zn| - |m\pi zn|)$, which averaged -3.7 during that period. The data also show, however, that this 'variability-gap' was slowly closing, particularly after 1970. During this latter period, there was a marked increase in the average value $m\pi z$, which had the effect of reducing the standard deviation of $m\pi zn$ by more than a half, to 3.0. This, together with an increase in the standard deviation of $f\pi zn$ to 2.1, shrunk the negative magnitude of the differential-risk index to an average of only -0.9 over the 1971-1986 period.

Clearly, there was a gradual erosion over the past three decades in the 'stability-edge' which large firms reputedly possess over their smaller counterparts.⁷ This, of course, is a *retrospective* view and hence would have been partly concealed from the *contemporary* business view which prevailed during the unfolding of events. Furthermore, the precise impact of variations in profit-growth on the subjective perceptions of 'risk' is forever obscure. Yet, given the persistent shrinking of $(|f\pi zn| - |m\pi zn|)$, it would seem safe to conclude that there must have been also a corresponding decrease in the (negative) magnitude of $(\gamma_1 - \gamma_a)$, which then contributed toward the falling tendency of $(faz - maz)$.

⁷ While there is abundant evidence on the positive link between corporate size and the stability of rate of profit (see, Bowring, 1986, pp. 134-150, for example), the effect of corporate size on the stability of the *growth* of profit received little or no attention. Moreover, most studies focus on a cross-section analysis for a given period of time and do not explore the possible variations of risk *over time*.

To summarize, during the 1950s and 1960s, Fortune-500 firms enjoyed a high positive value for $(f\pi z - m\pi z)$ and a large negative value for $(|f\pi zn| - |m\pi zn|)$ which, together, assured their high differential rate of accumulation $(faz - maz)$. During the 1970s and 1980s, there were changes in the rates of growth of profit which affected both $(f\pi z - m\pi z)$ and $(|f\pi zn| - |m\pi zn|)$. The strong fluctuations in profits must have influenced expected earning capacity but, given the short-term nature of these fluctuations, the effect could not have been very large, which may partly explain the weaker impact of $(f\pi z - m\pi z)$ on $(faz - maz)$ during that period. At the same time, the enhanced variability in the growth rates of profit shrank the (negative) value of $(|f\pi zn| - |m\pi zn|)$, and that may have contributed toward a lower average value for $(faz - maz)$.

Given the crucial impact of net profit on both earning capacity and risk, it is clear that our analysis of differential pecuniary accumulation must start with the differential growth of net profit. Specifically, we must ask what determined the average magnitude of $(f\pi z - m\pi z)$? Why was this difference relatively stable during the 1950s and 1960s? What made it more unstable in the 1970s and 1980s? To answer these questions, we need to break $(f\pi z - m\pi z)$ down to its constituent components.

9.6 Differential Changes in the Breadth and Depth of Accumulation: An Overview

In Section 9-3, we decomposed the differential rate of growth of net profit for a 'typical' large corporation l , such that

$$(11a) \quad (\pi_l - \pi_a) \approx (e_l - e_a) + (\pi e_l - \pi e_a),$$

where $(e_l - e_a)$ denoted the differential increase in the *breadth* of accumulation and $(\pi e_l - \pi e_a)$ designated the differential expansion in the *depth* of accumulation. Using our operational variables listed in Table 9-1, this could be written for a 'typical' Fortune-500 firm, such that

$$(11c) \quad (f\pi z - m\pi z) \approx (fez - mez) + (f\pi e - m\pi e),$$

where fez and mez denote the rates of growth of employment per firm in the Fortune-500 and M&M groups, respectively, while $f\pi e$ and $m\pi e$ are the corresponding rates of growth of profit per employee in the two groups. Within this operational framework, the differential growth of the breadth of accumulation is denoted by $(fez - mez)$, whereas the differential growth of the depth of accumulation is given by $(f\pi e - m\pi e)$.

Consider now Figures 9-5a and 9-5b, in which we contrast the historical evolution of the Employment-per-Firm Ratio FEZ/MEZ with that of the Profit-per-Employee Ratio FIE/MIE , as well as their respective rates of growth, $(fez - mez)$ and $(f\pi e - m\pi e)$. Table 9-6 includes relevant summary statistics for our analysis. Overall, the data point to a major shift in the relative significance of $(fez - mez)$ and $(f\pi e - m\pi e)$. During the first period, between 1955 and 1970, the primary source for the differential growth of profit emanated from the breadth of accumulation. While the average annual value of $(f\pi e - m\pi e)$ was actually negative, at -1.9 percent, the average for $(fez - mez)$ was a positive 5.6 percent, leading to an average of 3.9 percent for $(f\pi z - m\pi z)$. In other words, Fortune-500 firms were raising their breadth of accumulation so much faster than the average firm, that even with their depth of accumulation declining against the average, they still managed to enjoy a brisk differential expansion in their net profit per firm.

Table 9-6 Differential rates of change for a Fortune-500 firm (annual averages, percent)

Differential rate of change of:		1955-70	1971-74	1975-86
Assets per Firm				
(Differential Rate of Accumulation, DRA)	$faz - maz$	4.5	1.7	0.5
Net Profit per Firm				
	$f\pi z - m\pi z$	3.9	-17.5	5.4
Employees per Firm				
(Breadth of Accumulation)	$fez - mez$	5.6	1.4	1.5
Net Profit per Employee				
(Depth of Accumulation)	$f\pi e - m\pi e$	-1.9	-19.5	4.0
Sales per Employee				
Markup	$fse - mse$ $fk - mk$			
Differential-Risk Index				
(Normalized Deviations from Average)	$ f\pi zn - m\pi zn $	-3.7		-0.9

Figure 9-5a The breadth and depth of accumulation: ratios

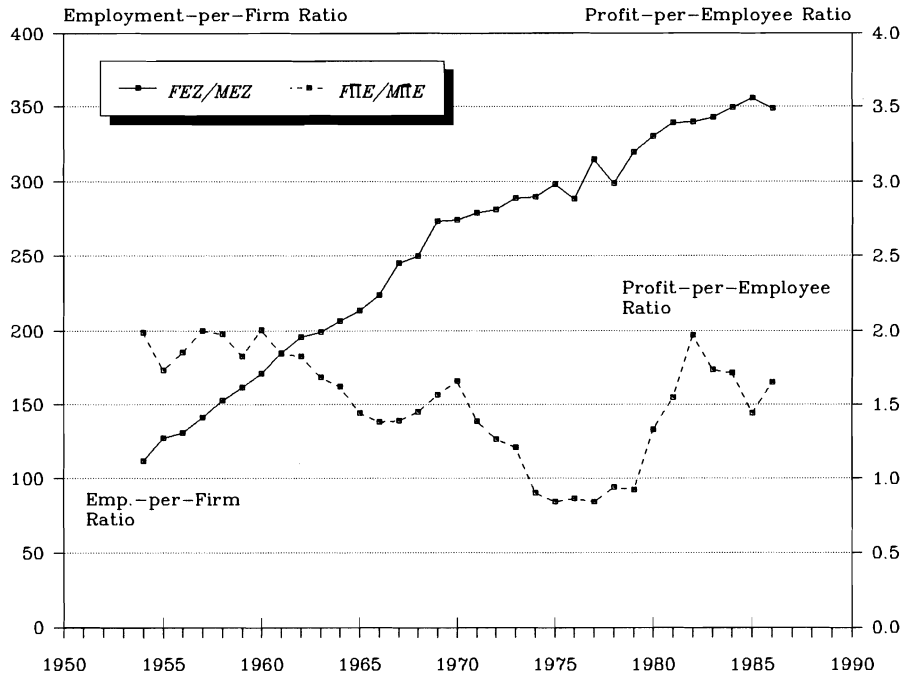
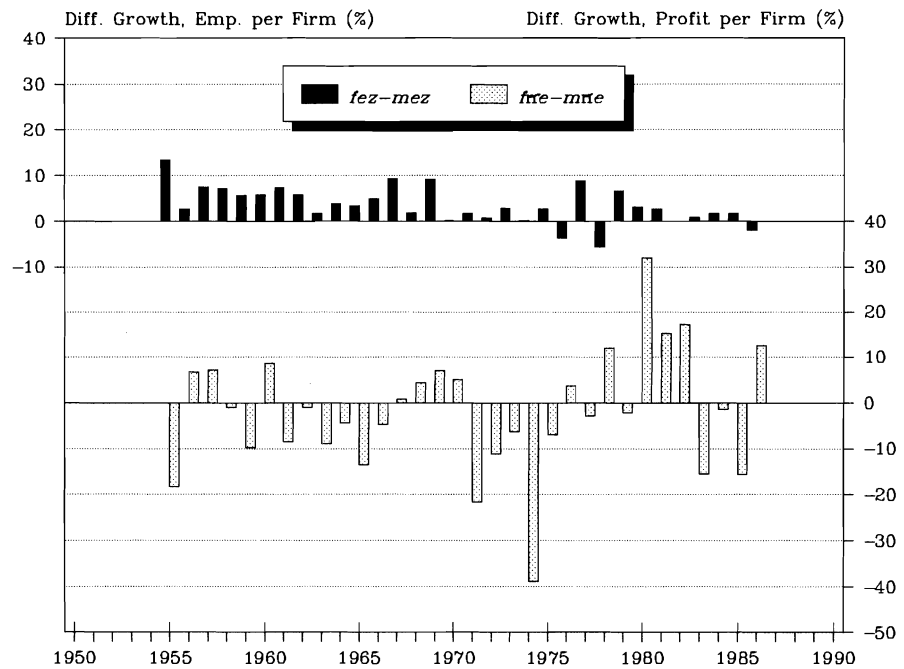


Figure 9-5b The breadth and depth of accumulation: differentials



The relative role of these components changed after 1970, with the marked decline in the average value of $(fez - mez)$. Between 1971 and 1974, the differential growth of employment per firm dropped to annual average of 1.4 percent. At the same time, the differential growth of net profit per employee $(\pi e - m\pi e)$ declined to an average of -19.5 percent, pulling $(\pi z - m\pi z)$ down to annual average of -17.5 percent. After 1975, the average annual value of $(fez - mez)$ remained a low 1.5 percent, but that of $(\pi e - m\pi e)$ experienced a sharp reversal: it rose to 4.0 percent, pushing up the average annual value of $(\pi z - m\pi z)$ to 5.4 percent.

In summary, while during the 1950s and 1960s, the differential growth of net profit per firm $(\pi z - m\pi z)$ was affected mainly by the breadth of accumulation, during the 1970s and 1980s it was mainly the depth of accumulation which generated most of the changes. Furthermore, as the data in Figure 9-5b make fairly clear, it was this shift of emphasis, from the breadth to the depth of accumulation, which also generated much of the increased instability of $(\pi z - m\pi z)$ after 1970. We now turn to examine developments in each of these areas, beginning with employment per firm.

9.7 The Breadth of Accumulation

Let us commence by examining the overall historical evolution of employment per firm for the various groupings in the M&M universe. Consider first Figure 9-6a, in which we chart the average number of employees per firm for the Fortune 500, for the 'Others' and for the M&M sector as a whole. The data reveal major disparities in the experience of the different groups. Between 1954 and 1970, Fortune-500 firms almost doubled their average size -- from 15,715 to 29,215 employees per firm. The historical record for the 'Others' constituted almost a mirror image: these smaller firms saw their average size shrinking by more than a half -- from 81 employees per firm in 1954, to 38 in 1970. The experience for the 'average' M&M firm was mixed: first a decline from an average size of 141 employees per firm in 1955, to 99 in 1962, and then a certain increase, to 107 by 1970. Turning to Figure 9-6b, we can see how these different trends affected the relative position of large firms. With Fortune-500 firms rapidly expanding their breadth of accumulation amidst an overall contraction or stagnation for the average M&M firm, the Employee-per-Firm Ratio FEZ/MEZ was rising at an average annual rate of

Figure 9-6a Employment per firm

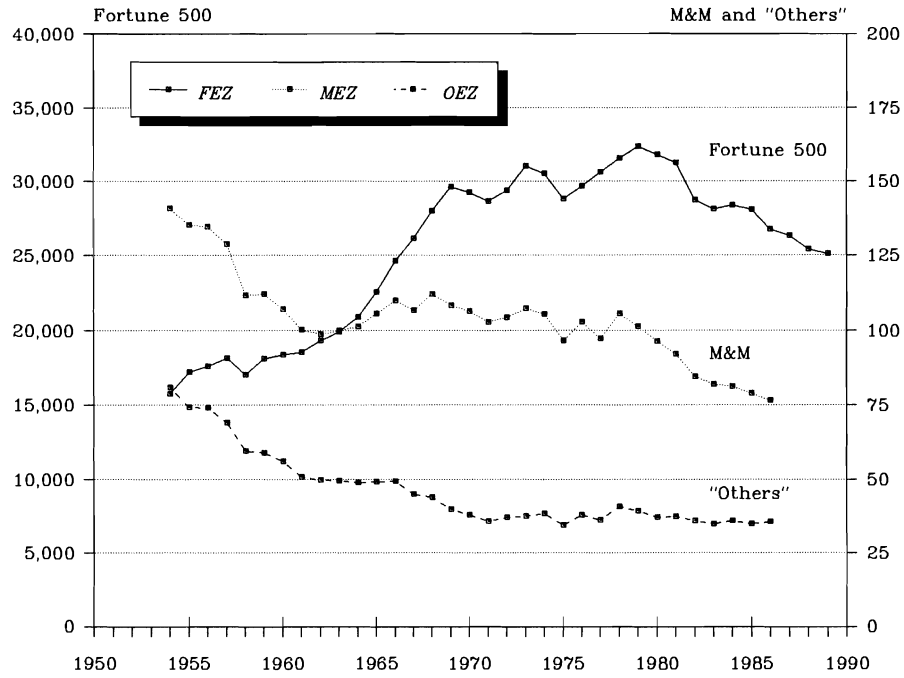
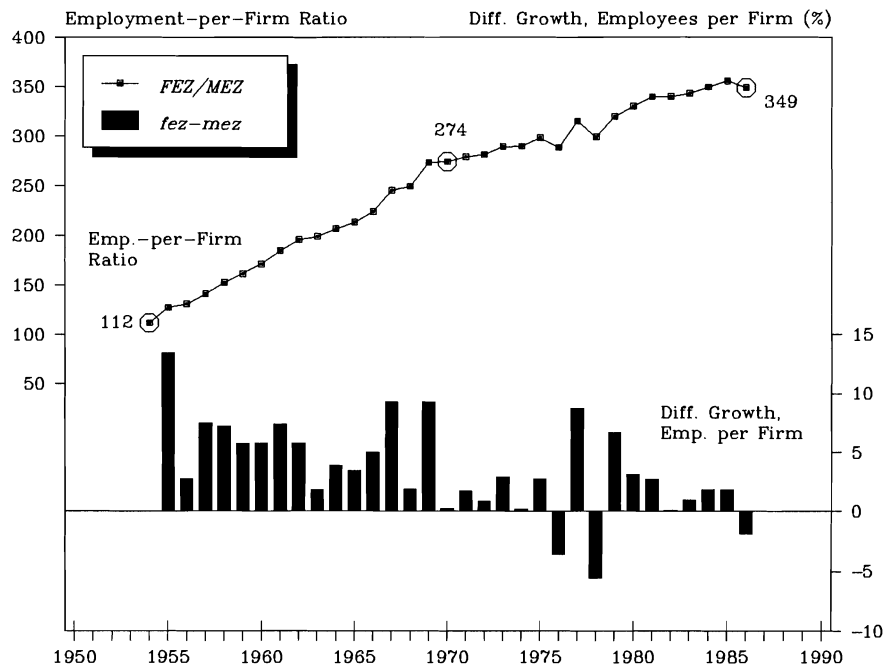


Figure 9-6b Employment per firm: differential indicators



5.6 percent, from 112 in 1954, to 274 in 1970 [the annual rates of change of *FEZ/MEZ* are given by the bar chart for (*fez - mez*) at the bottom of the figure].

The 1970s and 1980s brought substantial changes in trend. The Fortune-500 firms were no longer growing as fast as they did in the 1950s and 1960s. Between 1971 and 1979, their employment per firms rose only slightly to 32,387 and then started to decline rapidly, to 26,724 in 1986 and then further down to 25,080 in 1989. For the 'Others,' the 1970s and 1980s were marked by relative stability, with employment per firm fluctuating mildly around an average level of 37. In the entire M&M sector, employment per firm was slowly declining, reaching 77 by 1986. These changes affected a substantial reduction in (*fez - mez*), which fell to an annual average of 1.5 percent over the 1971-1986 period. Thus, in contrast to the near-tripling of *FEZ/MEZ* during the 1950s and 1960s, the value of this ratio was now growing much more slowly, reaching 349 by 1986.

At first glance, the contours of these historical developments may seem perplexing. How is it possible, one could ask, for there to be such large differences between the movements of *FEZ* and *OEZ*? In particular, how could the employment size of large and small firms move in *opposite* directions, as they did throughout the first period, between 1954 and 1970? Such a differential-growth pattern may be possible when we compare the record of *individual* companies which operate in *different* industries, but here we are dealing with *averages* for two groups whose activities span the *entire* industrial sector. With the number of 'other' firms growing by more than 50 percent -- from 138,613 in 1954, to 211,772 by 1970 -- it is clear that this sector indeed shared the 'prosperity' of the 1950s and 1960s, so why did the average size of 'other' firms *shrink* throughout that period? On the other hand, how could employment per firm in the Fortune-500 sector grow so much faster than what was warranted by the overall expansion of the industrial sector? The answer to these question has to do with the *sources* of employment growth.

The average number of employees per firm could change either through internal or external growth, but only the latter could lead to such divergent behaviour of the kind recorded in Figure 9-6a. Internal growth or decline commonly emerges in response to macroeconomic circumstances and hence

tends to have a similar impact on *FEZ* and *OEZ*. External expansion or contraction, on the other hand, are the consequence of mergers and acquisitions and, to the extent that these work by ‘redistributing’ employees from one group of firms to the other, they will have *opposite* effects on *FEZ* and *OEZ*. Provided that this inter-group redistribution is sufficiently intense, its opposite effects on employment growth for large and small firms may completely overshadow the similar effects of macroeconomic conditions, whatever they may be.

