THE RATE OF PROFIT AND THE FUTURE OF CAPITALISM

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According to Marxian theory, the performance of capitalist economies depends above all else on the rate of profit. When the rate of profit is high, capitalism is relatively prosperous: business investment is high, unemployment is relatively low, and the living standards of workers generally rises. However, when the rate of profit is low, prosperity turns into stagnation and depression: investment is low or nonexistent, unemployment is high, and living standards decline. Marx of course argued that there is an inherent tendency for the rate of profit to eventually decline during periods of prosperity and expansion, thus

turning periods of prosperity into periods of depression. In other words, recurring crises and depressions are inevitable in capitalist economies.

I and others have argued that the main cause of the stagflation of the U.S. economy over the last two decades was a very significant decline in the rate of profit. This theory of the recent stagflation will be briefly reviewed in the first section of this paper below. From this theory it follows that, if capitalism is to fully recover from this stagflation and return to the more prosperous conditions of the 1950s and 1960s, the rate of profit must be restored to its earlier higher levels. The main purpose of this paper is to examine the trend in the rate of profit since the mid-1970s in order to determine whether or not there has been a significant recovery of the rate of profit, which would make a return to prosperity more likely. The estimates of the rate of profit and related variables since the mid-1970s are presented in Section 2. Finally, Section 3 will speculate about the future of capitalism based on the recent trends in the rate of profit and its determinants presented in Section 2.

There seems to be a widespread impression that the U.S. economy has been experiencing a "profit boom" over the last decade, so that the rate of profit has increased significantly. Given the fact that real wages have been stagnant or declining since the mid-1970s, one would certainly expect that the increases in productivity over this period would have led to a significant increase in the rate of profit. Furthermore, the main explanation of the decline of the rate of profit by radical economists - the "wage-push profit squeeze" theory - suggests that two decades of high unemployment and declining wages should have more or less restored the rate of profit to its earlier higher levels. However, the rate of profit also depends on other factors besides real wages and productivity. Therefore, we need to examine the data to determine whether or not the rate of profit has increased significantly, thus laying the groundwork for a return to prosperity in which hopefully real wages could begin to increase again.

1. THE DECLINE OF THE RATE OF PROFIT, 1947-1977

Most readers of the RRPE know that the rate of profit in the U.S. economy declined significantly in the 1960s and early 1970s, and that many radical economists have argued that this significant decline in the rate of profit was the main cause of the economic stagflation of the last two decades. There are different measures of the rate of profit, but they all show essentially the same strong negative trends during the postwar period. According to my estimates, presented in Table 1 (see below), the rate of profit declined almost 50%, from 22% in the late 1940s to 12% in the mid 1970s.

I (and others) have argued that this significant decline in the rate of profit was the main cause of both the "twin evils" higher unemployment and higher inflation, and hence also of the declining living standards of recent decades (see Moseley 1992, Chapter 4). As in periods of depression of the past, the decline in the rate of profit resulted in a decline in business investment and higher unemployment. One new factor in the postwar period is that many governments in the 1970s responded to the higher unemployment by adopting Keynesian expansionary policies (more government spending, lower interest rates, etc.) in an attempt to reduce unemployment. However, these government attempts to reduce unemployment generally resulted in higher rates of inflation, as capitalist enterprises responded to the government

stimulation of demand by raising their prices at a faster rate in order to reverse the decline in their rate of profit. In the 1980s, financial capitalists revolted against these higher rates of inflation and have generally forced governments to adopt restrictive policies (less government spending, higher interest rates, etc.). The result has been less inflation, but also sharply higher unemployment and sharply reduced living standards. Therefore, government policies have affected the particular combination of unemployment and inflation that has occurred, but the fundamental cause of both of these "twin evils" has been the decline in the rate of profit.

There have been two main theories presented by radical and Marxian economists of the specific causes of the decline of the rate of profit. The most commonly held theory is generally referred to as the "wage-push profit squeeze" theory (e.g. Weisskopf 1979, Glyn and Sutcliffe 1972). According to this theory, the decline of the rate of profit was caused by an increase of wages that resulted from the workers' struggles of the late 1960s and early 1970s. It is argued that the lower rates of unemployment of this period increased the bargaining power of workers and enabled them to gain higher wages at the expense of capitalists' profits. Thus, according to this view, the current crisis of capitalism is the mainly the result of the power and militancy of workers which increased wages and reduced the rate of profit.

