Capitalism, Inequality and Globalization: Thomas Piketty's "Capital in the Twenty-First Century"

Prabhat Patnaik

ı

The Piketty Argument

Thomas Piketty's book *Capital in the Twenty-first Century* embodies an immense amount of empirical research into the distribution of wealth and income across the population for a number of advanced capitalist countries going back for over two centuries. In particular Piketty has made extensive use of tax data for the first time to arrive at several important conclusions in his *magnum opus* which has deservedly attracted much international attention, both in academic circles and among the public at large.

The conclusions themselves are quite striking. Central to them is the finding of a U-shaped curve relating to a number of key variables, viz. wealth distribution defined as the share of the top 10 percent (or the top 1 percent) in total wealth in each of the countries studied; income distribution defined in a similar manner; and the wealth-income ratio. Each of these variables, quite high (or rising) until the first world war, undergoes a sharp drop during the war and remains more or less low until 1945, after which it begins to increase, and in the more recent decades particularly sharply.

The period between 1914 and 1945 in short represents a remarkable break, which, not surprisingly, created an impression that capitalism had become more egalitarian, that inherited wealth had ceased to matter as much as before, that the individual's "ability" rather than patrimony determined in the new situation his or her position in the socio-economic hierarchy, and so on. To be sure, the bottom 50 percent of the population in most capitalist countries hardly owned much wealth at any time, and hence hardly earned any income from wealth; but the period 1914-1945 threw up a middle class which raised its share of wealth and income at the expense of the rich, of the very top decile for instance.

What the more recent period has been seeing is the top decile increasing its share in income and wealth once more. In the case of income for instance, the top decile in the U.S.A. (where the increase in inequality has proceeded much further than in Europe, reversing their pre-1914 ranking), claims as much as 90 percent of the total income, which was the figure for several countries in Europe on the eve of the first world war.

Piketty expects the march of inequality to continue into the future. The period 1914-1945 according to him saw capitalism being exposed to a series of shocks: the war-time destruction of wealth in physical terms, the loss of foreign assets through expropriations following the Bolshevik Revolution and decolonization (whose effects of course were in the 1950s), high rates of inflation in consumer prices

not matched by the rate of inflation in asset prices, and the introduction of taxation of income and wealth (though in France wealth taxation had come with the French Revolution).

He sees movements in the wealth-income ratio, in wealth inequalities and in income inequalities as proceeding in the same direction, and as being determined, barring this period of shocks, by the excess of the rate of return on capital over the rate of growth of the economy (r-g). When r exceeds g, wealth grows faster than the national income, wealth inequalities increase, and so do inequalities in income from wealth, which also push up overall income inequalities. Piketty expects that in the twenty-first century, the rate of growth in the advanced countries will slow down, *inter alia* because of a slowing down of population growth, while the reduction in the rate of return on capital will be much less. This is because in a situation where capital can easily substitute labour (what economists call a situation of high elasticity of substitution between capital and labour), high rates of capital accumulation are perfectly compatible with slow demographic and economic growth: more capital is simply used per unit of labour without much lowering the rate of return on capital. The difference (r-g) therefore will increase in the decades to come which will make wealth and income inequalities even worse; and this would be further accentuated by the tendency, already discernible at present, towards a lowering of the tax burden on the rich, which characterizes contemporary globalization.

Piketty is concerned about the effects of such an increase in inequality, which he argues is fundamentally incompatible with democracy. His suggestion is for heavier wealth taxation; but since any single country doing so will simply drive capital away from itself, such wealth taxation will have to be coordinated, at least among the rich countries.

Piketty is invariably cautious in stating his conclusions. Nonetheless what emerges clearly from his analysis is that in the absence of shocks of the kind witnessed during 1914-1945, or of deliberate fiscal intervention to the contrary, there is a tendency under contemporary capitalism for wealth inequalities to increase.

This arises for two reasons: first, through the maintenance of a *level* of (r-g), whose associated degree of wealth inequality is greater than the initial level. In other words, even though for any given (r-g) the degree of wealth inequality may eventually stabilize, this level of inequality is likely to be higher than the initial state, so that in the transition to it wealth inequality increases. Besides, this level at which wealth inequality may stabilize, may itself also be unacceptable *per se*. For instance, with r = 5 percent and g = 1 percent, stability according to Piketty's simulations may be achieved at a level where the top decile owns 90 percent of all wealth, which is clearly extraordinarily high and unacceptable in a democracy.

Secondly, an *increase* in (r-g) would accentuate inequality, and this is what he expects to happen in the coming decades. This difference (r-g) which had been high in pre-1914 capitalism and then come down somewhat, is once more set to increase in the twenty-first century, both in advanced countries and even globally (since population growth will be slowing down) which would only mean a worsening of wealth, and hence income, inequality.