To consider these issues, we now turn to Figures 9-7a, 9-7b and 9-7c, in which we describe the effects of different growth components on the behaviour of employment per firm in each group of corporations. (The precise computations of these components are explained in Appendix C.) Beginning with the Fortune 500, we can decompose the change in employment per firm ΔFEZ_t , such that

$$(15) \quad \Delta FEZ_t = \Delta FEZ.DI_t + \Delta FEZ.DE_t + \Delta FEZ.F_t,$$

where $\Delta FEZ.DI_t$ is domestic internal growth attributed to the net creation of jobs within the United States by Fortune-500 firms, $\Delta FEZ.DE_t$ is domestic external growth stemming from mergers and acquisitions which ‘redistribute’ employees from the ‘Others’ to Fortune-500 corporations, and $\Delta FEZ.F_t$ is the net growth attributed to variations in the number of employees working for foreign subsidiaries of Fortune-500 firms (including both internal and external changes). (In this and the following decompositions, we treat external expansion into non-M&M areas as a facet of internal growth.) Now, suppose that, beginning with the level of FEZ_t in 1954, we added in each subsequent year t the annual contribution of $\Delta FEZ.DI_t$. The cumulative series -- which we label $Cum \Delta FEZ.DI_t$ -- tells us what would have happened to employment per firm had the Fortune 500 experienced only domestic internal growth. Using this same procedure for the other sources of growth, we can similarly compute the path of employment per firm with only domestic external growth ($Cum \Delta FEZ.DE_t$) and the cumulative effect of foreign growth ($Cum \Delta FEZ.F_t$). These hypothetical paths, along with the actual values for *FEZ*, are plotted in Figure 9-7a.

Figure 9-7a Sources of employment growth: Fortune 500

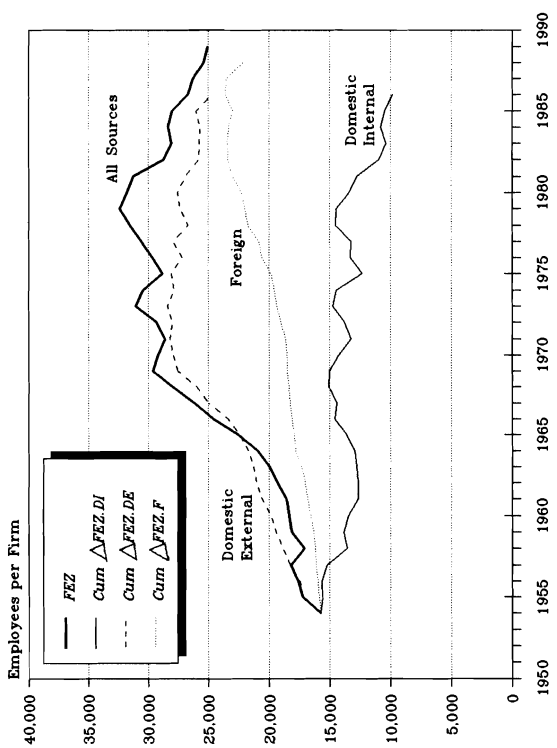


Figure 9-7b Sources of employment growth: 'Others'

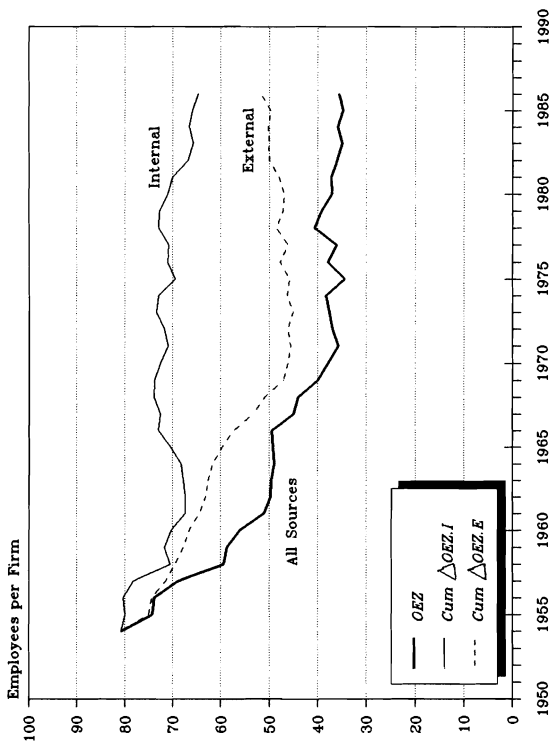


Figure 9-7c Sources of employment growth: M&M sector

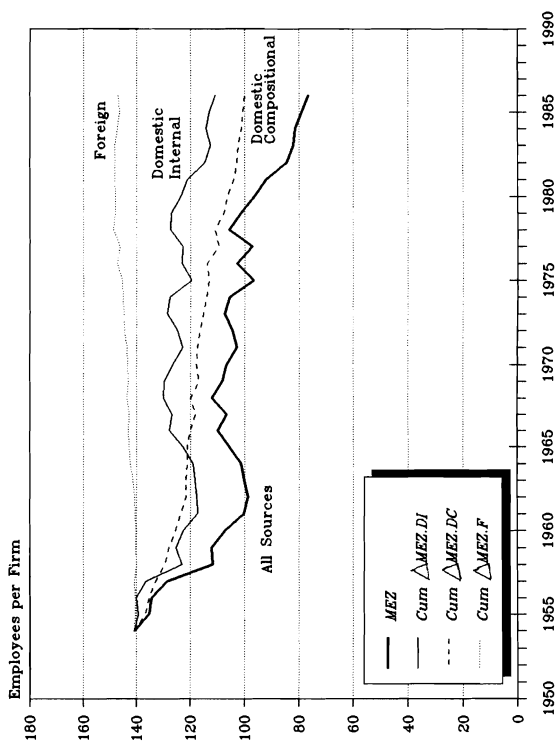
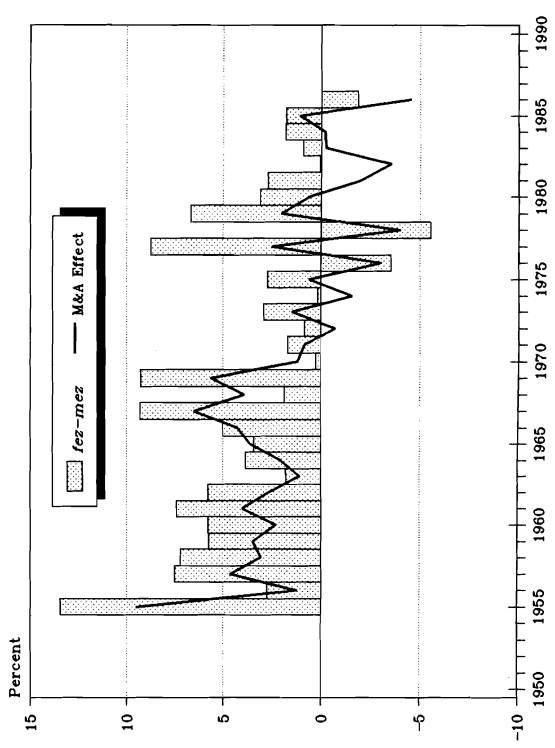


Figure 9-7d Differential employment growth and the M&A Effect



The decomposition for the other groups proceed in much the same way. Ignoring the negligible foreign operations of the 'Others,' we have

$$(16) \quad \Delta OEZ_t = \Delta OEZ.I_t + \Delta OEZ.E_t ,$$

where $\Delta OEZ.I_t$ and $\Delta OEZ.E_t$ denote the internal and external changes in employment per firm, respectively. The cumulative effect on *OEZ* of internal growth is then given by *Cum* $\Delta OEZ.I_t$, and that of external growth by *Cum* $\Delta OEZ.E_t$, which together with *OEZ* are charted in Figure 9-7b.

Finally, for the entire M&M universe, we have

$$(17) \quad \Delta MEZ_t = \Delta MEZ.DI_t + \Delta MEZ.DC_t + \Delta MEZ.F_t .$$

Here, $\Delta MEZ.DI_t$ is the contribution of domestic internal growth to M&M employment per firm, $\Delta MEZ.F_t$ is the corresponding contribution of foreign growth and $\Delta MEZ.DC_t$ denotes domestic compositional changes. (These compositional shifts arise from disproportionate variations in the number of small and large firms. Since most newly incorporated firm are small, the proportionate net increase in the total number of M&M firms *MNUM* is far larger than the corresponding proportionate increase in the overall M&M employment *ME*, and that tends to lower *MEZ* even if there are no changes in the actual size of existing firms.) With these definitions, the path of M&M employment per firm with only internal growth is given by *Cum* $\Delta MEZ.DI_t$, the path with only domestic compositional growth by *Cum* $\Delta MEZ.DC_t$, and that with only foreign growth by *Cum* $\Delta MEZ.F_t$. These series, together with *MEZ* are plotted in Figure 9-7c. Let us now turn to examine the historical record as told by the different figures.

Overall, it seems clear that, for all three groups, the impact on employment per firm of internal growth was characteristically different from the effects of external, compositional and foreign growth. Specifically, in each of the cases, internal growth seems to have influenced the pattern of short-term fluctuations, while the latter sources of growth were mainly responsible for long-term changes.

Furthermore, while the pattern of internal growth was similar for the three groups, their comparable experiences with the other sources of growth were quite different.

Taking a closer look at these charts, we can see that, for the Fortune-500 firms, the near-doubling of *FEZ* between 1954 and 1970 had very little to do with domestic internal growth. Over that period, a 'typical' Fortune-500 corporation in fact eliminated 1,485 jobs which, in the absence of other factors, would have lowered *FEZ* from 15,715 employees in 1954, to 14,230 in 1970. The level of *FEZ* nevertheless increased, firstly through the addition of foreign employees, which more than offset the internal decline in domestic employment, but, primarily, due to the very rapid external growth *via* mergers and acquisitions. Indeed, external growth on its own could explain almost the entire increase in *FEZ* over the 1954-1970 period! The other side of this process is evident when we examine the comparable experience of 'other' companies as depicted in Figure 9-7b. The number of employees per firm in that group fell from 81 in 1954, to 38 in 1970 -- but only about 15 percent of that decline was due to internal reasons. Most of the drop came as a consequence of external decline -- probably through acquisitions of large 'other' firms by their Fortune-500 counterparts.

The significance of this employee 'reallocation' is consistent with what we know on the conglomerate merger-wave of the 1950s and 1960s. According to Ravenscraft and Scherer (1985, Table 2-4, p. 30), the top 200 manufacturing firms (ranked by sales) more than doubled their average number of business lines per company from 4.8 in 1950 to 10.9 by 1975. Further evidence (Table 2-7, p. 36) indicate that, out of the newly added lines of business, about 75 percent were added through acquisitions as compared with only 25 percent which were added *via* internal growth. Finally, most large firms tended in that period to acquire lines of business which were substantially smaller than their main operation (p. 29), suggesting that the majority of these lines were previously part of the small economy. In interpreting the historical record, Scherer and Ross (1990, p. 94) concluded that, were it not for these conglomerate mergers, the share of value added in domestic manufacturing accounted for by the 200 largest manufacturing firms would have *fallen* from 34 percent in 1950, to 28 percent by 1975 -- instead of *rising*, as it did, to 44 percent.

These data, together with our own findings on the sources of employment growth, may serve to cast some doubt on the common belief that the maturation of modern capitalism brought a principal change in the *modus operandi* of big business. At the turn of the century, Veblen (1904, pp. 24-5) identified the chief preoccupation of large-scale business enterprise with ‘an alert redistribution of investments from less to more gainful ventures’ and with the ‘strategic control of the conjunctures of business through shrewd investments and coalitions with other business men.’ During the 1950s and 1960s, there was a growing conviction among liberal as well as radical economists that this characterization was no longer adequate. The modern corporation of the mid-twentieth century, many argued, was fundamentally different from its predecessor of the late nineteenth century. Galbraith, in his *New Industrial State* (1967), for example, insisted that the goal of pecuniary accumulation had given way to the quest of ‘stability’ for the technostructure, while Baran and Sweezy in their *Monopoly Capital* (1966, p. 29) suggested that the present-day corporation manager was once again fully immersed in the ‘surveillance and regulation of a given industrial process with which his livelihood is bound up.’

The data presented in this section suggest a somewhat different interpretation. Fortune-500 firms may be concerned with their underlying industrial operations, but that does not necessitate that they stop buying and selling firms. In fact, their reputed concern for stability all but *dictates* that they continue and expand by mergers and acquisitions. Maintaining stable oligopolistic profits requires that there be no ‘over-investment’ in industrial capacity, so Baran and Sweezy’s ‘surveillance and regulation’ may not be so different from Veblen’s ‘industrial sabotage’ after all.⁸ That is not to say, of course, that large firms do not invest in their existing operations. It only means that, on the whole, such investment must not lead to any appreciable internal increase in capacity and employment. The ‘success’ of large firms in fulfilling this requirement is clearly evident from the historical path of *Cum ΔFEZ.DI* in Figure 9-7a. However, limiting investment in one’s own industry does not solve the oligopolistic dilemma. With their profits rising faster than their ‘need’ for additional productive capacity, large firms are constantly faced with a chronic lack of ‘offsets to savings.’ As Bowring (1986) convincingly argued

⁸ Later, Sweezy acknowledged that he and Baran neglected to appreciate the crucial role of financial activity. In Magdoff and Sweezy (1983), he identified the duality of ‘production’ and ‘finance’ as a potential explanation for chronic stagflation. Unlike Veblen, however, Magdoff and Sweezy did not take this distinction further, to explore the interaction between stagflation and corporate restructuring.

(thought almost a century after Veblen made this very claim), the persistent threat of creating excess capacity in their home industries, compels core firms to *continuously* diversify into non-core areas of the small economy. Unlike Veblen, however, Bowring seems to imply that large firms will expand by creating new capacity in the industries to which they enter, and that is *not* supported by the evidence. While Fortune-500 have indeed become increasingly diversified, the data suggest their diversification was achieved almost exclusively through *external* growth, that is, by taking over smaller firms.

The 'redistribution' of employees from the 'others' to the Fortune-500 had to come to an end, however. In their expansion into new, non-core areas, Fortune-500 rarely bother with small companies and go directly after the leading corporations. Yet, this method of entry cannot be used forever since, after a certain point, there will be no more sufficiently large non-core firms left to be acquired. Indeed, the ongoing conglomerate merger movement eventually eliminated many of the large firms in the 'Others' group and, by the early 1970s, with *OEZ* standing at less than half of its 1954 level, there were simply not too many 'other' candidates worth buying. In fact, many large firms started to divest some of their less successful acquisitions. According to Ravenscraft and Scherer (1985, ch. 6), during the 1970s and early 1980s, there were thousands of divestitures by large firms, and this is also suggested by our own data in Figures 9-7a and 9-7b which show for that period a positive external contribution to *OEZ* and a corresponding external deductions from *FEZ*. The receding of the merger movement in the 1970s was only temporary, however. The ever-present predicament of excess capacity meant that, on the whole, external growth was still the only 'safe' way to offset large corporate savings. The underlying pressure to expand was as strong as ever and, with the greatly relaxed antitrust attitude of the new Reagan Administration which took power in 1981, the merger movement was once again resumed. Since the early 1980s, there was a dramatic increase in the number and indeed the size of mergers. This time, however, many of the takeover targets were themselves part of the Fortune-500 core. For example, in the 1983-88 period alone, 67 of the Fortune-500 firms were 'swallowed' by other Fortune-500 corporations, while another 15 were turned into privately-held firms (Newport, 1989). Yet, despite the unprecedented size of many of these mergers (which often reached multibillion-dollar proportions), they had very little effect on *FEZ* and *OEZ*. The reason is fairly simple. When one Fortune-500 firm is acquired by another, its place is taken by the largest among the 'Others.' But since the conglomerate

merger wave of the 1950s and 1960s reduced the average size of the large ‘other’ firms, the effect on *FEZ* and *OEZ* of such inter-group movements became rather negligible. This, together with ongoing divestitures, meant that net external growth during the 1970s and 1980s had a mildly negative effect on *FEZ*. The impact of foreign growth, on the other hand, was generally positive during that period and, if it were only for these two sources, *FEZ* would have continued to rise. Domestic internal growth did not remain neutral, however. As we describe later in Section 9.10, the 1970s and 1980s were marked by a growing penetration of imports which heightened the spectre of excess capacity for the Fortune 500 and forced them toward a massive industrial ‘rationalization.’ Indeed, many of the large mergers of the 1980s were motivated by the need to curtail ‘superfluous’ operations. All in all, between the late 1970s and the mid-1980s, large-scale layoffs and plant closing by the Fortune 500 generated a substantial internal decline in their domestic operations, leading to a 15 percent drop in *FEZ*.

Turning to Figure 9-7c, we can see that for the average M&M firm, there was some increases due to growing foreign employment, but that these were relatively insignificant in arresting the long-term decline of *MEZ*. Part of that decline could be attributed to internal contraction, primarily during the late 1950s and early 1960s, and then again during the early 1980s. The main driving force, however, was the compositional shift in the size-structure of firms which accounted for a full 2/3rds of the drop in *MEZ* between 1954 and 1986.