I have presented an alternative explanation of the decline of the rate of profit in the postwar U.S. economy, which emphasizes Marx's distinction between productive labor and unproductive labor, and, to a lesser extent, an increase in the composition of capital (see Moseley 1992, Chapters 2-4). I will here very briefly review Marx's distinction between productive labor and unproductive labor and then briefly present this alternative Marxian theory of the decline in the rate of profit.

According to Marx's theory, there are two main types of unproductive labor within capitalist enterprises: circulation labor and supervisory labor. Circulation labor is labor related to the exchange of commodities and money, including such functions as buying and selling, accounting, check processing, advertising, debt-credit relations, insurance, legal counsel, and securities exchange. Marx argued that circulation labor does not produce value and surplus-value because exchange is essentially the exchange of equivalent values. Circulation labor only transforms a given amount of value from commodities to money, or vice versa. Supervisory labor is labor related to the control of the labor of production workers, including such functions as management, direct supervision, record-keeping, etc. Marx argued that supervisory labor does not add to the value of commodities because this labor is not technically necessary for production, but is instead necessary because of the antagonistic relation between capitalists and workers over the intensity of labor of workers.

Capitalist enterprises must of course pay unproductive labor to carry out these necessary functions, even though, according to Marx's theory, these functions do not produce value and surplus-value. Therefore, the costs of this unproductive labor cannot be recovered out of value which it produces. Instead, these unproductive costs are recovered out of the surplus-value produced by productive labor employed in capitalist production. If these unproductive costs increase faster than the surplus-value produced by productive labor, then there will be proportionally less profit left over for capitalists. As we shall see, according to this Marxian theory, this negative effect of rising costs of unproductive labor was the main cause of the decline in the rate of profit in the postwar U.S. economy.

The rate of profit being analyzed here is by definition equal to the ratio of the amount of profit (P) to the total stock of capital invested (K). According to Marx' theory, profit, the numerator in the rate of profit, is the difference between the annual flow of surplus-value (S) and the annual flow of unproductive costs (U_f) (almost entirely the wages of unproductive labor, but also includes a small part (about 5%) of the costs of materials and the depreciation costs of buildings, machinery, etc. used in unproductive functions):

(1) $P = S - U_f$

Similarly, according to Marx's theory, the stock of capital, the denominator in the rate of profit, is divided into two components: constant capital (C) (the capital invested in means of production) and the stock of capital invested in unproductive functions (U_s):

(2) $K = C + U_s$

Combining equations (1) and (2), we obtain the following Marxian equation for the conventional rate of profit:

(3) $$RP = \frac{P}{K} = \frac{S - U_f}{C + U_s}$$

Finally, following Marx's procedure of relating all variables to variable capital, the "source" of surplus-value, we divide all terms on the right-hand side of the above equation by the annual flow of variable capital (V), and obtain:

(4) $$RP = \frac{S/V - U_f/V}{C/V + U_s/V} = \frac{RS + UF}{CC + US}$$

From equation (4), we can see that, according to this Marxian theory, the rate of profit varies directly with the rate of surplus-value (RS) and varies inversely with the composition of capital (CC) and the two ratios of unproductive capital to variable capital (UF and US).

Estimates of the rate of profit and its Marxian determinants for the US economy from 1947 to 1977 are shown in Table 1. We can see from these estimates that over this period the rate of surplus-value increased 17% and the composition of capital increased 41%. We can all see that the two ratios of

unproductive capital to productive capital had even more striking trends: the ratio UF increased 74% (from 0.54 to 0.94) and the ratio US increased 117% (from a small initial magnitude). Thus, according to the Marxian theory presented here, the proximate causes of the decline in the rate of profit were the significant increases in the composition of capital and the two ratios of unproductive capital to variable capital.

TABLE 1 SHOULD BE INSERTED ABOUT HERE

In Moseley (1992, Table 4.2 and pp. 111-112), I estimated the individual contributions of each of these proximate determinants to the total decline in the rate of profit, by decomposing the total decline into components which could then be used to analyze the effects of changing each of these four determinants of the rate of profit, one at a time. According to these estimates, the ratio UF was the proximate determinant that contributed the most to the decline of the rate of profit, accounting for approximately two-thirds of the total decline. By the end of this period, the annual costs of unproductive labor (U_f) was over half (approximately 55%) of the total surplus-value produced by productive labor. The composition of capital accounted for most of the rest of the total decline.