The conclusion that wealth inequality has a tendency to increase under capitalism is also drawn by Marxists, but for independent reasons, having to do with the tendency towards centralization of capital

immanent in capitalism. Marxists therefore should normally not have much difficulty in agreeing with Piketty's prognostications about the twenty-first century, and even his suggestion for a global wealth tax, as a transitional demand (which would never of course get realized under capitalism). But the problem that any Marxist would have with Piketty's book is that while his empirical work is impressive, the theory he advances for his argument cannot stand scrutiny.

But before discussing his theory I want to enter a caveat. While his empirical work is impressive, indeed immensely impressive, we simply do not know how seriously to take his figures; and even forming an opinion on it requires substantial research. I would like to cite one example here. There is a massive drop in the capital-income ratio, especially in Europe, in a very short span of time, between 1914 and 1920, which the various factors cited by Piketty do not appear to me to explain adequately. This low level of capital-income ratio moreover continues through the Depression years, when we should be expecting an increase in the capital-income ratio (since a Depression entails reduced capacity utilization). But these are issues which will be sorted out in due course and need not detain us here.

Ш

The Neo-Classical Paradigm

There are in fact two quite distinct problems with Piketty's theory: first, the basic theoretical paradigm (the "neo-classical" paradigm) within which his argument is set is a largely discredited one; and second, even within this paradigm his specific position is based on assumptions which are highly untenable. Let me discuss these problems *seriatim*.

The basic theoretical paradigm which he uses is one where there is always full employment of all "factors of production"; where the rate of remuneration of each "factor" is determined by its "marginal productivity" at the point of full employment, i.e. by how much an additional unit of it would contribute to total output if we visualized a *hypothetical situation* in which the amounts of all other "factors" are kept constant; where all savings are invested in each period (which is required anyway for the "marginal productivity" theory to hold); and where the economy, with full employment in every period, moves over time towards a uniform "steady state" growth rate, which is equal to the sum of the exogenously given rate of growth of labour productivity, caused by what economists call "labour augmenting" technological progress. (*This long term-growth rate in short is completely exogenous and does not depend on the rate of capital accumulation; the latter on the contrary adjusts to this exogenous long-term growth rate)*.

This paradigm today has few takers even among "mainstream" economists, let alone economists in general. It assumes away all problems of the deficiency of aggregate demand, and hence the entire Keynesian-Kaleckian "revolution" in economic theory (though long before Keynes and Kalecki, Marx had emphasized the possibility of over-production crises under capitalism). It assumes away the existence of a reserve army of labour, without which a capitalist system, as Marx had shown, simply cannot function. It assumes that capital accumulation meekly adjusts to the rate of growth of labour force in each country instead of acquiring the requisite labour for itself, which capitalism, shifting millions of people across the globe to suit its requirements, has historically done.

Besides, it treats "capital", which is a value-sum, as if it was, like any other "factor of production", measurable in physical units. Taking capital, correctly, as a value-sum creates insurmountable logical problems for this theory which were pointed out by Piero Sraffa (and whose discovery is sometimes referred to as the "Sraffa revolution"). These logical problems arise from the fact that to measure capital as a value-sum, and hence find out the "marginal product of capital" which is supposed to determine the rate of profit, we already need to know the equilibrium prices of production; but these cannot be known unless we already postulate a rate of profit. Hence, to determine the rate of profit we already need to know the rate of profit. (And it is not even the case that at lower and lower rates of profit the value-sum of capital per unit of labour is higher and higher, as the "marginal productivity" theory, with its assumption that the "marginal productivity" of a factor declines as more and more of it used, requires).

And finally, it is open to the subtle methodological criticism of Piero Sraffa that the "marginal productivity" theory explains the existing reality via the consequences of a hypothetical change which are *in principle* non-observable, non-ascertainable and non-verifiable. Whatever exists in reality in short, is explained by the proposition, *for which there is no independent evidence*, that if it did not exist then there would be forces at work that would make it exist.

Piketty is thus reviving a discredited theoretical paradigm which even modern-day "mainstream" growth theory (called "endogenous growth theory"), with its assertion that capital accumulation causes the economy's growth rate to be liberated from the constraint imposed by its population growth, has rejected. (Piketty does not seem aware of these theoretical debates, since he erroneously imagines the controversy following Sraffa's work, about the problem posed by capital's being a value-sum, to have been a controversy about the relevance of aggregate demand (pp.230-231)¹).

He justifies his acceptance of this (neo-classical) growth paradigm, and his not treating capitalism as a "demand-constrained" system, by claiming that demand problems, as empirical evidence shows, arise only in the "short-run" but disappear over time, so that any long-run analysis of capitalism should ignore them.