How have these various sources of change affected the *differential* growth of employment for a ‘typical’ Fortune-500 firm? In order to assess the balance of evidence, we first decompose (*fez* – *mez*) such that

$$\begin{aligned}
 (18a) \quad (fez - mez)_t &= \Delta FEZ_t / FEZ_{t-1} - \Delta MEZ_t / MEZ_{t-1} \\
 &= (\Delta FEZ.DI_t + \Delta FEZ.DE_t + \Delta FEZ.F_t) / FEZ_{t-1} \\
 &\quad - (\Delta MEZ.DI_t + \Delta MEZ.DC_t + \Delta MEZ.F_t) / MEZ_{t-1}
 \end{aligned}$$

and then rearrange by ‘source’, so

$$\begin{aligned}
(18b) \quad (fez - mez)_t &= (\Delta FEZ.DI_t/FEZ_{t-1} - \Delta MEZ.DI_t/MEZ_{t-1}) && /domestic\ internal \\
&+ (\Delta FEZ.DE_t/FEZ_{t-1}) && /domestic\ external \\
&- (\Delta MEZ.DC_t/MEZ_{t-1}) && /domestic\ compositional \\
&- (\Delta FEZ.F_t/FEZ_{t-1} - \Delta MEZ.F_t/MEZ_{t-1}) . && /foreign
\end{aligned}$$

In Table 9-7, we record the average annual values for each of these components during the two sub-periods of 1955-1970 and 1971-1986. The results reported in this table could be interpreted in two ways. During any given period, they indicate the contribution of each source of growth to the average level of $(fez - mez)$. They could also be used to assess how each of these factors affected the change in $(fez - mez)$ which occurred between the two periods.

Table 9-7 Differential rates of growth of employee per firm for the Fortune 500: decomposition by source (annual averages, percent)

Period	All Sources ($fez - mez$)	Domestic Internal		Domestic External	Domestic Composit.	Foreign	
		$\frac{\Delta FEZ.DI_t}{FEZ_{t-1}}$	$\frac{\Delta MEZ.DI_t}{MEZ_{t-1}}$	$\frac{\Delta FEZ.DE_t}{FEZ_{t-1}}$	$\frac{\Delta MEZ.DC_t}{MEZ_{t-1}}$	$\frac{\Delta FEZ.F_t}{FEZ_{t-1}}$	$\frac{\Delta MEZ.F_t}{MEZ_{t-1}}$
1955-70	5.6	-0.6	-0.6	3.7	-1.2	0.9	0.2
1971-86	1.5	-0.9	-1.0	-0.7	-1.1	1.1	0.2

These summary statistics accentuate the pivotal role of mergers and acquisitions. First, we can see that internal growth had practically no impact on $(fez - mez)$ since, in each period, the annual averages for $\Delta FEZ.DI_t/FEZ_{t-1}$ were almost identical to those of $\Delta MEZ.DI_t/MEZ_{t-1}$. The effect on $(fez - mez)$ of compositional shifts was positive, but it hardly changed between the two periods: the annual average for this variable was -1.2 percent between 1955 and 1970, and -1.1 percent between 1971 and 1986. The impact of foreign growth was similar. It, too, contributed positively to $(fez - mez)$, but the effect in the first period (0.7 percent) was small and not much different from that in the second period (0.9 percent). The principal reason why $(fez - mez)$ dropped from an average annual rate of 5.6 percent during the 1956-1970 period, to 1.5 percent during the subsequent 1971-1986 period, was the dramatic change which occurred in the contribution of domestic external growth: from an annual average

of 3.7 percent in the first period, it fell to -0.7 percent in the second. This crucial significance of external growth is illustrated in Figure 9-7d, where we contrast the annual values of $(fez - mez)$ with those for $\Delta FEZ.DE_t / FEZ_{t-1}$ which we label here as the 'Mergers and Acquisitions Effect.' The chart illustrates both the tight short-term correlation between the two series, as well as their positive long-term relationship.

In summary, mergers and acquisitions had a fundamental effect on the Fortune-500 employment per firm and on its differential rate of growth relative to the average M&M firm. To be sure, Fortune-500 firms would have expanded their breadth of accumulation faster than the average even without external growth, but their differential expansion in that case would have been far more stable than it actually was. Instead of averaging as much as 5.6 percent between 1954 and 1970, and only 1.5 percent from 1971 to 1986, the average annual value of $(fez - mez)$ in the absence of mergers and acquisitions would have been 1.9 percent in the first period and marginally higher, at 2.2 percent, in the second. This effect of mergers and acquisitions on the breadth of accumulation had an indirect but crucial impact on the inflationary experience of the M&M sector. Specifically, it affected developments in the depth of accumulation in a way which alleviated inflationary pressures until 1970 and raised them thereafter. We turn to consider these links now.

9.8 The Depth of Accumulation

As we have seen in Section 9.6, the focus of differential profit growth for the Fortune-500 firms shifted from the breadth of accumulation during the 1950s and 1960s, to the depth of accumulation during the 1970s and 1980s. The underlying changes in the depth of accumulation are depicted in Figure 9-8a, where we contrast the historical development of net profit per employee in the various corporate categories, and in Figure 9-8b which summarizes the interaction between the performance of the Fortune 500 and the M&M universe. Relevant summary statistics for these and the remaining charts of this section are included in Table 9-8.

While Figure 9-8b reveals continuous changes in the Profit-per-Employee Ratio FIE/MIE , the variations in the 1954-1970 period were clearly much smaller than those occurring in the subsequent

Figure 9-8a Net profit per employee

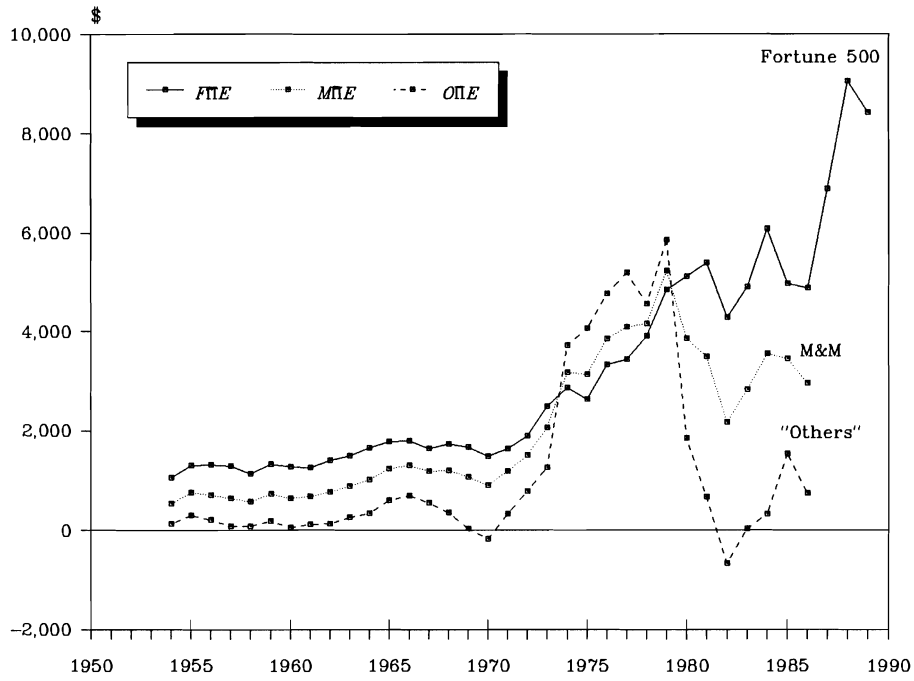
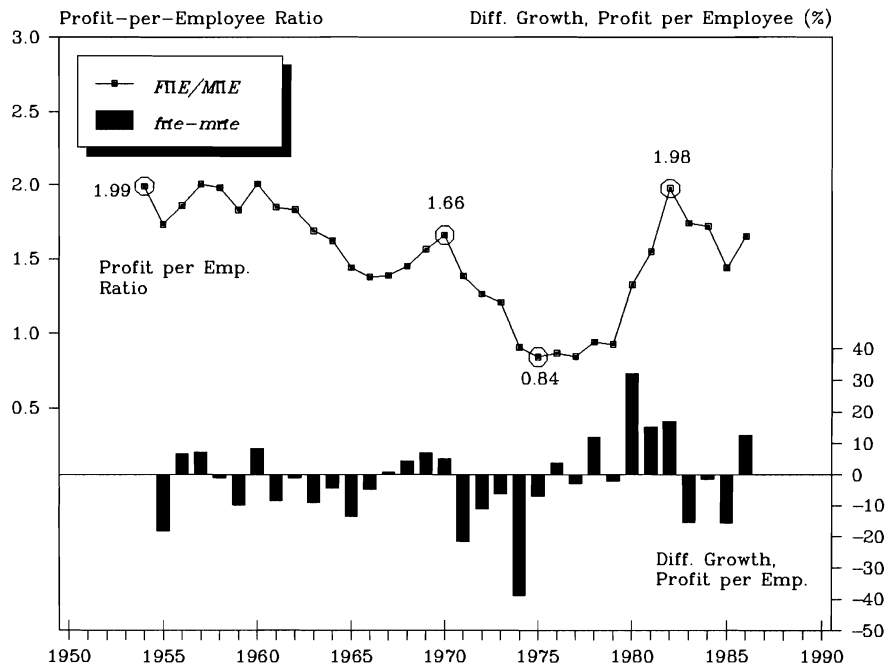


Figure 9-8b Net profit per employee: differential indicators



period between 1971 and 1986. The relative stability of this ratio until 1970 reflects similarities in the movement of the underlying profit-per-employee series depicted in Figure 9-8a. For the Fortune 500, profit per employee $FPIE$ grew by 41 percent, from \$1,052 in 1954, to \$1,484 by 1970. For the 'Others,' $OPIE$ declined by 230 percent -- from \$138 in 1954, to -\$179 by 1970 -- but that had a relatively small impact on MIE . During the 1950s and 1960s, there was a rapid rise in the overall number of Fortune-500 employees, coupled with a decline in the corresponding number for the 'Others' (see Chapter 8). This shift, which resulted mainly from the conglomerate merger wave, implied that changes in $OPIE$ were becoming decreasingly significant relative to $FPIE$ in affecting the average profit per employee in the M&M sector as a whole. Overall, MIE rose somewhat faster than the $FPIE$: it increased by 69 percent from \$529 in 1954, to \$895 by 1970. As a result, the Profit-per-Employee Ratio $FPIE/MIE$ fell at an average annual rate of 1.9 percent -- from 1.99 in 1954, to 1.66 by 1970 [the approximate rates of growth for $FPIE/MIE$ are given by the bar chart for $(f\pi e - m\pi e)$ at the bottom of Figure 9-8b].

Table 9-8 Differential rates of change for a Fortune-500 firm (annual averages, percent)

Differential rate of change of:		1955-70	1971-74	1975-86
Assets per Firm				
(Differential Rate of Accumulation, DRA)	$faz - maz$	4.5	1.7	0.5
Net Profit per Firm				
	$f\pi z - m\pi z$	3.9	-17.5	5.4
Employees per Firm				
(Breadth of Accumulation)	$fez - mez$	5.6	1.4	1.5
Net Profit per Employee				
(Depth of Accumulation)	$f\pi e - m\pi e$	-1.9	-19.5	4.0
Sales per Employee				
	$fse - mse$	-0.9	-0.3	1.5
Markup				
	$fk - mk$	-0.8	-16.3	2.2
Differential-Risk Index				
(Normalized Deviations from Average)	$ f\pi zn - m\pi zn $	-3.7		-0.9

This drop in $FPIE/MIE$ must have been only a minor cause of concern for Fortune-500 firms since, as we already know, during that period, the Employment-per-Firm Ratio FEZ/MEZ was expanding at a brisk average rate of 5.6 percent per annum. The predicament for the Fortune-500 firms arose only after 1970, when, with the receding conglomerate merger movement and enhanced divestitures, the increase in FEZ/MEZ has moderated considerably. Under these new circumstances,

developments in the depth of accumulation became far more significant than before. And indeed, we can see how, after 1970, the Profit-per-Employee series started to experience much stronger fluctuations. For the Fortune 500, there was a more or less continuous expansion throughout the 1970s, with *FIE* rising more than threefold and reaching \$5,103 by 1980. For the 'Others,' the changes have been even more dramatic. From an average loss of \$179 per employee in 1970, *OIE* climbed very rapidly, surpassing *FIE* and reaching \$3,712 by 1975!. The increase continued, though at a slower pace, until 1979, when *OIE* reached a peak of \$5,850, still higher than the comparable value for the Fortune 500. The 1980s brought further changes. Whereas the Fortune 500 experienced some slowdown in the growth of *FIE*, the 'Others' saw their average net profit per employee *OIE* plummet from \$5,850 in 1979, to -\$675 in 1982, rise again to \$1,525 in 1985, and then decline to \$736 in 1986. (There was a large increase in *FIE* during the late 1980s, but we have no comparable data for the two other categories.)

During this period, there was a reversal in the relative impact of *FIE* and *OIE* on *MIE*. As we say in Chapter 8, after 1970, the share of 'Others' in M&M employment began to rise, so *OIE* started to have an increasing influence on *MIE*. We can indeed see in Figure 9-8a that, much like *OIE*, net profit per employee in the M&M universe rose to surpass *FIE* through most of the 1970s and then dropped below it during the 1980s. The consequence of this heightened variability in the underlying profit-per-employee series was enhanced instability for the *FIE/MIE* ratio: it fell sharply in the early 1970s, stabilized for the rest of the decade and, then, rebounded in the early 1980s.

In summary, these historical details, together with a second bird-eye view over Figures 9-8a and 9-8b, suggest that the depth of accumulation was not an 'area of contention' until 1970, but that it become one thereafter. During the 1950s and 1960s, the race for differential pecuniary accumulation took place mainly within the breadth of accumulation, primarily through mergers and acquisitions. The Fortune 500 enjoyed a rapid differential growth in employee per firm combined with low risk premiums, so there was no apparent need for any destabilizing increases in profit per employee. When the conglomerate merger movement ended in the late 1960s, however, the Fortune 500 were left with no other alternative and reluctantly turned to expanding their depth of accumulation. And, indeed, the end results were not necessarily favourable. Initially, their differential growth of net profit per employee fell,

and when it subsequently started to rise, there was already a considerable deterioration in their relative risk position (see Section 9.5).

Why has the depth of accumulation proven a more ‘problematic’ area for the Fortune 500? The reason is fairly simple. As we explained in Section 9.3, changes in employment per firm are rarely ‘contagious,’ and when the Fortune 500 expand through mergers and acquisitions, the resulting increase in *FEZ* has no meaningful effect on *MEZ*. Changes in net profit per employee, on the other hand, tend to ‘spread’ much more rapidly, and a rising *FIIZ* for the Fortune 500 is bound to affect *MIIZ*, both directly as well as indirectly through its impact on *OIIZ*. Furthermore, in raising their depth of accumulation, large firms may adversely affect their risk premium and possibly their breadth of accumulation, so the overall impact on their differential rate of accumulation becomes highly uncertain.

Symbolically, we can decompose the differential growth of net profit per employee into two components, such that

$$(19) \quad (f\pi e - m\pi e) \approx (fse - mse) + (fk - mk) ,$$

where $(fse - mse)$ is the differential growth of sales per employee and $(fk - mk)$ is the differential growth of the markup. In order to raise $(f\pi e - m\pi e)$, Fortune-500 firms must increase their rate of "Inflation" fse with the hope that this will raise fk [recall that, since cost cutting is often independent of firm size, its effect on $(fk - mk)$ is likely to be negligible]. The problem for these firms is that the average M&M "Inflation" mse , as well as the growth of the M&M markup mk are ‘indeterminate.’ The spark of a higher Fortune-500 "Inflation" may raise mse and enhance the general inflationary pressures with uncertain consequences for $(fk - mk)$. This interaction between the components of Equation (19) may shed some light on the inflationary experience of the M&M sector and we proceed to examine it more closely now.

Consider, first, Figure 9-9a, which charts data for sales per employee in the different groups, and Figure 9-9b, which depicts the Sales-per-Employee Ratio and the Fortune-500’s differential rate of

Figure 9-9a Sales per employee

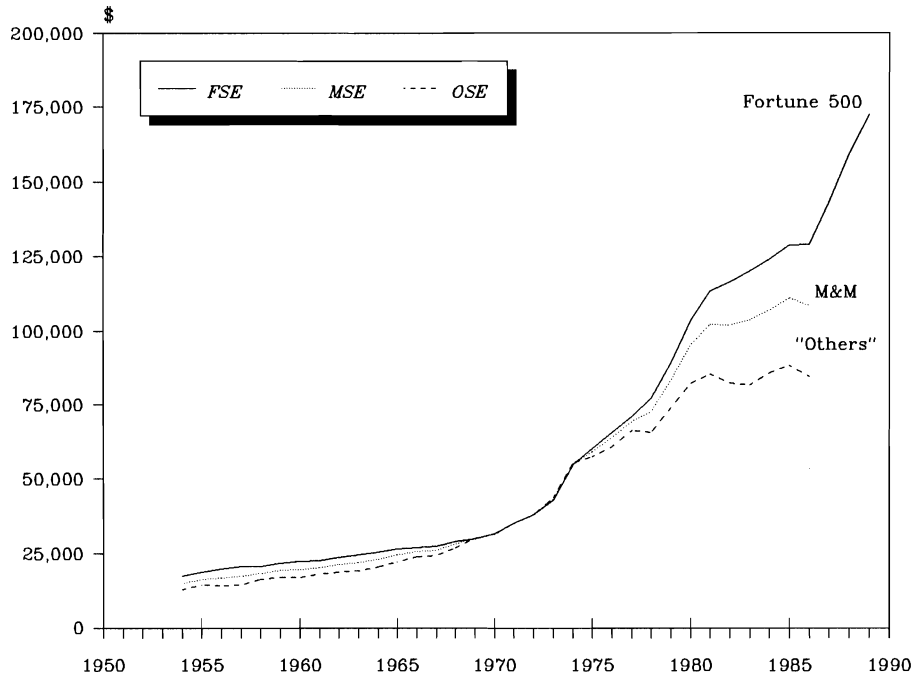
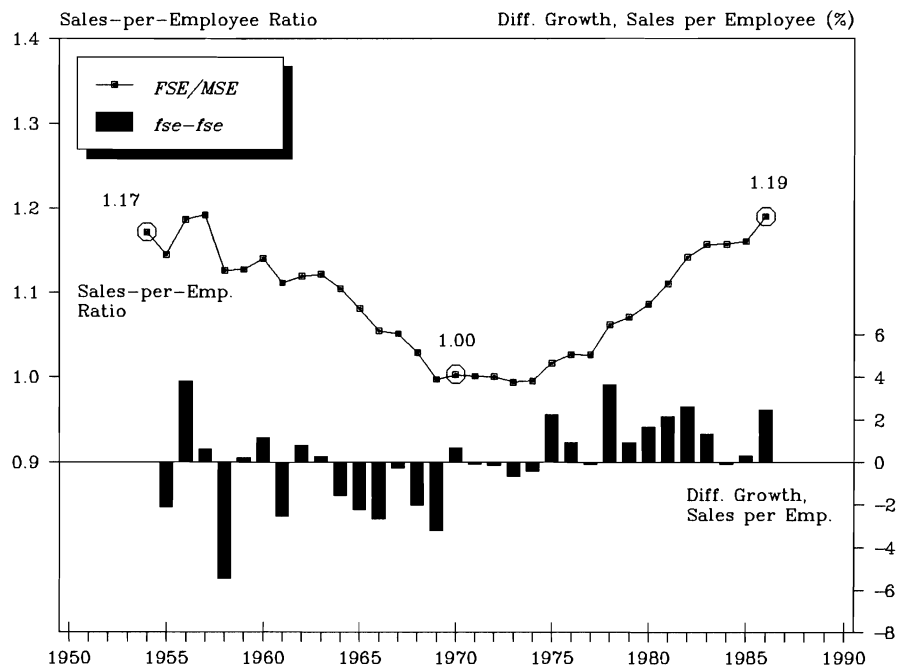


Figure 9-9b Sales per employee: differential indicators



"Inflation." We can see that, until 1970, sales per employee for all groups rose relatively slowly. However, as we have already shown in Chapter 8, the rate of "Inflation" was not uniform across the different groups of firms. While the Fortune 500 expanded *FSE* at an average annual "Inflation" rate of 4 percent (from \$17,408 in 1954, to \$31,759 in 1970), the 'Others' were raising *OSE* faster, at an average annual rate of 5.7 percent (from \$12,948 in 1954, to \$31,533 by 1970). For the M&M sector as a whole, sales per employee *MSE* expanded at an average "Inflation" rate of 4.9 percent, from \$14,857 to \$31,679 over that same period. The consequences for the Sales-per-Employee Ratio FSE/MSE was a gradual decline at an average annual rate of -0.9 percent from 1.17 in 1954, to 1.00 in 1970.