These conclusions raise the obvious further question: what were the underlying causes of the very significant increases in the two ratios of unproductive capital to productive capital, especially the ratio UF? It turns out that the increase in the ratio UF was due almost entirely to a roughly proportional increase in the ratio of unproductive labor to productive labor; the relative average wages of unproductive labor and productive labor remained more or less constant during this period. The ratio of unproductive labor to productive labor increased 83%, from 0.35 in 1947 to 0.64 in 1977 (see Moseley 1992, Table 4.3 and pp. 111-15). According to the Marxian theory presented here, this very significant increase in the ratio of unproductive labor to productive labor was the main cause of the decline of the rate of profit in the postwar U.S. economy.

In Moseley (1992, Chapter 5), I presented a preliminary analysis of the causes of this very significant increase in the ratio of unproductive labor to productive labor in the postwar U.S. economy. Of the two main types of unproductive labor, the most important by far is circulation labor, which accounted for approximately 80% of the total unproductive labor during the postwar period. The causes of the relative increase of circulation labor are many and complex (in part because there are many different types of circulation labor), but the main cause seems to have been the "productivity" of circulation labor increased slower than the productivity of productive labor, which seems to be due to the inherent difficulties of mechanizing the functions of buying and selling which must remain to a large extent person-to-person transactions. The slower "productivity" growth of commercial labor required that greater and greater quantities of commercial labor had to be employed in order to sell the more rapidly increasing output of productive labor. For example, in the automobile industry, continual mechanization has greatly increased the productivity of production workers, but the sale of automobiles continues to be a highly personalized service which has made it difficult to increase the quantity of cars sold per salesperson. Barger (1955) suggested essentially the same explanation for the relative increase of "distribution workers" in the first half of the 20th century in the US economy. Another important cause

of the increase of commercial labor, and of financial labor in particular, appears to have been the spread of personal checking as a means of making payments, which required more and more labor to process the ever-growing volume of checks.

The increase of supervisory labor, the other main type of unproductive labor, appears to have been due to a variety of causes, such as the increased size of firms, the increase of union membership (in the early postwar period), and the attempts by managers to increase their control over production workers. Given the above results, further analysis of the causes of the very significant increase of the relative increase of unproductive labor in the postwar U.S. economy should be a high priority for future research. The future trend of the rate of profit would seem to depend mainly on the future trend of the ratio of unproductive labor to productive labor, and the future trend of this latter ratio depends on whether or not the main causes of the prior strong increase of this ratio continue to operate in the years ahead.

2. HAS THE RATE OF PROFIT INCREASED, 1975-94?

Since the mid-1970s, capitalist enterprises have responded to the significant decline of the rate of profit discussed above by attempting in a variety of ways to increase their rate of profit back up to its earlier higher levels. The most important of these strategies has been the attempt to reduce workers' wages in a number of ways: by direct wage cuts, by increasing prices faster than wages, and by moving their operations to low-wage areas of the world (this has been the main driving force beyond the "globalization" of recent decades). The negative effect of these wage cuts on the living standards of workers is only too well known: the average real wage in the US economy has declined about 20% over the last two decades.

The extent to which capitalist enterprises have succeeded in restoring the rate of profit is shown in Table 2. According to these estimates, the rate of profit has increased somewhat over the last two decades, from around 0.12 in the mid-1970s to around 0.16 in the mid 1990s. However, the surprising result is that only about 40% of the earlier decline (a decline of 0.10 from 0.22 to 0.12) has been recovered. Hence, the rate of profit remains 25-30% below its earlier peaks.

TABLE 2 SHOULD BE INSERTED ABOUT HERE

We can also see from Table 2 the reasons why the increase in the rate of profit has been so limited, in spite of the declining wages of this period. The higher rates of unemployment and lower wages resulted, as expected, in a significant increase in the rate of surplus-value (a 36% increase from 1.71 to 2.33). In addition, the composition of capital declined somewhat (15%, from 5.39 to 4.61), especially since the late 1980s, due to the decline of oil prices, a slower rate of technical change, and perhaps to an increase of bankruptcies and the resulting devaluation of capital. However, the positive effect of the increase of the rate of surplus-value and the decline of the composition of capital was offset to a large extent by continued increases in the ratio UF (a 49% increase, from 0.98 in 1975 to 1.46 in 1994), and to a lesser extent in the ratio US (a 20% increase, from 0.69 in 1975 to 0.83 in 1994). Therefore, the main underlying cause of the limited increase in the rate of profit is the same as the main cause of the previous

decline in the rate of profit: a continued increase in the costs of unproductive labor. The total costs of unproductive labor is now 62% of the total surplus-value produced by productive labor.