This raises a basic methodological point: the "long-run" is nothing else but a sequence of "short-runs" strung together; hence unless we can show that the problem of deficiency of aggregate demand that afflicts capitalism "in the short-run", spontaneously reverses itself through the working of the system, we cannot, on the basis of empirical evidence alone (to the effect that demand problems over a long period of time are not always visibly severe), ignore them in our dynamic analysis.

For instance Rosa Luxemburg, acutely aware of the demand problem, argued that the problem disappeared because of capitalism's incursions into the pre-capitalist sector, and not because either Say's Law (that "supply created its own demand") was valid, or the system's internal mechanisms made it disappear. From the observed lack of importance of the demand problem therefore we cannot conclude as Piketty does, that the system's own mechanisms make it disappear over time. On the

4

¹.Likewise Piketty's interpretation of Marx's proposition on the falling tendency of the rate of profit shows a lack of familiarity with Marx's own work and with the enormous literature that exists on the subject.

contrary, imperialism, or more generally what Kalecki called exogenous stimuli (which include State expenditure and "innovations", apart from incursions into pre-capitalist markets) play a role in its not being obtrusively present, in which case the "long-run" dynamics of the system should be analyzed not as if it observed Say's Law, but rather as a sequence of short-term states, in each of which the fact of its being demand-constrained was countered by the operation of some exogenous stimuli, such as precapitalist markets.

It is significant that imperialism plays no role in Piketty's analysis, neither in explaining the growth of wealth and wealth inequalities, nor even in the analysis of past growth, or prognostications of future growth. On the contrary the book is informed by a perception according to which capitalist growth in one region is generally beneficial for all within that region, is never at the expense of the people of another region, and tends to spread from one region to another, bringing about a general improvement in the human condition. What this perception misses is that capitalist growth in the metropolis was associated not just with the perpetuation of the pre-existing state of affairs in the periphery but with a very specific kind of development, which we call "underdevelopment", which squeezed the people in an entirely new way. For instance, over the period spanning the last quarter of the nineteenth century and the first two of the twentieth (until independence), not only was there a decline in per capita real income in "British India", but also the death of millions of people owing to famines².

Let me return to Piketty's theoretical paradigm (the "neo-classical" paradigm). According to this theoretical paradigm all persistent unemployment must be explained as the result of wages being "too high", i.e. as the product of trade union action. It is not accidental that Robert Solow whose "neo-classical" growth model Piketty invokes is a votary of "labour market flexibility", i.e. smashing trade unions through "free hire and fire", which Rajasthan's BJP government is trying to introduce at present and the current central government would dearly love to do. Smashing trade unions on the plea that this would raise employment is currently on the agenda of corporate capital everywhere in the world including India. It is a pity that Piketty, despite his concern with wealth inequality, adopts a theory that provides sustenance to this corporate agenda.

In fact he is not unaware of the limitations of the "marginal productivity theory". His explanation for the burgeoning inequality in income from work in the US in the recent period is that the corporate managers determine their own salaries and pitch it too high, i.e. their salaries are not linked to their "marginal productivity". He seems to think that while the "marginal productivity" explanation can be jettisoned for this segment, it can nonetheless be applicable for the segment consisting of the mass of ordinary workers.

This however is fallacious. Even within its own paradigm, once "marginal productivity theory" is given up for one segment, it just breaks down; it ceases to be applicable at all. The corporate managers who give

²The decline in per capita real income emerges if we put together the estimates of F.J.Atkinson and S.Sivasubramaniam. The figures can be found in Irfan Habib, *A People's History of India*, Volume 28, Tulika Books, Delhi, 2006; and S.Sivasubramaniam, *The National Income of India in the Twentieth Century*, Oxford University Press, Delhi, 2000.

themselves high salaries are filching it either from profits or from wages. But once we accept that there is this element of compressibility in any income share, then it follows that the workers too, through trade union action, can demand and get higher wages at the expense of the managers or of profits, without causing unemployment. The proposition advanced by the "marginal productivity" theory that wages cannot rise above marginal productivity without causing unemployment, breaks down, undermining the theory as a whole.

Ш

Income Distribution and the Savings Ratio

Let me now move to Piketty's untenable assumptions within this theoretical paradigm. The first assumption is that the savings ratio in the economy is independent of income distribution. Piketty obviously does not believe this, but once we drop this assumption his argument becomes logically untenable. Clearly the rich save more than the poor; in fact the poor hardly save at all since their share of wealth as Piketty's figures show is negligible.

There has been a long tradition in economics of assuming that all wages are consumed and all profits saved. (David Ricardo assumed that all wages are consumed and all profits above some basic consumption of the capitalists are saved). Let us, for generality, assume that both workers and capitalists save certain ratios of their total incomes, the former's ratio being lower than that of the latter. The workers saving at all however means that they also get some income from wealth, so that their savings ratio, lower than that of the capitalists, applies to their *total income*, both what they get from work and what they get from wealth (while the capitalists' ratio applies only to what they get from wealth since they do not have any labour income). Such a universe has been much explored in economic theory and yielded well-known conclusions.