The 1970s brought a sharp acceleration of "Inflation" in all corporate categories. For a while, between 1971 and 1974, sales per employee in all three groupings expanded at similar annual rates: 14.8 percent for the Fortune 500, 15.7 percent for the 'Others' and 15.2 percent for the M&M sector as a whole. We can see in Figure 9-9b, that the Sales-per-Employee Ratio (temporarily) stabilized during that period around a value of unity, with the differential pace of "Inflation" ($fse - mse$) averaging a negligible -0.3 percent a year.

From 1975 onward, sales per employee for the three groups were once again diverging. Contrary to the pre-1970 period, however, the rate of "Inflation" for the Fortune 500 was now higher, not lower than the comparable rates for the 'Others' and the entire M&M sector. From a level of \$54,664 in 1974, *FSE* rose at an average annual rate of 7.5 percent, reaching \$128,979 by 1986. (As we can see in Figure 9-9a, Fortune-500 "Inflation" accelerated again during the late 1980s but, unfortunately, there are no comparable statistics for the other two categories.) The rate of "Inflation" for the 'Others' was far lower: rising at an average rate of only 3.8 percent per annum, *OSE* increased from \$55,383 in 1975, to \$84,556 by 1986. For the M&M sector, the rate of "Inflation" was 6.0 percent and that raised *MSE* from \$55,925 in 1974, to \$108,368 in 1986. As a consequence of these shifts in the relative rates of "Inflation," the ($fse - mse$) differential rose to an annual average of 4.0 percent, pulling the Sales-per-Employee Ratio FSE/MSE from 1.00 in 1974, to 1.19 by 1986, which was approximately where it stood in the mid-1950s.

The overall historical contours in Figures 9-9a and 9-9b suggest that developments in the breadth of accumulation were indeed consequential for the "Inflation" experience affecting the depth of accumulation. The link between these two realms is illustrated more directly, firstly in Figure 9-10a, where we contrast the Employment-per-Firm Ratio FEZ/MEZ with the Sales-per-Employee Ratio FSE/MSE and, secondly, in Figure 9-10b, which relates the respective rates of growth for these ratios, as approximated by $(fez - mez)$ and $(fse - mse)$. Based on these charts, we can conjecture that, as long as the merger movement of the 1950s and 1960s enabled Fortune-500 firms to expand their depth of accumulation much faster than the average, these firms could allow their sales per employee to rise more slowly than the average (as was shown in Figure 9-9a). Part of the ensuing decline in FSE/MSE was the consequence of the Fortune 500 acquiring 'other' firms with lower sales per employee. The overall effect on FSE/MSE of this compositional shift, however, was only marginal. The main reason behind the downward trend of FSE/MSE until 1970 was the "Inflation" strategy of large firms. With the Employment-per-Firm Ratio FEZ/MEZ rising so fast, Fortune-500 firms found it permissible, and maybe even desirable, to accept a low inflation consensus and to let their own sales per employee rise more slowly than the average. At the time, this historical experience was reflected in the writings of many economists as evidence of a new industrial order (see Chapter 4). The large bureaucratic corporation was seen as a stability-seeking organization, habituated toward gently adjusting to changing circumstances. With its fixed-markup policies and reputed 'smoothing' techniques, the large firm was inhibited from taking any initiative, becoming a mere transmitter of cost signals. The 'price maker' of the 1930s apparently resurfaced as the 'inflation taker' of the 1960s. However, since the early 1970s, with the differential increase in the breadth of accumulation slowing down, the Fortune-500 could no longer maintain their 'moderation.' The long-term decline in FSE/MSE had to come to an end and with it disappeared the reputed sluggishness of corporate giants. For a while, there was a 'neck to neck' "Inflation" race between the Fortune-500 and the 'average' but, eventually, from the mid-1970s onward, the Fortune 500 were emerging as the clear 'winner' with the FSE/MSE ratio starting its ongoing ascent.

The link between differential changes in the depth of accumulation and the relative pattern of "Inflation" appears all the more significant when we note that it holds not only for long trends, but also for short-term variations. This is clearly illustrated in Figure 9-10b, where we can see the very tight

Figure 9-10a Employment-per-Firm and Sales-per-Employee ratios

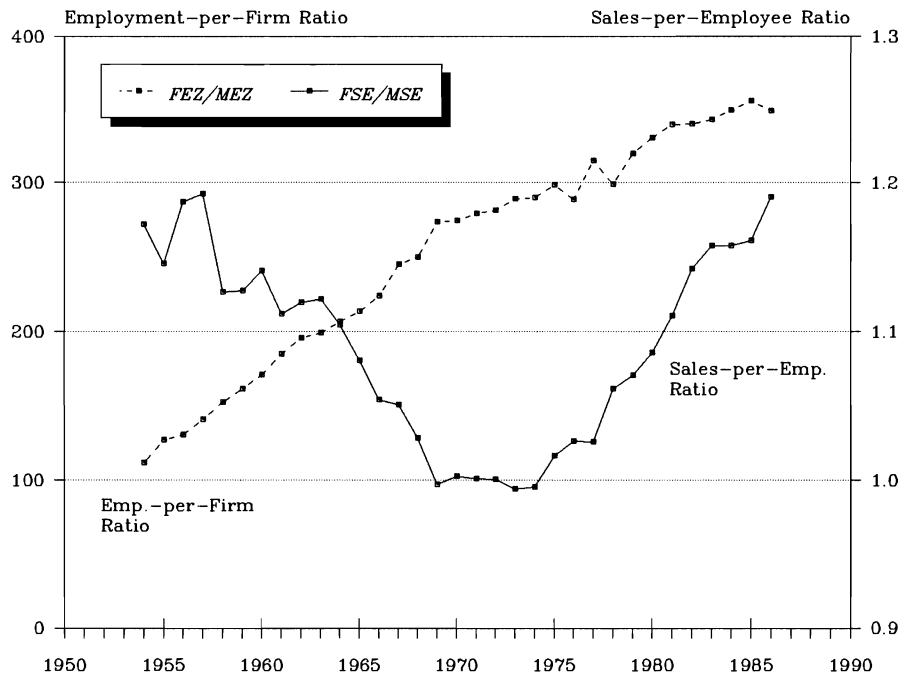
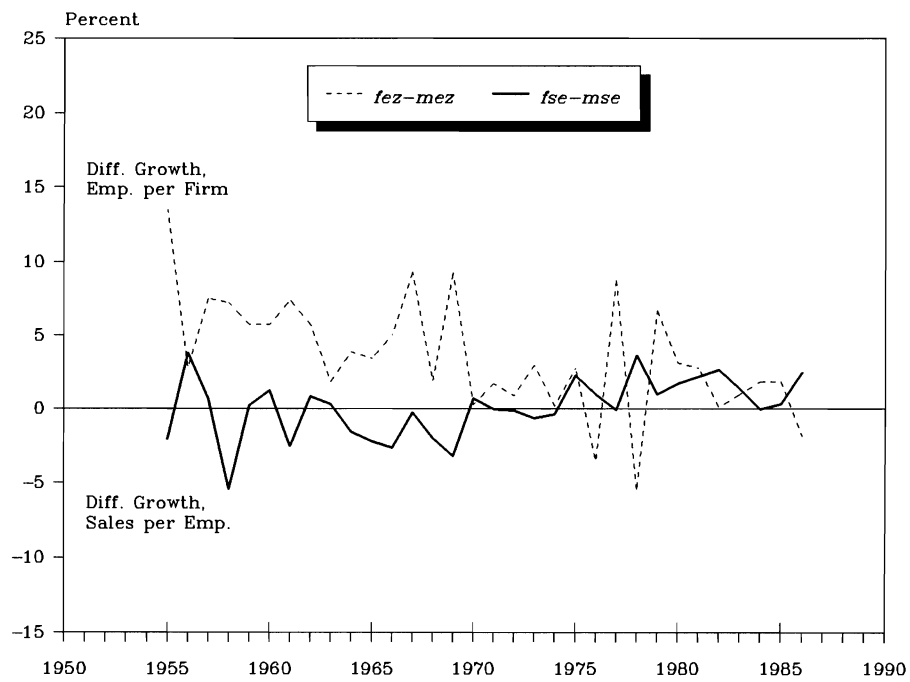


Figure 9-10b The breadth of accumulation and "Inflation": differential changes



inverse correlation between the oscillations of $(fez - mez)$ and $(fse - mse)$, particularly before 1970. This may serve to suggest that the large corporations were probably never 'inflation-passive,' not even during the relatively tranquil 1950s and 1960s. The data appear to indicate that, in seeking to alter their "Inflation" relative to the average, core firms may have tried to counteract not only long-term shifts in FEZ/MEZ , but also the annual fluctuations of that ratio!

Being able to determine their own rate of "Inflation" fse , and by that to influence the differential growth of sales per employee $(fse - mse)$, is still insufficient for the Fortune 500, however. In order to positively affect the differential growth of profit per employee $(fpe - mpe)$, their "Inflation" strategy must also have a desirable impact on the differential growth of the markup, and that is not easy to ensure.

Consider now Figure 9-11a, where we chart the markup of net profit on sales in the different corporate categories, and Figure 9-11b, which describes the Markup Ratio and its approximate rate of change. In that second figure, we also include for the purpose of comparison, the Profit-per-Employee Ratio as charted earlier in Figure 9-8a. The data presented in Figure 9-11a will be analyzed in some detail later. At this stage, we should simply observe that it was mainly the underlying changes in these markups, through their effect on the Markup Ratio FK/MK , which determined the historical course of the Profit-per-Employee Ratio FIE/MIE . In terms of Figure 9-11b, it is clear that the contemporaneous variations in the Sales-per-Employee Ratio had only a secondary impact, illustrated by the vertical distance between FIE/MIE and FK/MK . The primary role of the markup is evident mainly in the second period of the 1970s and early 1980s. As we can see from Table 9-8, the rapid decline of the Profit-per-Employee Ratio FIE/MIE between 1971 and 1974 (at an average annual rate of -19.5 percent) was instigated primarily by the sharp drop of the Markup Ratio FK/MK (at an average annual rate of -16.3 percent). Similarly, during the 1975-86 period, the 4.0 percent annual rate of increase of FIE/MIE was affected more from the annual 2.2 percent rise in the Markup Ratio, than from the corresponding 1.5 percent increase in the Sales-per-Employee Ratio.

Heading to this secondary role of FSE/MSE , should we conclude that the "Inflation" strategy of Fortune-500 firms was largely inconsequential in affecting $(fpe - mpe)$ and, by extension, $(faz - maz)$?

Figure 9-11a Profit markups

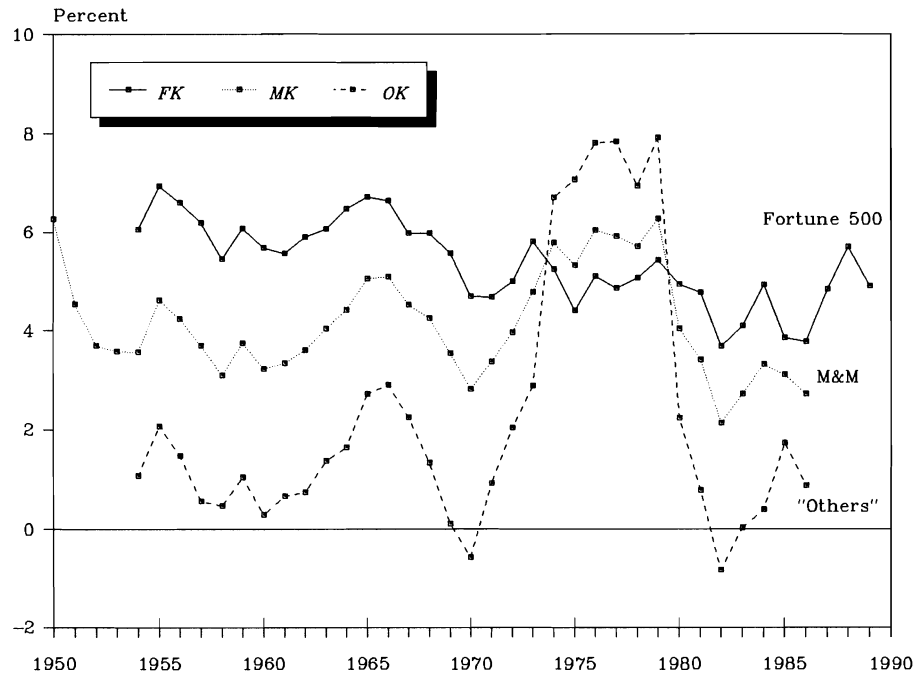
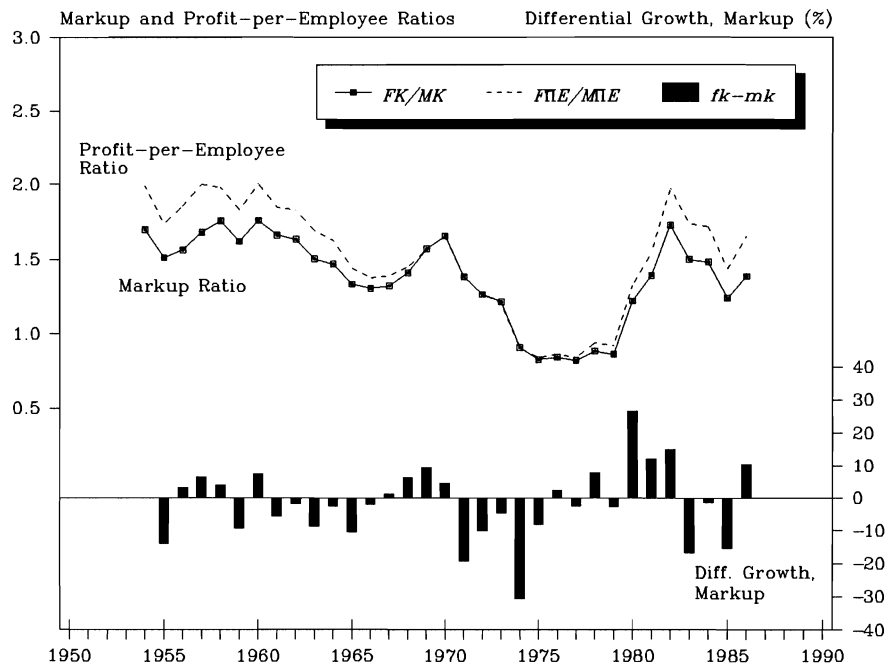


Figure 9-11b Profit markups: differential indicators



Not at all. While the *direct* contribution of "Inflation" to the differential development of net profit per employee may have been relatively small, its *overall* effect, including the impact it had on the differential evolution of markups, was not. We turn to analyze these relationships now.

9.9 Inflation and Redistribution

In section 9.3, we identified the large core corporations as the 'inflation makers' of modern capitalism. We argued that although price increases could arise for a variety of reasons, in the context of chronic excess capacity, the inflation process could be *sustained* only through the strategic limitation of industrial activity by the large corporate coalitions. The overall rate of inflation hence depends largely on the 'inflation consensus' among core firms. When they expand their breadth of accumulation faster than the average, these firms 'need' only a low inflation, whereas when their expansion of employment per firm is not much faster than the average, they feel 'compelled' to push inflation higher.