The main cause of the increase in the ratio UF in this more recent period was again a continued increase in the ratio of unproductive labor to productive labor, which increased 22% from 0.64 in 1975 to 0.78 in 1994, although the rate of increase of this ratio was somewhat slower, approximately 1% per year compared to the almost 2% a year in the early postwar period.

The slowdown in the relative increase of unproductive labor seems to have been even greater for supervisory labor than for circulation labor (according to very rough estimates), which suggests that the "downsizing" of recent years (which is often concentrated in the layers of middle management) has had a significant impact on the relative increase of supervisory labor. In addition, there was another cause of the increase in the ratio UF in this more recent period - an increase in the average wages of unproductive relative to the average wages of productive wages, which increased 23% from 1.45 in 1975 to 1.78 in 1994 in contrast to the earlier period, in which this ratio remained more or less constant. Therefore, the relative increase of the costs of unproductive labor since the mid-1970s was due not only to a continued relative increase of the number of unproductive workers, but also to a new increase in the relative wages of these unproductive workers. Estimates of the ratio of unproductive labor to productive labor and of the ratio of the average annual wage of unproductive workers to the average annual wage of productive workers are shown in Table 3.

TABLE 3 SHOULD BE INSERTED ABOUT HERE

These estimates for the last two decades support the alternative Marxian theory that I have presented of the prior decline of the rate of profit, and contradict the "profit squeeze" explanation presented by Weisskopf and Wolff and others (and by Glyn and Sutcliffe for the UK economy). My alternative Marxian theory can explain not only why the rate of profit declined in the early postwar period, but also why the increase of the rate of profit has been so limited in recent decades. The "profit squeeze" theory can explain the prior decline, but it cannot explain why two decades of higher unemployment and lower wages have not fully restored the rate of profit.

The limited increase of the rate of profit since the mid-1970s explains why slow growth and stagnation have continued in these decades: the rate of profit still has not increased sufficiently to make possible a return to a more rapid rate of expansion. These results also of course imply that a full recovery from this stagnation in the years ahead is not very likely. The future implications of these results are explored further in the final section.

The analysis above has been in terms of a gross concept of profit which includes the interest paid by non-financial businesses. This gross profit is the appropriate measure of the total returns to capital and is the fundamental determinant of the rate of capital accumulation for the economy as a whole. However, if one breaks down the gross profit into net profit plus interest and then examines the ratio of net profit to gross profit for the postwar US economy, we find some interesting trends. From the late 1940s through

the late 1970s, this ratio declined slowly from about 95% to about 80%. Then this ratio declined more rapidly in the early 1980s and even more rapidly in the late 1980s, reaching a low of 61% in 1990, due both to higher debt levels and to higher real interest rates. Since 1990, these trends have been largely been reversed, with lower debt levels, lower real interest rates, and a sharply rising ratio of net profit to gross profit, so that the ratio in 1994 was almost exactly the same as in 1977 (79%). In other words, in recent years non-financial corporations have been receiving a larger share of the gross profit, and their "net" rate of profit has increased sharply. This is no doubt the reason for the general impression that the rate of profit has increased significantly in the 1990s. However, this recent increase in the share of non-financial corporations of the gross profit comes after a roughly equal decline in this share in the 1980s. The overall rate of return on capital (the "gross" rate of profit) has increased much less than the "net" rate of profit in the 1990s and remains 25-30% below its early postwar peaks.

3. THE FUTURE TREND IN THE RATE OF PROFIT?

I argued in the Introduction that the future of capitalism depends mainly on the future trend of the rate of profit. Based on the above analysis of the causes of the decline of the rate of profit in the early postwar period and the limited increase in the rate of profit in recent decades, what is the future trend of the rate of profit likely to be? According to the Marxian theory of the rate of profit presented above, the rate of profit depends on three variables: the rate of surplus-value, the composition of capital, and the ratio of unproductive labor to productive labor. What are the likely trends of these three Marxian determinants of the rate of profit?

The rate of surplus-value is very likely to continue to increase in the years ahead. The trend of the rate of surplus-value depends on the relative rates of increase of productivity and real wages. The continuation of stagnation and high unemployment in the years ahead will continue to put downward pressure on wages, which will make it very difficult to avoid further declines in real wages; increases of real wages are even less likely. Therefore, any increases in productivity that occur will result in further increases in the rate of surplus-value.

The future trend of the composition of capital is more difficult to predict. Continued stagnation will likely be accompanied by a continuation of slow investment, which suggests that the composition of capital will not increase much, if at all, in the year ahead and may even decline somewhat.

However, the future trend of the rate of profit would seem to depend mainly on the trend of the ratio of unproductive labor to productive labor. The strong increase of this ratio throughout the postwar period was both the cause of the significant decline of the rate of profit in the early postwar period and of the limited increase of the rate of profit in recent decades. The strong increase of this ratio, although somewhat less in recent decades, would by itself seem to suggest that this ratio will continue to increase in the years ahead. The main cause of the relative increase of unproductive labor identified by my preliminary analysis (Moseley 1992, Chapter 5) was the slower "productivity" growth of circulation labor compared to productive labor, which seems to be due to the inherent difficulties of mechanizing the functions of buying and selling, which must remain to a large extent person to person transactions.

However, there is one important new factor to consider: computer technology. New computer technology is being applied especially to many of the unproductive functions of circulation (accounting, billing, check processing, cashiering, etc.). This new technology has reduced and will probably continue to reduce the need for circulation labor. However, this effect has not yet been strong enough to fully eliminate the relative increase of circulation labor. As noted above, the slowdown in the relative increase of unproductive labor seems to have been even greater for supervisory labor than for circulation labor due to the "downsizing" of recent years. However, it is unlikely that this "downsizing" will be carried much further in the years ahead.

Therefore, it appears likely that the ratio of unproductive labor to productive labor will continue to increase in the years ahead, although probably at a somewhat slower rate. This continued relative increase of unproductive labor will continue to put downward pressure on the rate of profit and will continue to offset the positive effect of further increases of the rate of surplus-value. Therefore, it seems unlikely that the rate of profit in the U.S. economy will increase significantly in the years ahead.

It might be suggested that investment in developing countries (including Eastern Europe), with their much lower wages, would be a way to significantly increase the rate of profit for US corporations. However, the US capital invested abroad is still less than 10% of the total US capital, and the majority of this investment is in other advanced countries, rather than in the low-wage developing countries. Therefore, it seems unlikely that investment in low-wage countries will be so great that it will significantly affect the rate of profit of US corporations.

In summary, it seems that the best we can hope for in the years ahead is a continuation of the current stagnation and slow growth. Capitalist enterprises will continue to try to restore their rate of profit by every means possible, including cutting wages. However, they will likely continue to be only partially successful in achieving this objective. Therefore, a return to the more prosperous conditions of the early postwar period, with fuller employment and rising wages appears to be unlikely.

Furthermore, the Marxian theory presented here implies that there is not much that government economic policies can do to alter this gloomy prospect, because there is not much government policies can do to increase the rate of profit. Restrictive policies may make it easier to reduce wages by creating more unemployment, but probably not much more than is already taking place. Government policies have little or no effect on the other two determinants of the rate of profit, the composition of capital and the ratio of unproductive labor to productive labor. Expansionary government policies may even exacerbate the problem of insufficient profitability, because they require that a greater share of surplus-value be used to pay for these expansionary policies. The pioneering analysis from a Marxian perspective of the limits of expansionary government policies was made by Paul Mattick (1969). Mattick predicted in the 1950s and 1960s, almost alone among economists, both orthodox and radical, that Keynesian expansionary policies would not provide a permanent solution to capitalism's tendency of the rate of profit to decline and thus that the then prevailing relative prosperity would eventually come to an end and turn into crisis. The events of the last 20 years dramatically support the validity of Mattick's analysis, based on Marx's theory.

On the other hand, it also appears unlikely that the U.S. economy is about to fall into another deep depression, similar to the Great Depression. The rate of profit has increased somewhat and appears to be not so low as to cause widespread bankruptcies of capitalist firms.

As discussed above, the interest burden of non-financial businesses has been reduced in recent years, thus reducing the risk of widespread bankruptcies. If such a deeper depression were to threaten, emergency government policies would probably be enacted, which although these would not able to solve the underlying problem of insufficient profitability, they would probably be able to prevent, or at least delay, a slide into deeper depression.