In order to examine this hypothesis, it is necessary to look into the relationship between inflation and the relative performance of large and smaller firms. Underlying our reasoning in the first paragraph is the premise that the inflation consensus embodies the common interest of the large firms. In other words, we presume that the large firms take it that they would indeed gain from a low inflation in the first case, and from a higher inflation in the second. But is this assumption warranted? Is there a factual basis to substantiate such a conviction? Do large firms really benefit from inflation? Note that the answer to these questions could not prove whether or not the large firms are indeed the 'root' of inflation: showing that these firms gain from inflation does not necessarily mean that they instigate it. But the evidence are nevertheless important. In order to 'support' an ongoing rate of inflation, the large firms must believe that it is in their interest to do so, and that requires that the gains be observable. Without these visible benefits there could be no 'inflation-consensus,' and without that consensus the 'inflation-making thesis' becomes indefensible. Our goal in this section, then, is to examine the impact of inflation on the relative performance of large and small firms and in that light to interpret the historical development of inflation itself.

Consider, first, Figures 9-12a to 9-12d, in which we relate the Fortune-500 rate of "Inflation" f_{se} to the markup FK . The first two charts on the left (12a and 12b) provide data for the 1950s and 1960s, while those on the right (12c and 12d) detail the experience of the 1970s and 1980s. The picture emerging from these data is quite clear: during both of these periods, "Inflation" had a tight positive impact on the profit markup. In other words, regardless of what prompted the large firms to alter their rate of "Inflation," the general outcome was for their profit share in sales to rise when "Inflation" was increasing and fall when "Inflation" was decreasing. In a way, the remarkable regularity of this relationship makes the customary distinction between cost-push and profit-push inflation somewhat irrelevant. This is accentuated by Figure 9-13, where we chart the respective rates of growth for the Fortune-500 net profit and 'cost' (computed as the difference between sales revenues and net profit). As the figure makes clear, the two variables were closely correlated, so it is rather trivial that if the rate of Fortune-500 "Inflation" was positively associated with changes in profit, it must have been also positively related to variations in cost. Unfortunately, the preoccupation with identifying the 'push-factor' serves to divert attention from another, perhaps more important fact, and that is that cost and profit tend to change at *different* rates. In the case of the Fortune 500, the relative changes in profit were commonly much *larger* than those in cost, and on this we must focus. If we adopt a teleological point of view which looks for the 'purpose' of social phenomena, the ultimate reason for inflation must be sought in its *redistributional consequences*. From this perspective, the Fortune-500 record must then be viewed as a clear case of *profit-share inflation*.

Given these findings, we should now turn to examine the experience of the 'Others': Were these firms enjoying distributional gains similar to those won by the Fortune-500? The answer to this question could be learnt from Figures 9-14a to 9-14d, in which we relate the rate of "Inflation" o_{se} for the 'Others' to the contemporaneous values of their profit markup OK . Unlike the case of the Fortune 500, the relationship between "Inflation" and the markup for these smaller firms has undergone significant changes. During the first period of the 1950s and 1960s, there was no apparent association between the two variables. Despite the fact that in those years "Inflation" for the 'Others' was faster than for the Fortune-500, smaller firms did not seem to have gained from it. This situation changed since the early 1970s, when the markup OK and the rate of "Inflation" o_{se} began to move together. There was also,

Figure 9-12a "Inflation" and the markup for the Fortune 500, 1954-1969

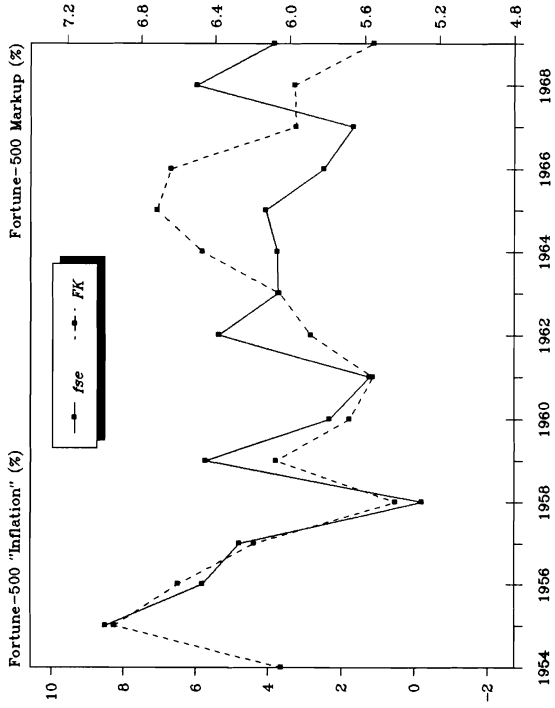


Figure 9-12b "Inflation" and the markup for the Fortune 500: a functional presentation, 1955-1969

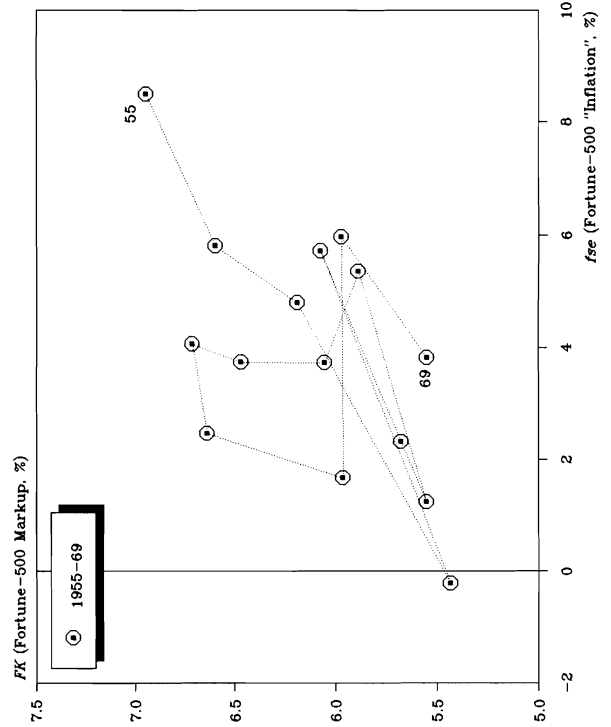


Figure 9-12c "Inflation" and the markup for the Fortune 500, 1970-1989

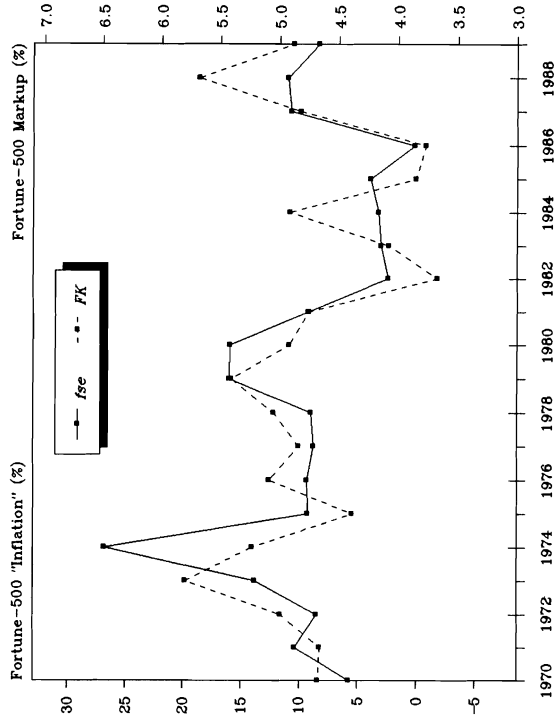


Figure 9-12d "Inflation" and the markup for the Fortune 500: a functional presentation, 1970-1989

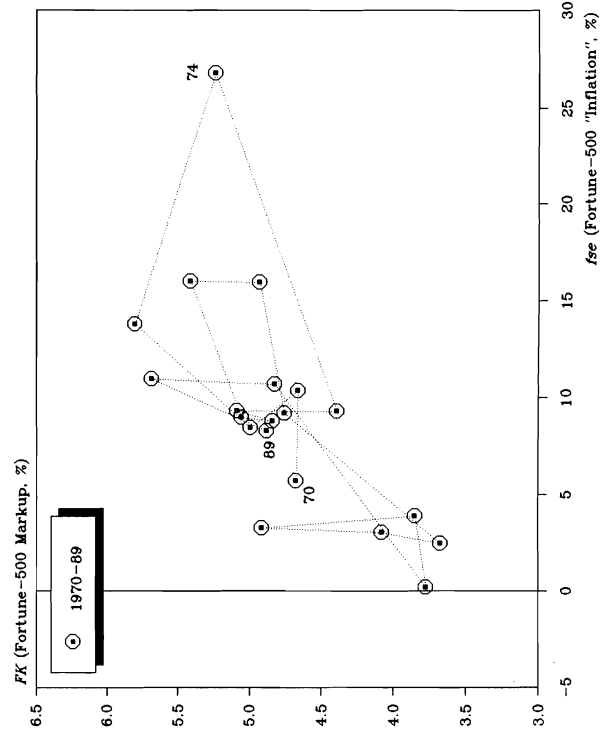


Figure 9-13 Changes in profit and cost for the Fortune 500

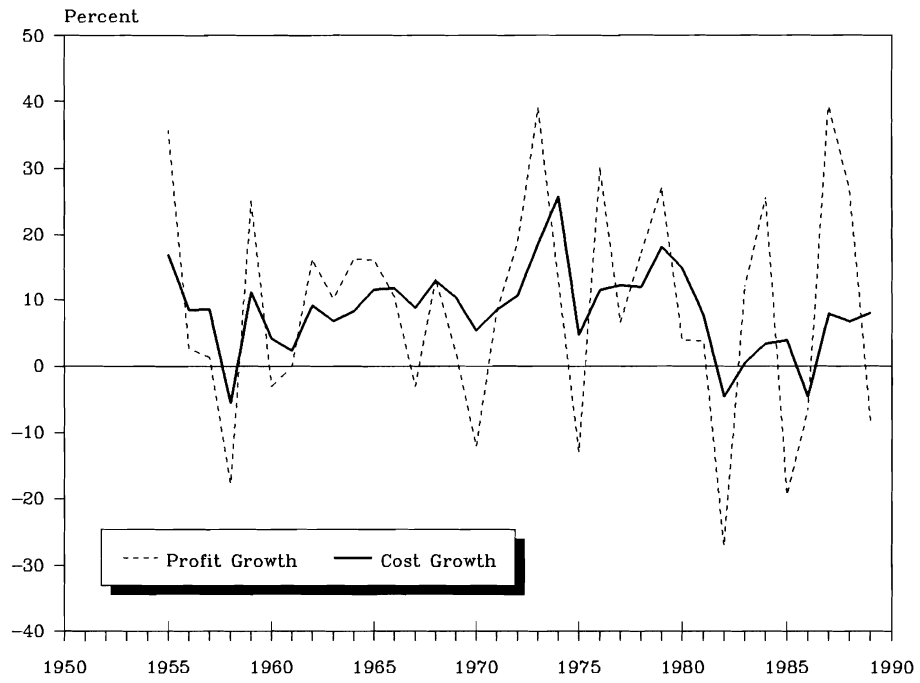


Figure 9-14a "Inflation" and the markup for the 'Others,' 1954-1969

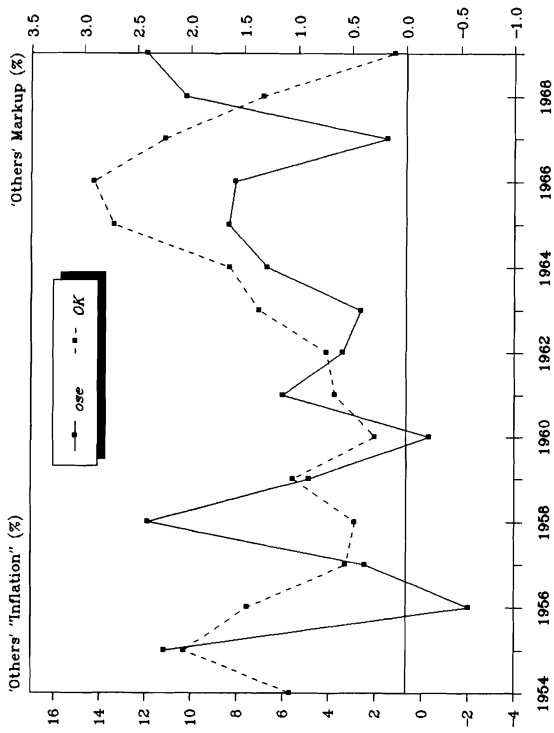


Figure 9-14b "Inflation" and the markup for the 'Others': a functional presentation 1955-1969

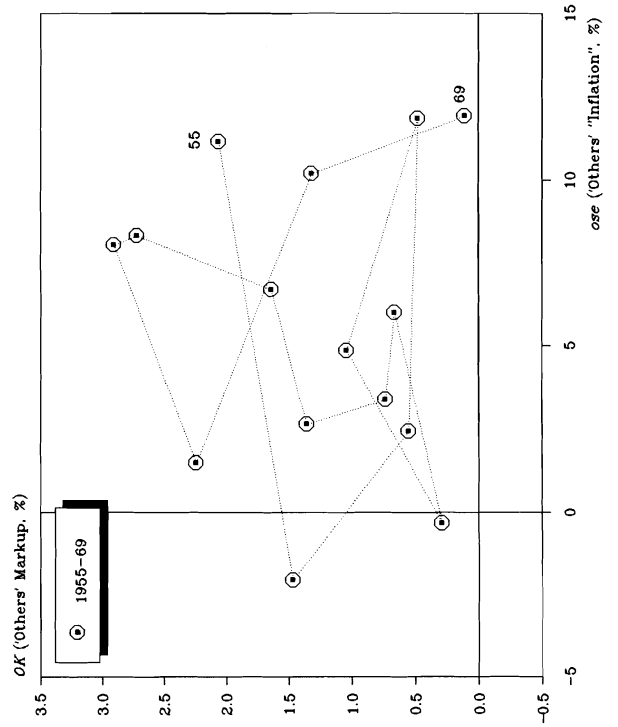


Figure 9-14c "Inflation" and the markup for the 'Others,' 1970-1986

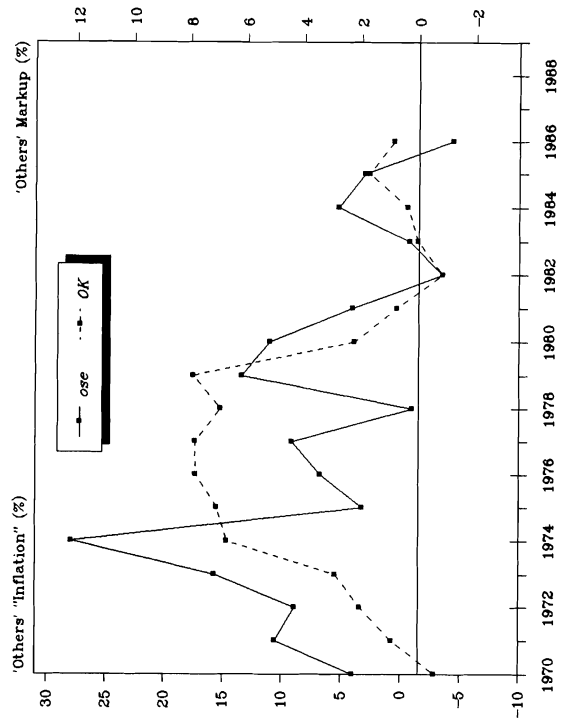
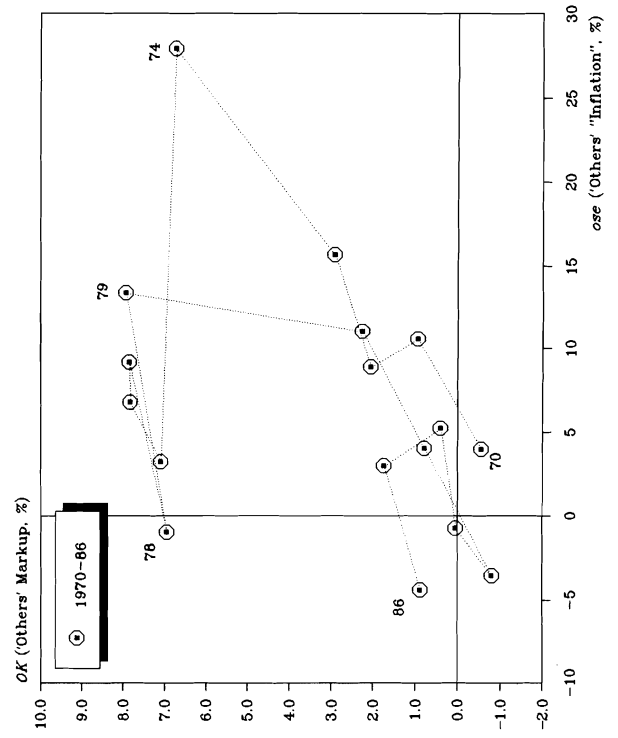


Figure 9-14d "Inflation" and the markup for the 'Others': a functional presentation, 1970-1986



between 1975 and 1979, a large shift in this relationship which could be at least partly attributed to the effect on many small mining firms of the surge in commodity prices. Of course, the positive association since the early 1970s between *ose* and *OK* does not mean that the 'Others' have acquired new inflation-making powers. Inflation still requires the effective rationalization of industrial activity and that could be done only by the large corporate coalitions. Thus, even when the smaller firms appear to benefit from the inflationary process, their gains are *derived gains*, crucially dependent on the inflation consensus among the large firms.

The relationship between inflation and profit markups for different corporate-size categories could be examined from another perspective, using the quarterly markup data published by the Bureau of the Census in its *Quarterly Financial Reports for Manufacturing, Mining and Trade Corporations* (QFR). There are certain differences between this and our other data sources: (1) Unlike the IRS and *Fortune* data which include both manufacturing and mining, the QFR cover only manufacturing corporations (all sources include subsidiaries from other industries). (2) While the IRS and *Fortune* numbers reflect the consolidated performance of foreign as well as domestic subsidiaries (majority owned), the Bureau of the Census began, since the fourth quarter of 1973, to consolidate only domestic subsidiaries and include the profits of foreign subsidiaries on an equity or cost basis. (3) The IRS data are based on tax accounting, whereas the QFR and *Fortune* use the accounting conventions of financial reporting. (4) The QFR endeavour to eliminate the double counting arising from ownership ties, while the IRS and *Fortune* do not.⁹ Fortunately, these differences tend to affect only the relative level of markups and not their pattern of change which is our primary concern here.