Of course, from a broader, global perspective, much of the world is already in a deep depression, especially Latin America and Africa. These developing countries have suffered the most form the current crisis of capitalism. For example, in Mexico, sub-employment has increased dramatically (unemployment is often disguised as "self-employment," e.g. selling candy on the streets), real wages have been cut in half or more, and many small and medium-sized enterprises have gone or soon will go bankrupt. There is not much hope of a recovery in these countries, unless the advanced countries grow more rapidly, which we have already seen is not very likely. There seems to be a greater risk that these countries will deteriorate even further, which would have important repercussions on the U.S. economy. In addition, the continuing depression and increasing misery in these countries may lead in the years ahead to more organized social movements in opposition to capitalism (such as the Zapatistas in Mexico and the "trabajadores sin tierra" (workers without land) in Brazil). Such social movements would also have repercussions back on the U.S. and other major capitalist countries.

Therefore, as we move into the 21st century, it seems very likely that capitalism will remain in a condition of stagnation and crisis for the foreseeable future. The rate of profit is still too low to make possible a faster rate of expansion and a return to more prosperous conditions. Capitalism may be able to avoid another Great Depression for the foreseeable future, but it is extremely unlikely that capitalism will be able to provide a return to prosperity and improving living standards for the vast majority of the world's population, and will probably instead continue to produce lower living standards and increasing misery.

Whether or not these conditions of stagnation and deteriorating living standards will generate significant oppositional movements in the U.S. and elsewhere is a very important question that is beyond the scope of this paper. However, further consideration of this question should take into account the very strong probability that the objective social conditions will continue to deteriorate in the years ahead for the vast majority of the world's population, including in the United States.

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APPENDIX: SOURCES AND METHODS

The sources and methods used to derive the estimates of the rate of profit and related variables are described in detail in Appendix B of (Moseley 1992), and the interested reader is asked to please consult this description. The following is a brief overview of these sources and methods.

1. Variable capital (V) (annual flow): the total compensation (including supplements and benefits) of productive workers. The estimation begins with the "total employee compensation" of the Business sector in the National Income and Product Accounts (NIPA), which does not distinguish between production and non-production workers. The percentage of this total employee compensation that is paid to production workers is estimated from a variety of sources. The primary sources used to estimate this percentage are the Census of Manufactures, which distinguishes between "production workers" and "other employees", and the Bureau of Labor Statistics Current Establishment Survey, which distinguishes between "non-supervisory employees" and "other employees". The method used to estimate variable capital is essentially the same as Mage (1963) and Shaikh and Tonak (1994), except that they deduce the taxes paid by productive workers.

2. Surplus-value (S) (annual flow): the difference between value added and variable capital. Estimates of valued added are derived from the NIPA estimates of the net product of the Business sector, excluding the value added by self-employed producers and the "imputations" that do not correspond to actual goods and services sold on the market. The most important of these imputations are the rental value of owner-occupied homes (almost 80% of the total) and the imputed interest for financial intermediaries.

3. Flow of unproductive capital (U_f) (annual flow): the total compensation of unproductive workers plus the annual depreciation of non-production buildings and equipment (see #6 below). The total compensation of unproductive workers is the difference between the "total employees compensation" of the Business sector and variable capital.

4. Profit (P) (annual flow): the difference between surplus-value and the flow of unproductive capital (see equation 1 in the text).

5. <u>Constant capital</u> (C) (stock): sum of fixed and circulating constant capital. <u>Fixed constant capital</u> is the current value of buildings and equipment used in production activities. Estimates are derived from the Bureau of Economic Analysis' <u>Fixed Reproducible Tangible Wealth</u>, and in particular from the estimates of "net fixed private non-residential capital" (current costs), excluding various types of buildings and equipment used in activities of circulation and supervision (see #6 below). <u>Circulating constant capital</u> is the current value of inventories, which is taken from NIPA data for "business inventories".

6. <u>Stock of unproductive capital</u> (U_s) (stock): the current value of buildings and equipment used in circulation and supervision activities (e.g. commercial buildings; office, computing and accounting machines; furniture and fixtures, etc.).

7. <u>Total capital stock</u> (K) (stock): the sum of constant capital and the stock of unproductive capital (see equation 2 in the text).

Table 1: The rate of profit and its Marxian determinants, 1947-77

	RS	CC	UF	US	RP
1947	1.40	3.58	0.54	0.30	0.22
1948	1.35	3.60	0.53	0.30	0.21
1949	1.50	3.83	0.59	0.32	0.22
1950	1.42	3.94	0.58	0.32	0.20
1951	1.44	3.78	0.56	0.31	0.22
1952	1.41	3.69	0.57	0.31	0.21
1953	1.35	3.56	0.58	0.30	0.20
1954	1.46	3.84	0.64	0.33	0.20
1955	1.51	3.85	0.65	0.34	0.21
1956	1.44	3.96	0.67	0.36	0.18

1957 1.50 4.08 0.70 0.38 0.18

1958 1.59 4.33 0.75 0.42 0.18

1959 1.61 4.14 0.75 0.41 0.19

1960 1.62 4.11 0.78 0.42 0.19

1961 1.68 4.18 0.81 0.45 0.19

1962 1.71 4.07 0.81 0.45 0.20

1963 1.71 3.99 0.80 0.46 0.21

1964 1.73 3.92 0.81 0.47 0.21

1965 1.73 3.92 0.80 0.48 0.21

1966 1.72 3.91 0.81 0.50 0.21

1967 1.72 4.03 0.84 0.52 0.19

1968 1.69 4.02 0.84 0.53 0.19

1969 1.62 4.07 0.85 0.54 0.17

1970 1.61 4.29 0.89 0.58 0.15

1971 1.71 4.50 0.93 0.62 0.15

1972 1.67 4.37 0.89 0.61 0.16

1973 1.59 4.39 0.87 0.61 0.14

1974 1.55 5.13 0.92 0.69 0.11

1975 1.71 5.39 0.98 0.69 0.12

1976 1.66 5.15 0.95 0.66 0.12

1977 1.63 5.03 0.94 0.66 0.12

RS: Rate of surplus-value

CC: Composition of capital

UF: Ratio of the flow of unproductive capital to variable capital

US: Ratio of the stock of unproductive capital to variable capital

Sources: see Appendix and Moseley (1992, Appendix B)

Table 2: The rate of profit and its Marxian determinants, 1975-94

RS CC UF US RP

1975 1.71 5.39 0.98 0.69 0.12

1976 1.66 5.15 0.95 0.66 0.12

1977 1.63 5.03 0.94 0.66 0.12

1978 1.70 5.26 0.98 0.70 0.12

1979 1.64 5.32 1.00 0.67 0.11

1980 1.70 5.66 1.06 0.72 0.10

1981 1.81 5.76 1.09 0.74 0.11

1982 1.89 5.92 1.16 0.78 0.11

1983 1.93 5.76 1.20 0.80 0.11

1984 2.08 5.58 1.22 0.73 0.14

1985 2.15 5.47 1.26 0.79 0.14

1986 2.23 5.50 1.32 0.80 0.15

1987 2.22 5.48 1.33 0.79 0.14

1988 2.25 5.25 1.39 0.80 0.14

1989 2.28 5.03 1.41 0.81 0.15

1990 2.31 4.86 1.39 0.82 0.16

1991 2.27 4.89 1.45 0.83 0.14

1992 2.28 4.80 1.45 0.82 0.15

1993 2.29 4.71 1.46 0.83 0.15

1994 2.33 4.61 1.46 0.83 0.16

Sources: see Appendix and Moseley (1992, Appendix B)

Table 3: Productive Labor and Unproductive Labor

UL AU$_w$

PL UL PL AV

(millions of workers)

1975 36.9 23.5 0.64 1.45

1976 38.3 24.4 0.64 1.41

1977 39.6 25.5 0.64 1.38

1978 41.3 26.4 0.64 1.45

1979 43.2 27.9 0.65 1.46

1980 42.7 28.5 0.67 1.50

1981 42.7 29.1 0.68 1.51

1982 41.4 29.1 0.70 1.56

1983 41.4 29.5 0.71 1.58

1984 43.7 31.2 0.71 1.61

1985 44.6 32.7 0.73 1.62

1986 45.2 33.8 0.75 1.66

1987 45.9 34.6 0.75 1.67

1988 47.1 35.5 0.75 1.76

1989 47.8 36.6 0.77 1.74

1990 48.1 37.1 0.77 1.71

1991 47.1 36.7 0.78 1.77

1992 47.0 36.6 0.78 1.78

1993 47.7 37.2 0.78 1.77

1994 49.0 38.2 0.78 1.78

PL: number of productive workers

UL: number of unproductive workers

AU_w : average annual wage of unproductive workers

AV: average annual wage of productive workers

Sources: see Appendix and Moseley (1992, Appendix B)

ENDNOTES