Consider then the charts of Figure 9-15, in which we relate the markup of net profit on sales for different size categories of manufacturing firms with the rate of inflation as measured by the quarterly percent change in the Producer Price Index for manufacturing commodities.¹⁰ (Note that

⁹ See Bureau of the Census, *Quarterly Financial Reports for Manufacturing, Mining and Trade Corporations*, 1988:3, pp. IX-XV.

¹⁰ Data for the Manufacturing Producer Price Index are from *Citibase* (1990), Series PWM, p. V-1-5, 1982=100. These data were originally published by the Bureau of Labor Statistics of the U.S. Department of Commerce, in *Producer Price Index*.

Figure 9-15a Inflation and the markup for manufacturing corporations: asset-class 1

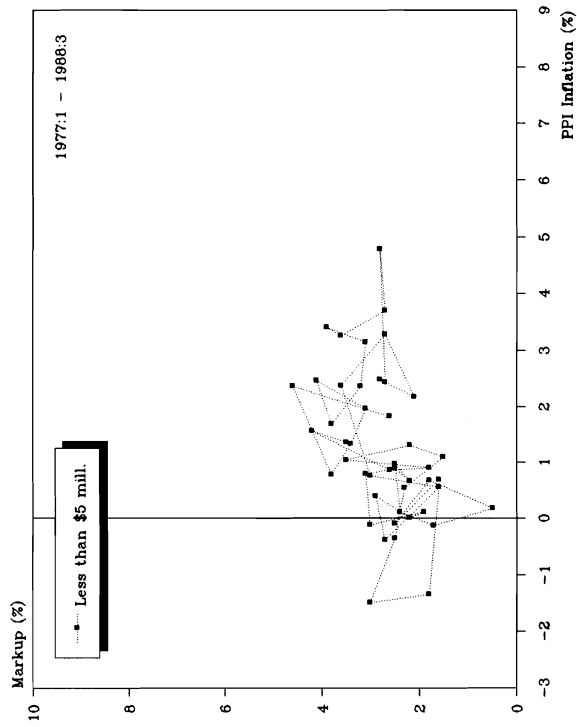


Figure 9-15c Inflation and the markup for manufacturing corporations: asset-class 3

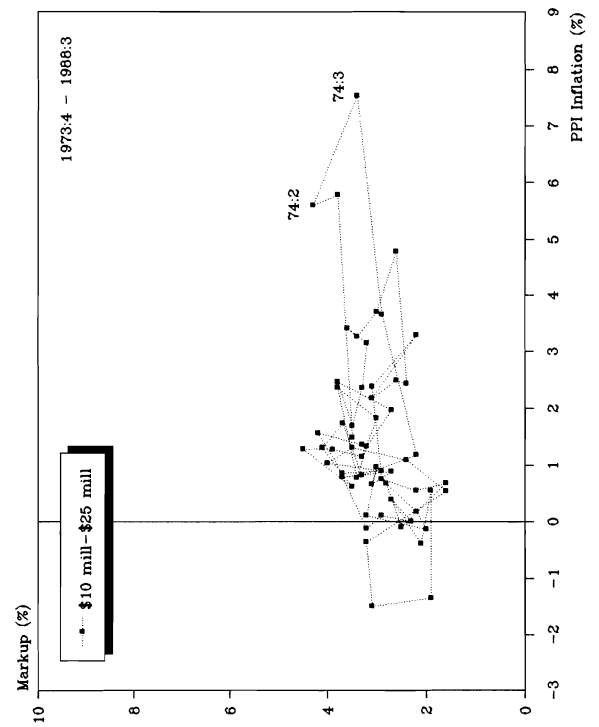


Figure 9-15b Inflation and the markup for manufacturing corporations: asset-class 2

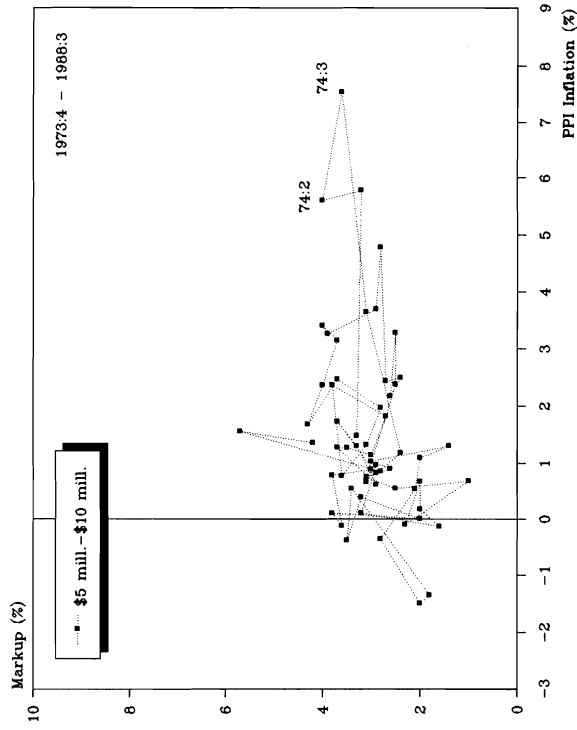


Figure 9-15d Inflation and the markup for manufacturing corporations: asset-class 4

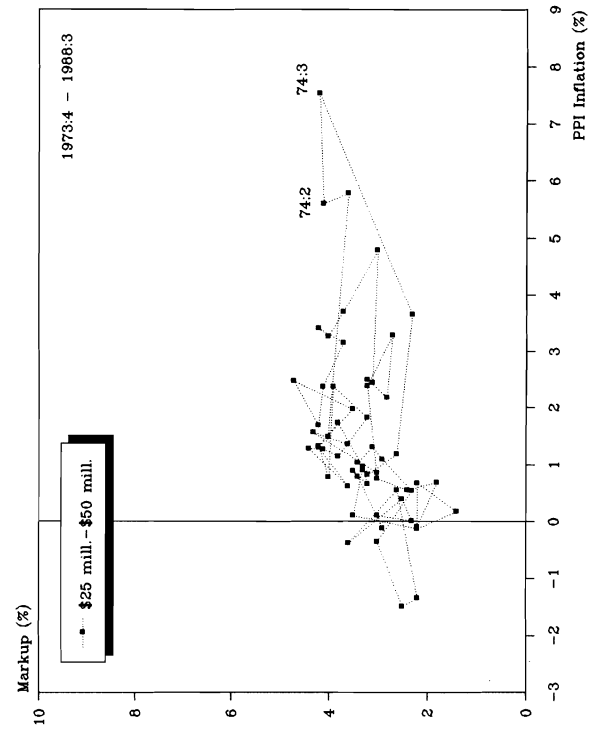


Figure 9-15e Inflation and the markup for manufacturing corporations: asset-class 5

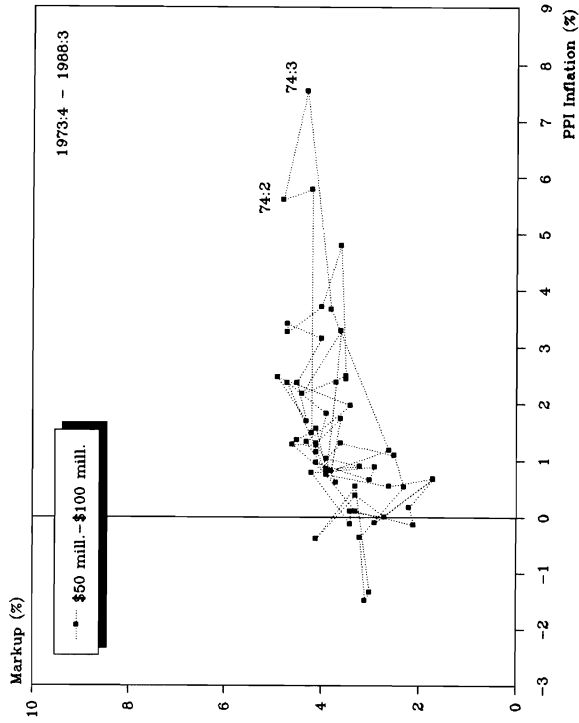


Figure 9-15f Inflation and the markup for manufacturing corporations: asset-class 6

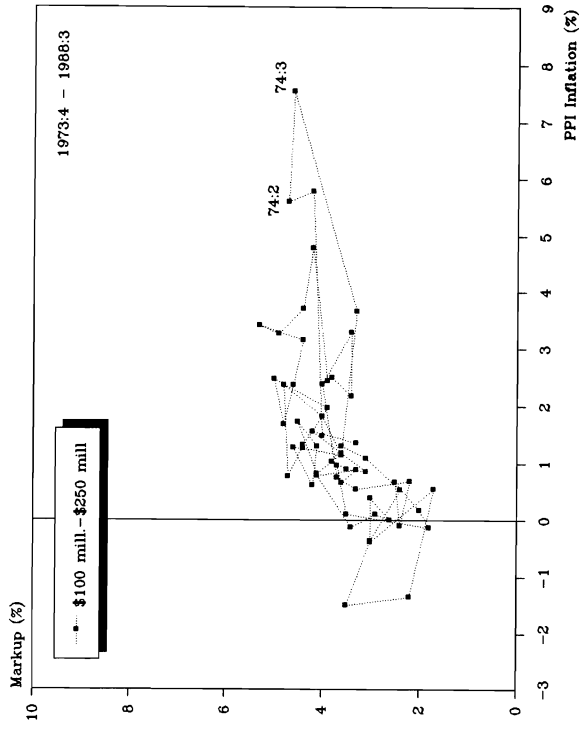


Figure 9-15g Inflation and the markup for manufacturing corporations: asset-class 7

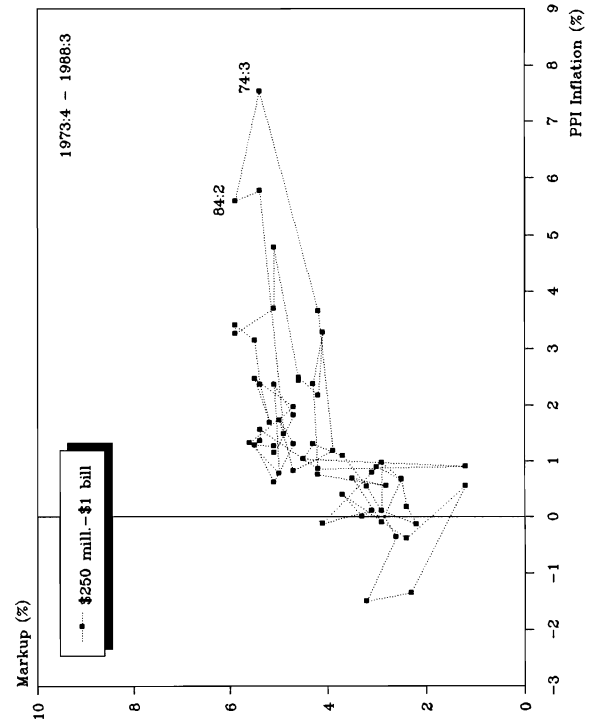
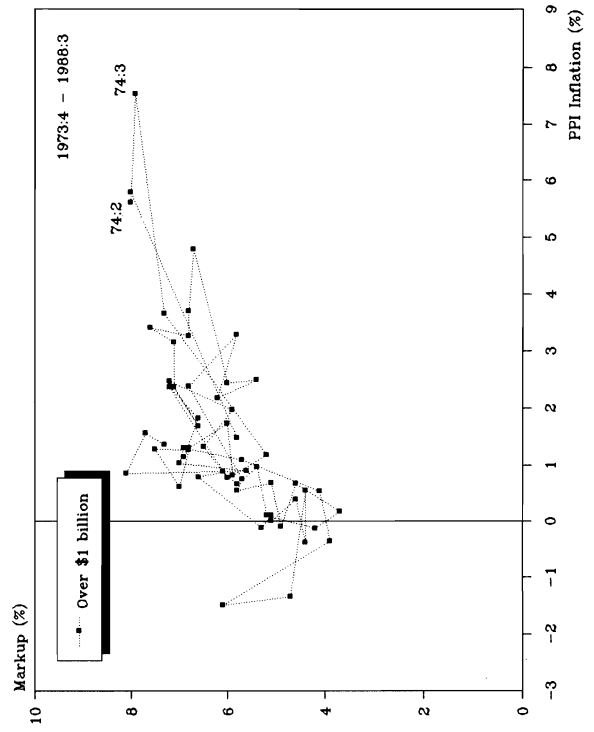


Figure 9-15h Inflation and the markup for manufacturing corporations: asset-class 8



unlike in Figures 9-12 and 9-14, here we contrast the markup for each group of firms not with the group's *own* rate of inflation, but with the *overall* rate of inflation in the manufacturing sector. This should present no difficulty, however, since, as we have shown in Chapter 8, the rate of change of the PPI was closely correlated with "Inflation" for both large and small firms, particularly after 1970.) The QFR's size breakdown is based on the value of total assets of the reporting firm and includes 8 categories with the following cutoff levels: less than \$5 million in assets, \$5 to \$10 million, \$10 to \$25 million, \$25 to \$50 million, \$50 to \$100 million, \$100 to \$250 million, \$250 to \$1 billion, and over \$1 billion. For the smallest size category there are 47 quarterly observations (from the first quarter of 1977 to the third quarter of 1988, inclusive), while for each of the remaining 7 categories there are 60 quarterly observations (from the fourth quarter of 1973, until the third quarter of 1988, inclusive). In terms of our own breakdown for the M&M sector, one can consider the two highest categories -- those which include firms with over \$250 million in total assets -- as corresponding roughly to the manufacturing subset of the Fortune 500, while the remaining categories correspond approximately to the manufacturing subset of the 'Others' group.¹¹

The patterns which emerge from the various charts of Figure 9-15 are consistent with those recorded in Figures 9-12 and 9-14. Here, too, we can see that, during the 1970s and 1980s, the rate of inflation was positively related to the level of the markup for both large and small firms. The fact that this positive association between inflation and the share of profit holds not only for annual observations, but also for short-term quarterly changes makes this relationship all the more robust. Furthermore, the data also point to some meaningful differences between the various groups of firms. These differences are most apparent when we contrast the record of the largest firms (Figures 9-15g and 9-15h) with that of the smallest firms (Figures 9-15a and 9-15b). (To facilitate comparison, all the charts in Figure 9-15 are drawn with same vertical and horizontal dimensions.) We can clearly see that the relationship between inflation and the markup was much *tighter* for the largest firms than it was for the smaller ones,

¹¹ This rough association is established based on the number of firms in the larger categories. In 1975, there were 427 manufacturing firms with assets of over \$250 million (276 with assets between \$250 million and \$1 billion and 151 with assets of over \$1 billion). Thirteen years later, in 1988, there were 884 such firms (550 with assets between \$250 million and \$1 billion and 334 with assets of over \$1 billion). See the *Statistical Abstract of the United States* for 1988, Table 898, p. 541, and for 1990, Table 858, p. 513.

particularly if we disregard the 'outlayers' of 1974.¹² So, although both the large and small firms experienced inflationary gains, the redistributive benefits for the former group were fairly systematic, whereas those for the latter were more irregular.

While our findings so far are consistent with an 'inflation-taking' behaviour for the smaller firms, they are still insufficient to substantiate our basic premise regarding the 'inflation-making' role of large corporations. Recall that, for these firms, the redistribution of sales revenues between cost and profit is merely a means of altering the distribution of profit among firms. Within that context, the principal purpose of inflation is to affect the rate of change of profit per employee and it is the relationship between these two variables which we now turn to.

For the Fortune 500, the rate of growth of net profit per employee $\dot{f}\pi e$ is approximately equal to the sum of "Inflation" fse and the rate of change of the markup $\dot{f}k$. As we demonstrated in the previous section, the direct contribution of fse to $\dot{f}\pi e$ was rather limited, implying that if and when the Fortune-500 "Inflation" strategy was successful, it must have worked mainly through its impact on $\dot{f}k$. In other words, to be effective, "Inflation" must affect not only the *level* of the markup, but also its *rate of change*. The significance of this latter relationship is depicted in the four charts of Figure 9-16. Beginning with Figure 9-16a, we can see that, during the 1950s and 1960s, Fortune-500 "Inflation" fse tended to be positively and tightly correlated with the rate of change of the markup $\dot{f}k$. Given this association it is then not very surprising that there was also a similar correlation between "Inflation" and the rate of growth of profit per employee $\dot{f}\pi e$, as depicted in Figure 9-16b. This neat relationship was upset to some extent from the early 1970s. We can see in Figure 9-16c that, during this latter period, the positive relationship between "Inflation" and markup growth was no longer very tight. That, in turn, affected the overall relationship between the Fortune-500 "Inflation" and the rate of growth of its profit per employee. As Figure 9-16d indicates, the overall effect on $\dot{f}\pi e$ of fse was still positive, but there were several 'aberrations' -- years in which profit per employee were seemingly 'out of control.'

¹² By treating the markup in each size category as a linear statistical function of a constant and PPI inflation, we found that both the estimated slope coefficient and as its associated significance level rose with corporate size. Unfortunately, such econometric techniques presume that there is some 'underlying' functional relationships between inflation and the markup, which makes the resulting evidence somewhat inadequate to the 'non-stationary' historical perspective adopted in this work.

Figure 9-16a "Inflation" and the rate of change of the markup for the Fortune 500, 1955-1970

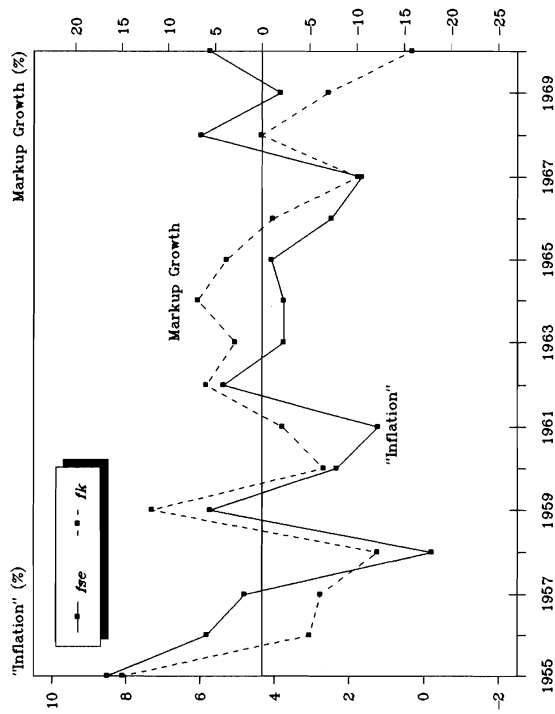


Figure 9-16c "Inflation" and the rate of change of the markup for the Fortune 500, 1970-1989

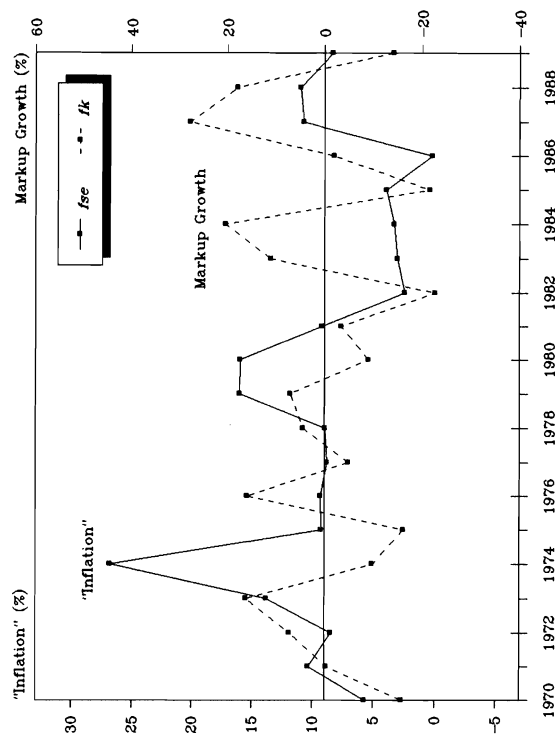


Figure 9-16b "Inflation" and the rate of change of profit per employee for the Fortune 500, 1955-1970

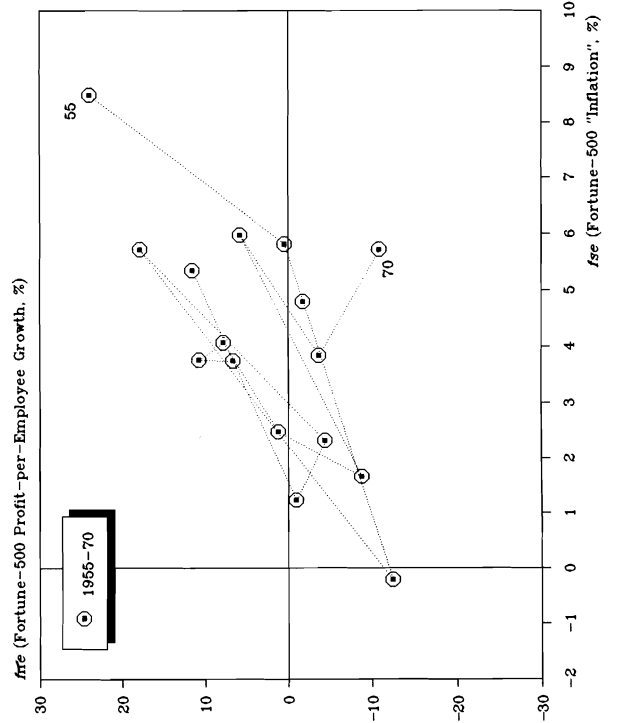
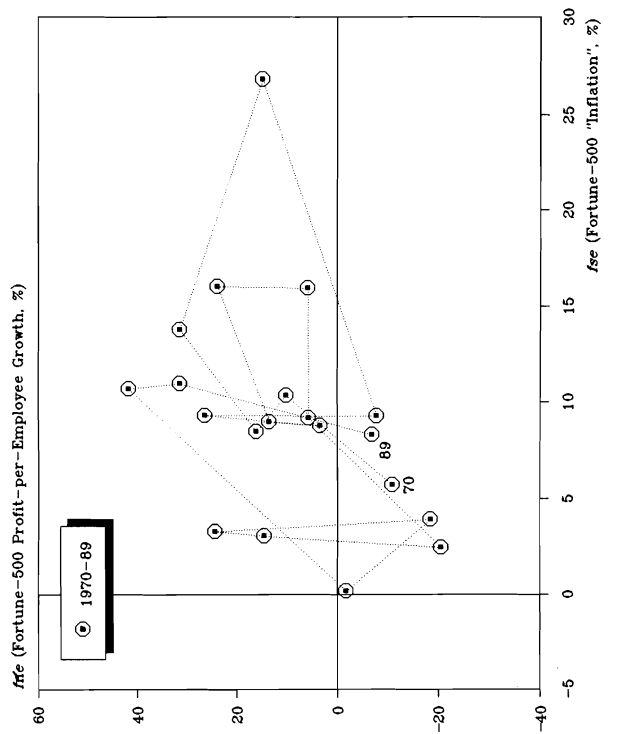


Figure 9-16d "Inflation" and the rate of change of profit per employee for the Fortune 500, 1970-1989



The difference between the experience in these two periods illustrates the fundamental dilemma facing the large core firms. Although increases in the rate of inflation may be used to boost profit margins, the rise is usually temporary, depending on the extent and speed of subsequent cost changes. So, while the immediate consequence of raising the rate of "Inflation" $f\pi e$ is a higher $f\kappa$ and hence a higher rate of growth for net profit per employee $f\pi e$, the eventual impact is far less certain. Unless the rate of "Inflation" continues to rise, FK is likely to drop and, with a negative value for $f\kappa$, even a fairly high "Inflation" may prove insufficient to prevent $f\pi e$ from becoming negative as well. The only way to prevent this latter outcome is to *continuously* raise the rate of "Inflation," but that may prove to be a self-defeating strategy since ongoing increases in core "Inflation" are likely to create an inflationary spiral with fluctuating distributional outcomes and indeterminate consequences for the core's differential rate of accumulation.

The inflation consensus among core firms is hence subject to two opposite forces. On the one hand, core firms know that raising their rate of "Inflation" is likely to augment their markup and increase their profit per employee. On the other hand, they also realize that the ensuing gains are short-lived; in order to maintain the higher rate of growth of profit per employee, they must continuously increase their rate of "Inflation" and that need not be beneficial. These conflicting pressures make core firms sensitive to negative as well as positive 'inflation stimuli.' Specifically, a failure to achieve a 'satisfactory' differential rate of accumulation generates a strong impetus toward a higher inflation consensus. Under these circumstances, the potential short-term gains are too strong to resist, making an inflationary spark all but inevitable. An 'adequate' differential rate of accumulation, on the other hand, is a negative inflation stimulus. In this latter case, long-term concerns become dominant and the inflation consensus remains low.

This analysis is of course conjectural to some extent. In our view, attempting to predict the inflationary inclinations of large firms as if they were a mathematical or statistical 'function' of some other variables would be quite misleading. Given the subjective underpinning of the differential rate of accumulation and the range of factors affecting this rate -- not the least of which is the possibility that

coalitions may choose a self-defeating strategy -- it is clear that any conclusion here must remain 'impressionistic' to a certain degree. It is only with these methodological limitations in mind, that we can finally turn now to interpret the inflationary experience of the Fortune-500 core and summarize its consequences for the manufacturing and mining sector as a whole.

9.10 Differential Pecuniary Accumulation and Inflationary Restructuring in the M&M sector: An Historical Interpretation

During the 1950s and 1960s, the large core firms enjoyed a very rapid differential rate of accumulation (Figure 9-1). Much of that growth originated from changes in the breadth of accumulation, particularly those brought by the conglomerate merger movement (Figure 9-5). With their ongoing acquisition of smaller periphery firms, core corporations were able to raise their employment per firm much faster than average (Figures 9-6 and 9-7). Given these gains, the large firms were less concerned with boosting their depth of accumulation and even allowed their net profit per employee to increase more slowly than the average (Figure 9-5). This relative decline was not altogether detrimental for it helped to maintain a stable growth for earnings and to keep the differential risk premium low (Figure 9-4).

So, until 1970, with their eye toward a stable expansion of profit, the large corporate coalitions were quite content to let their sales per employee grow more slowly than the M&M average (Figure 9-9). At the same time, the very fact that their inflation consensus was somewhat lower than the rate of M&M "Inflation" meant that these groups were highly sensitive toward any positive 'inflation impetus.' During the 1950s and 1960s, the most important of these inflation stimuli was probably the extent to which the Fortune 500 expanded their breadth of accumulation faster than the average. Indeed, as we showed in Figures 9-17a and 9-17b, until 1970, there was a rather tight inverse relationship between the differential growth of employment per firm and the rate of Fortune-500 "Inflation." With only few exceptions, a drop in (*f_{ez} - m_{ez}*) would trigger a contemporaneous rise in *f_{se}*, while an increase in this differential would bring "Inflation" down. Judging on the basis of these data, it seems that, for the Fortune 500, direct business-to-business redistribution and indirect labour-to-business redistribution were indeed two alternative strategies.

Figure 9-17a "Inflation" and the differential breadth of accumulation for Fortune-500 firms, 1955-1989

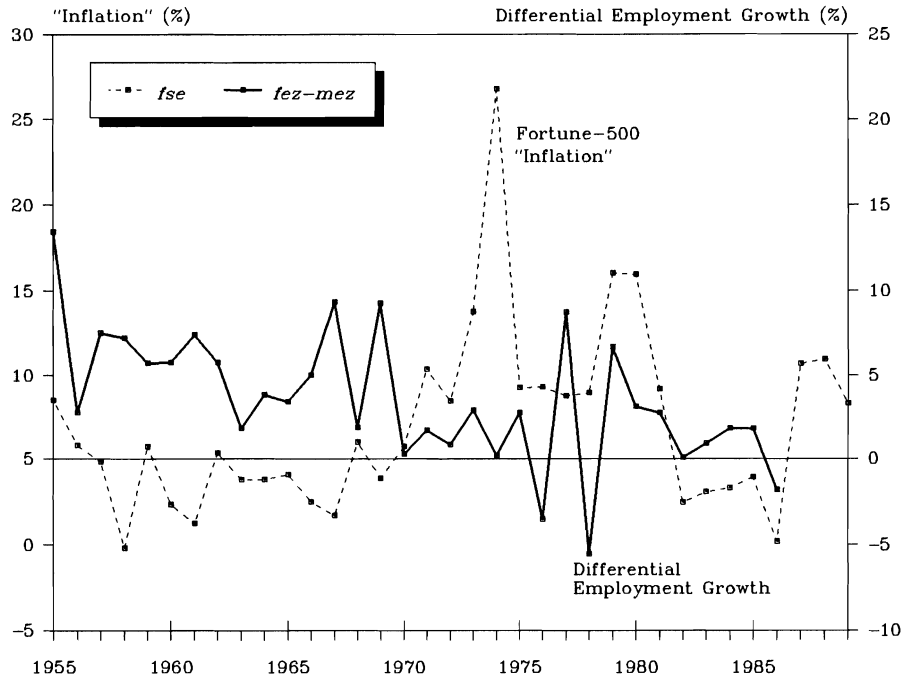
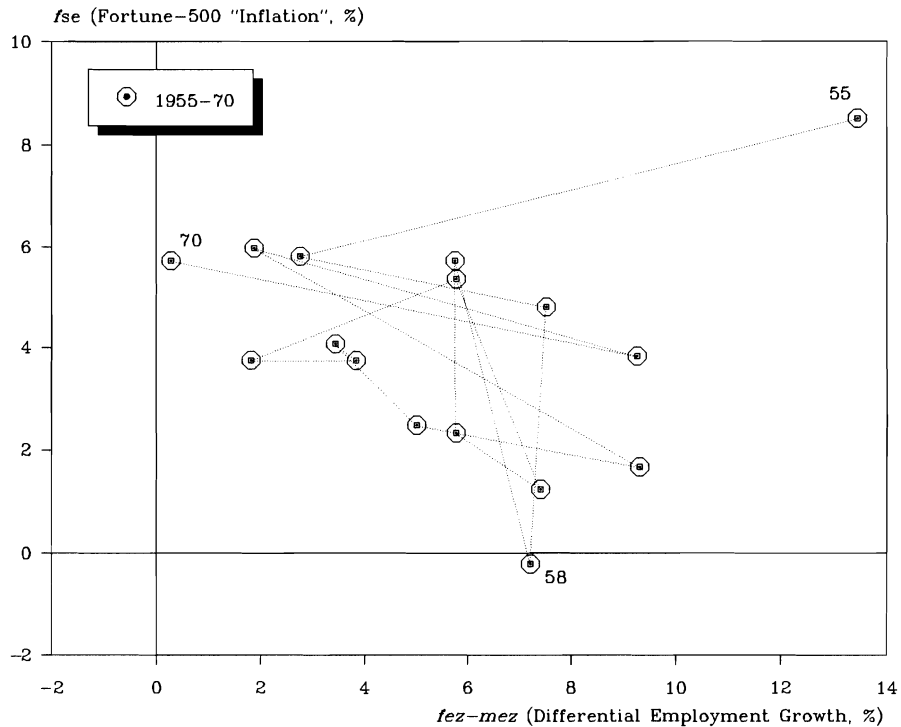


Figure 9-17b "Inflation" and the differential breadth of accumulation for Fortune-500 firms: a functional presentation, 1955-1970



In fact, this very ability to switch back and forth between the breadth and depth of accumulation helps explain the redistributive efficacy of Fortune-500 "Inflation" until 1970 (Figures 9-12 and 9-16). When the value of (*fez - mez*) dropped, the decrease was usually temporary. Eventually, there would be a rebound, permitting the large firms to downscale their inflation consensus. What made their inflation strategy so effective was precisely its *transient* nature. It was mainly by keeping their rate of "Inflation" from continuously growing, that the Fortune 500 were able to use occasional inflationary sparks to counteract temporary aberrations in the merger movement.

Thus, in a somewhat paradoxical way, the low inflation of the 1950s and 1960s owed much to the underlying consolidation of corporate coalitions. During that period, the Fortune-500 giants were busy expanding their breadth of accumulation and reinforcing their relative business position. Their acquisitions of smaller firms rapidly raised the overall concentration of the M&M sector: despite the ongoing increase in the number of 'other' firms, the aggregate concentration ratios for employment and sales climbed from less than 50 percent in the early 1950s, to about 65 percent in the late 1960s (Chapter 8).

By 1970, however, this massive realignment was completed. As we can see in Figure 9-17a, the differential expansion in the breadth of accumulation was now reduced to a mere trickle and, with no other way to exceed the average rate of accumulation, the Fortune 500 were becoming increasingly receptive toward inflationary increases in their depth of accumulation. Indeed, it was precisely at this point in time that the long-term decline in the Sales-per-Employee Ratio abruptly ended (Figure 9-9). The rate of Fortune-500 "Inflation" which was characteristically lower than the M&M average throughout much of the 1950s and 1960s, now began to rise as rapidly as the average and, subsequently, from 1975 onward, became persistently higher than the average.

The crucial role of large firms in instigating the inflationary spiral of the early 1970s was blurred by the parallel commodity-price explosion. Rapid increases in the prices of raw materials had a disproportionate effect on the profits of smaller mining firms and thus undermined, at least temporarily,

the relative profit position of the large companies (Figure 9-8). Since this was usually interpreted as evidence of oligopolistic sluggishness, the notion that inflation in fact stemmed from the big economy seemed far-fetched. Instead, many economists traced the rise of inflation during that period to heightened instability in the global financial system and the consequent resort to commodity speculations (see Section 4-4). These interpretations, however, are not inconsistent with our framework. To the extent that the rapid rise of raw material prices was indeed the outcome of inflation-hedging (as suggested in the 'pull-push' theories of Sylos Labini and Kaldor, for example), it brings us right back to the large Fortune-500 firms, for they were by far the biggest buyers of raw materials! In the final analysis, it was the higher inflation consensus among these firms which allowed commodity-price inflation to develop in the first place.

Toward the end of the 1960s, with declining investment opportunities in non-core industries, the large corporations were embracing higher inflation. Initially, their 'inflation sparking' may have been conceived as a standard short-term answer to declining mergers and acquisitions but, this time, the merger wave failed to resume. Driven by the quest for differential pecuniary accumulation but paralysed by the lack of takeover candidates, the large firms failed to downscale their inflation consensus and, with every passing day, their initial spark was spreading into an all-embracing inflationary spiral. With rising commodity prices and increasing wage cost, inflation soon seemed to have swirled 'out of control.' Yet at least in one fundamental respect the 'chaos' was more apparent than real. As we have seen (Figure 9-12 to 9-16), changes in the rate of inflation were almost invariably associated with parallel changes in the markup for the core firms, suggesting that even after 1970 inflation was never quite independent of the Fortune-500 consensus.

Of course, the ultimate consequences of inflation for the core's differential rate of accumulation were not necessarily beneficial. Because of the rapid commodity-price inflation during the early 1970s, profit-per-employee for the large corporations were initially rising more slowly than the average. Only later, from 1975 onward, did the inflation strategy of these firms start to bear fruit, leading to a differential increase in their depth of accumulation. To their dismay, however, the ensued instability increased the risk premium on their earnings, which in turned served to undermine their overall differential rate of accumulation.

The predicament for the Fortune 500 was intensified by another development which we have not elaborated upon so far. As we can see in Figure 9-17a, the fluctuations of (*fej – mez*) which explained much of the ups and downs of Fortune-500 "Inflation" until 1970, were no longer very helpful in accounting for its variations thereafter. This raises the important question of what affected the core consensus after 1970? Certainly, the long-term decline of *fse* since 1975 was partly due to its growing redistributive effectiveness, but was this the only reason? Furthermore, what prompted the inflationary surges of the late 1970s and late 1980s? The answer to these questions, we believe, is related to a new intra-core realignment which began during the late 1960s and started to have an effect roughly around 1975.

The essence of this transformation is suggested by the data in Figures 9-18a and 9-18b, where we contrast Fortune-500 "Inflation" with the ratio of merchandise imports to Fortune-500 sales.¹³ During the 1950s and 1960s, the United States was a relatively closed economy. Exports of foreign firms into the country amounted to less than 10 percent of total Fortune-500 sales and less than 5 percent of overall M&M sales. In contrast, the domestically-based core coalitions controlled over one half of all M&M sales which made them the undisputed inflation-makers. This started to change toward the end of the 1960s, with the increasing significance of imports. Within the short period between 1970 and 1974, the ratio of merchandise imports to Fortune-500 sales rose from 9 to 13 percent. It then continued to increase, reaching 15 percent in 1980, 19 percent in 1985 and almost 23 percent by 1989. Since most of these incoming imports originated from *large* European and particularly Japanese corporations, it is clear that this intrusion must have influenced the inflation-making role of the U.S.-based giants.

While it is hard to identify a precise 'turning point,' we could reasonably argue that, sometime during the second half of the 1970s, the large foreign giants became sufficiently significant to start affecting the inflation consensus of the Fortune 500. The overall impact of this import penetration was to reduce the rate of Fortune-500 "Inflation." The cause of that decline, however, had very little to do with 'import competition' per se. As we see it, there is no a priori reason, particularly at the end of the

¹³ Figures on merchandise imports are from *Citibase* (1990), series GIMM, p. XIV-1-7. These data were published originally by the Bureau of Economic Analysis of the U.S. Department of Commerce in its monthly *Survey of Current Business*.

Figure 9-18a Fortune-500 "Inflation" and import penetration, 1955-1989

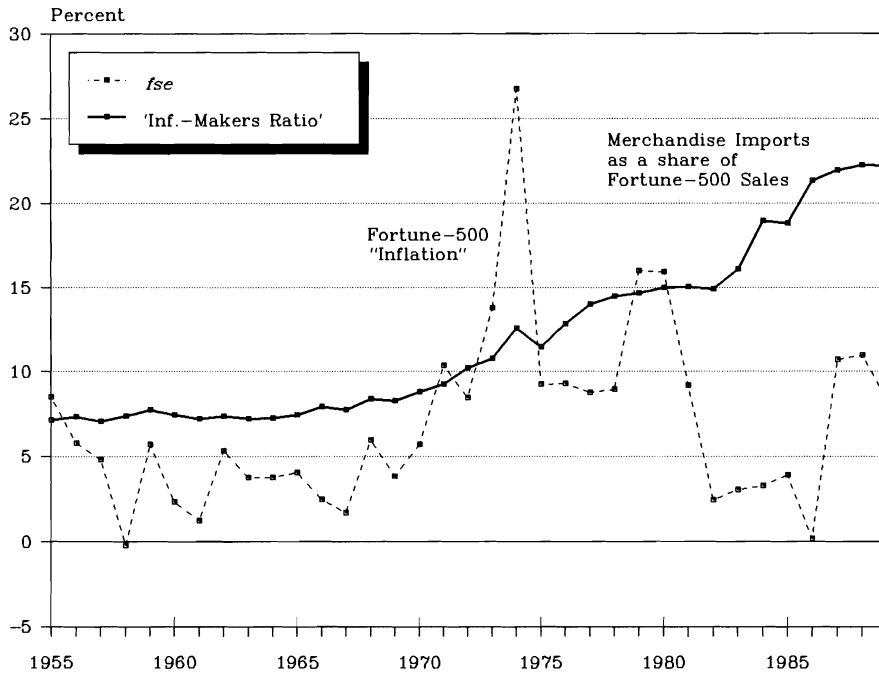
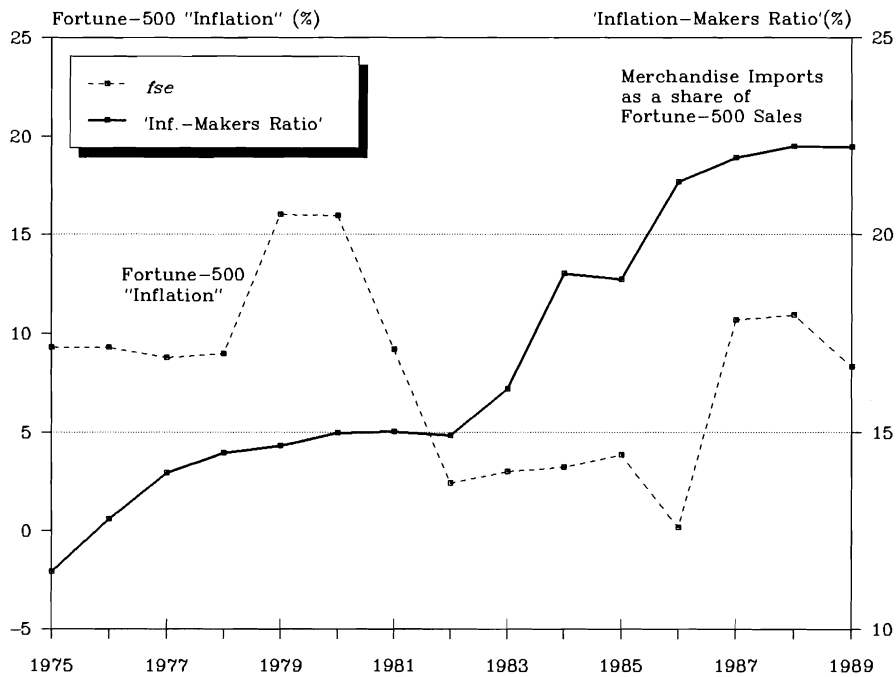


Figure 9-18b Fortune-500 "Inflation" and the 'Inflation-Makers Ratio,' 1975-1989



20th century, why business competition and cooperation should depend on the country of incorporation. If RJR Nabisco could cooperate with Philip Morris, why should it not be able to cooperate with Swiss-based Nestlé? Is there any intrinsic reason why General Electric could cooperate with Westinghouse but not with German-based Siemens, or Japanese-based Mitsui and Sumitomo? The 'opening up' of the U.S. economy induced the Fortune 500 to reduce their "Inflation" not because these domestically-based firms have some natural tendency to invoke price competition against foreign intruders, but rather because, for the most part, the large foreign corporations simply refused to cooperate on the inflation front.

Underlying this animosity was a fundamental global realignment among the large multinational corporations. In the United States, this restructuring meant that the locally-based giants were losing market share to the rising Japanese and European firms, and it was the particular course of this adjustment which now became a significant determinant of inflation. Variations in the rate of inflation still depended on the consensus among the large core firms, but the boundaries of the core were now expanding to include some of the larger foreign-based corporations. With these latter firms seeking to improve their own core position, intra-core cooperation was put in a permanent flux and the inflation consensus became harder to maintain. Whereas earlier changes in the rate of inflation may have hinged on the differential performance of the Fortune-500 *as a group*, the growing cleavage within the enlarged core meant that, from now on, these variations were increasingly dependent on the relative expansion of a small but 'militant' *sub-group* of foreign-based entrants.

Given these considerations, we can treat the ratio of merchandise imports to Fortune-500 sales as an 'Inflation-Makers Ratio.' The long-term increase in this ratio, evident in Figure 9-18a, indicates the growing significance of foreign giants relative to the Fortune-500. As long as these foreign companies were expanding their breadth of accumulation on account of their domestic counterparts, they had very little reason to support a higher inflation consensus and, without a commonly accepted inflation outlook, the Fortune-500 firms had to adjust their rates downwards. The long-term decline in Fortune-500 "Inflation" since the early 1970s was not uniform, however, and that, too, could be partly explained by the intra-core realignment. In Figure 9-18b, we concentrate only on the period from 1975 to 1989. We

can see how, between 1975 and 1978, with the 'Inflation-Makers Ratio' rising from 12 to 15 percent, the rate of Fortune-500 "Inflation" was relatively stable. In 1979-80, however, with the 'Inflation-Makers Ratio' approaching a new plateau, the intra-core cleavage was temporarily bridged. Unable to expand their own breadth of accumulation, the foreign firms became susceptible to a labour-to-business redistribution and the inflation consensus was scaled upward. This same pattern reoccurred in 1987-88. After rising vigorously for several years, the 'Inflation-Makers Ratio' was again starting to stagnate and with it came a new consensus toward a higher "Inflation."

While these data on the interaction between inflation and the process of intra-core realignment are merely suggestive, they are probably not coincidental. For example, during the early 1980s, when Japan agreed to impose 'voluntary quotas' on its automobile imports into the United States, the automakers in both countries used the arrangement to further boost their prices. A similar inflation consensus was established again in the late 1980s when, with stagnating exports, the Japanese auto companies raised their prices and were swiftly followed by the General Motors, Ford and Chrysler. Finally, in 1992, when the redistributive struggle in the car market was reaching its third stalemate, a new inflationary round got under way: despite the lingering of the deepest recession since the 1930s, and although it was hardly a month after the usual mid-season price hikes, the new inflation consensus was easily established, with all the major companies announcing their price increases in the same day.¹⁴

The penetration of foreign giants into the U.S. market was probably one of the most important factors behind the renewed merger thrust since the early 1980s. Increasing imports and attempts to combat them with improved productivity intensified the spectre of excess capacity in domestic markets. To counteract this threat, the Fortune 500 once again resorted to business amalgamation which proceeded throughout much of the 1980s and succeeded in cutting their own employment from 16 million in 1980, to just above 12 million by the end of the decade (Chapter 8). This particular period offers a classic Veblenian case of stagflationary restructuring. On the one hand, there were massive mergers accompanied by a speculative boom in the various financial markets, while on the other, there

¹⁴ See for example Armstrong, Edid and France (1985), Treece (1992), Lowry Miller and Gross (1992) and Armstrong and Lowry Miller (1992).

was a stagflationary combination of intense ‘industrial sabotage,’ coupled with an inflationary growth of sales. For the large coalitions, this stagflation helped maintain and even increase profits in a shrinking market, thus justifying the progressive recapitalization of their tighter cooperation.

To a certain extent, the growing stagnation since 1970 was rooted in the inflationary process itself, particularly in its consequences for the distribution of income between capital and labour. While a fuller analysis of this issue goes beyond the limits of this work, it is still essential to accentuate its fundamental significance. In Figure 9-19a we plot annual data on the share of net profit and interest in the overall value of M&M sales.¹⁵ Our purpose here is not to examine short-term changes, but rather to identify some broad tendencies in distributive shares. We can see that the share of net profit in sales tended to rise during the inflationary 1970s and then fell with the decline in inflation during the 1980s. If we add interest to net profits, however, their combined share exhibit a clear upward trend since 1970. (Although we have no disaggregated interest data for the Fortune 500 and the ‘Others,’ it seems safe to assume that the rising share of interest was coming mainly from the big economy.¹⁶)

The other side of this process is illustrated in Figure 9-19b, where we depict the corresponding distributive shares of wages and salaries and of total employee compensation.¹⁷ In the upper part of this chart, these aggregates are expressed as a share of M&M value added, while in the bottom, they are given as a share of M&M sales.¹⁸ The overall impression is that 1970 was indeed a watershed for

¹⁵ Figures on the interest payments of M&M corporations are from the Internal Revenue Service, *Statistics of Income, Corporations Income Tax Returns*, various years.

¹⁶ According to data published by the Bureau of the Census in its *Quarterly Financial Reports for Manufacturing, Mining and Trade Corporations, 1974:4* and *1989:4*, the share of total manufacturing debt accounted for by large firms (with more than \$1 billion in assets) rose from 55 percent in 1974, to 77 percent by 1989. It is reasonable to conjecture that this has in turn raised the share of interest payments originated from the big corporations.

¹⁷ These are gross-income data. Unfortunately, there are no adequate net-income figures for manufacturing and mining employees.

¹⁸ Except for M&M sales which are based on IRS data, all series are from *Citibase* (1990). Wages and salaries are computed as the sum of series GAWSMI (mining) and GAWSM (manufacturing), while total employee compensations are the sum of GAPMI (mining) and GAPM (manufacturing), p. X-6-3. M&M value added is computed as the sum of GAG14 (mining) and GAGM (manufacturing), p. X-6-3. Note that these data on labour income and value added cover the standard industrial classifications for manufacturing and mining and hence differ from our enterprise-based categories for sales, net profit and interest.

Figure 9-19a Distributive income shares: capital

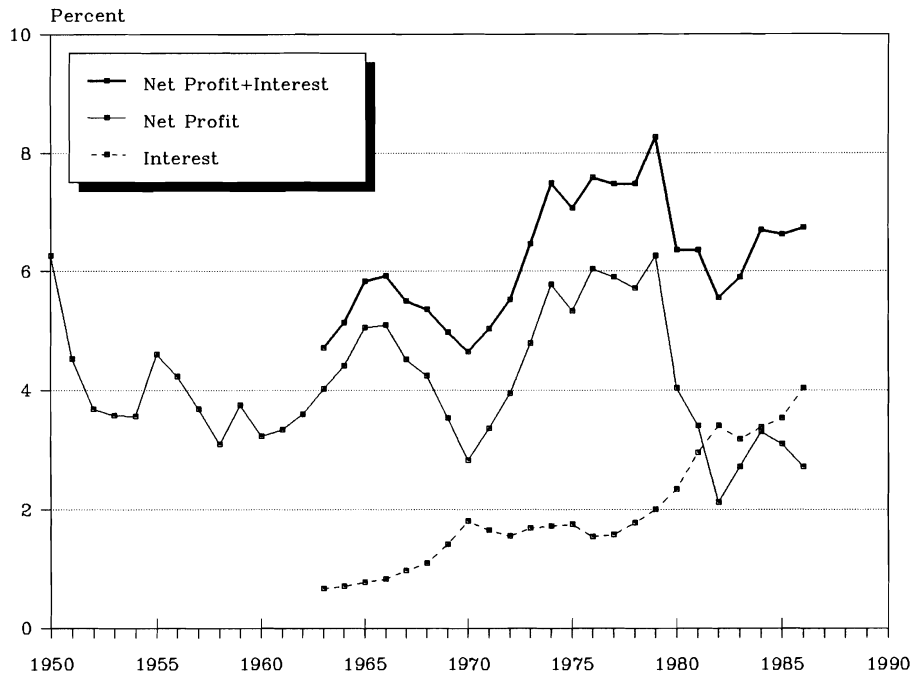
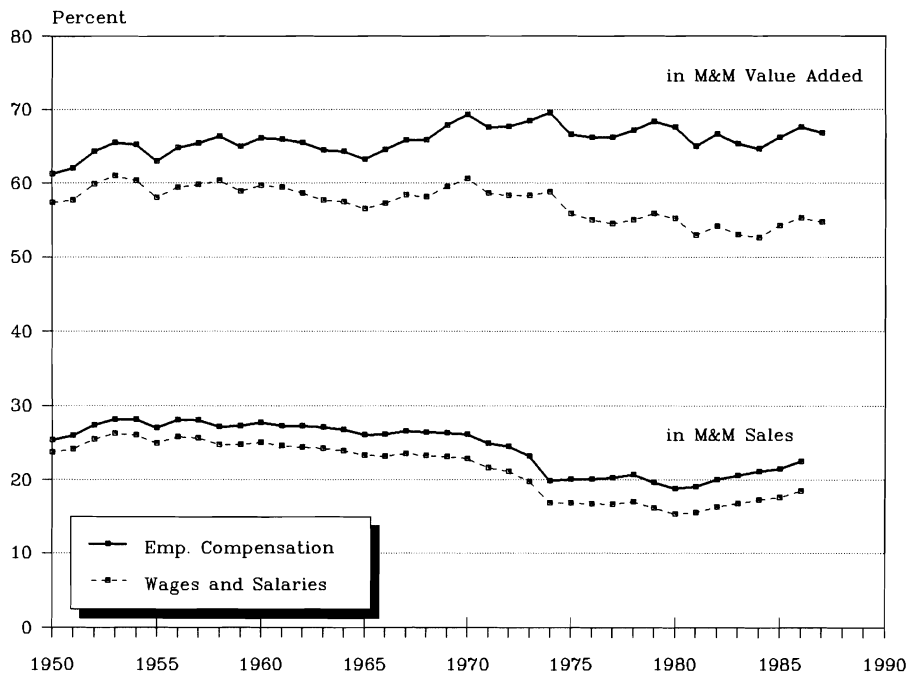


Figure 9-19b Distributive income shares: labour



M&M employees. With a relatively low inflation during the 1950s and 1960s, their share in value added was either rising (in the case of total compensation) or stable (for wages and salaries). The share of labour income in M&M sales was falling during that period, but the drop was relatively moderate by subsequent standards. After 1970, however, with rapidly rising inflation, the distributive share of labour income started to suffer. The combination of rising capital incomes and soaring raw material prices exerted such a colossal squeeze on the share of labour income in M&M sales that it lost almost one quarter of its value in only 4 years! A similar though quantitatively smaller decline is evident for the share of wages and salaries in value added, and even the share of total employee compensation in value added reverted to stagnation during that period.

These data may serve to suggest why the rise of inflation since 1970 tended to appear as 'stagflation.' As long as the core firms succeeded in their direct business-to-business redistribution through the breadth of accumulation, inflation was low and the effect on the relative share of labour income was minimal. This helped maintain mass consumption and contributed toward the overall expansion of the M&M sector. When the core coalitions reverted to inflation, however, the effect was an indirect labour-to-business redistribution, declines in the share of workers and substantial drops in mass consumption.

These consequences of differential pecuniary accumulation are particularly significant since they are not easily reversible. With a growing aggregate concentration, the ability of the large coalitions to achieve *further* distributional gains *via* mergers and acquisitions tends to diminish. Considered from a long-term perspective, this limitation implies that the large firms would be increasingly inclined to use inflation as their chief redistributive strategy. As a result, the share of labour income will most likely continue to be squeezed and inflation will continue to appear as stagflation.