The first thing to note is that if we postulate such savings behaviour, then *Piketty's theory becomes logically inconsistent*: a stable "steady state" trajectory of the sort Piketty assumes, where the growth rate equals the sum of the rate of growth of the workforce and the rate of growth of labour productivity, both exogenously given, (or what is sometimes referred to synthetically as the "rate of growth of the work force in *efficiency units*"), does not exist when the elasticity of substitution between capital and labour exceeds unity, as he assumes (see above).

In short, the moment the overall savings ratio is seen to depend on income distribution, which is an eminently reasonable assumption, the Piketty conclusion cannot hold: there cannot be both a stable, exogenously given, growth rate, and an elasticity of substitution between capital and labour that exceeds unity³.

³Even when the savings ratio does not depend upon income distribution, a steady state growth path may not exist if the elasticity of substitution along the production function exceeds unity. On Piketty's own assumptions in other words, a steady state growth path of the sort he visualizes may not exist; but if the savings ratio *does* depend upon

Let us suppose that a stable steady state growth path exists, i.e. there is a stable exogenously given growth rate to which the economy converges, and abandon Piketty's other assumption, namely of an elasticity of substitution exceeding unity. Along such a steady state path only two wealth distributions are logically possible: one where the workers own all the wealth and the capitalists own none⁴. The other is where there is a stable distribution of wealth between the workers and the capitalists. The first of these cases is obviously unrealistic and can be ignored. In the second case which was explored by the Italian economist Luigi Pasinetti⁵, the rate of profit on capital r must equal g / s_c where s_c is the savings ratio of capitalists⁶.

Now, Piketty takes r and g to be completely independent of one another. But this is impossible along the steady-state growth path that he himself is focusing on. For given s_{c_i} if g comes down, as he visualizes for the twenty-first century, then r must also come down. His entire argument about widening wealth inequalities in the twenty-first century is based on the presumption that while g would come down, r would not, so that (r-g) would increase, which according to him is the cause of widening inequality. But g cannot come down without r also coming down, so that his basic theoretical argument becomes untenable. Besides as this case clearly demonstrates, with $s_c < 1$, r is greater than g along the "steady state" growth trajectory *ant yet there is no increase in wealth inequalities over time*. The respective shares of wealth owned by the workers and the capitalists remain unchanged.

Let me give a numerical example to illustrate this steady state picture. The wage share is 60 percent, the profit share is 40 percent, and the rate of growth of output is 2 percent consisting of 1 percent increase in work-force and 1 percent increase in labour productivity along the growth path. The distribution of the capital stock between the capitalists and the workers is in the ratio of 50:50. The workers' savings ratio on their total income, consisting of wages and profits, is 5 percent, and the capitalists' savings ratio on their total income consisting of profits alone is 20 percent. The capital-output ratio is 4.

income distribution, then a steady state path, even if it perchance exists, will be unstable, in the sense that a deviation from it will lead to further and further deviation, and hence quite meaningless for analytical purposes.

⁴ I have discussed the logic of this case, which was originally visualized by two MIT economists Paul Samuelson and Franco Modigliani, in my article "On Wealth and Income Inequalities" in *People's Democracy* January 26, 2014, which is also reproduced in www.networkideas.org)

⁵L.L.Pasinetti, "Rate of Profit and Income Distribution in Relation to the Rate of Economic Growth", *Review of Economic Studies*, October 1962.

⁶Lance Taylor in a review of Piketty, I should note for the sake of completeness, visualizes a third, non-Pasinetti, equilibrium, where wealth-shares between the workers and the capitalists nonetheless remain stable over time. But he assumes not only an independently determined rate of accumulation (as I also do below) with no full employment, but an increase in wage share as capacity utilization increases in the economy. I do not make this assumption whose validity can be questioned, and hence confine myself to only the two equilibria mentioned in the text.

In this picture if the capital stock in any period is 400, then output is 100, of which the profits are 40 and wages 60. Since workers own half the capital stock, their total income is 80 (= 60 plus half of 40) and capitalists' total income is 20 (= half of 40). Workers' savings are 5 percent of 80, i.e. 4, while capitalists' savings are 20 percent of 20, i.e. 4. Since their savings are equal, their respective capital stocks which are in the ratio of 50:50, grow at the same rate and continue to remain in the ratio of 50:50. The economy's growth rate is 2 percent (= 8 percent / 4).

Now even though the capital stock between the workers and the capitalists is 50:50, there may be 90 workers and only 10 pure capitalists, in which case the ratio in per capital stock between workers and capitalists is 1:9; a worker's family owns one ninth the wealth of a capitalist family.

Piketty places much emphasis on the relative weights of inheritance and savings. But the fact of savings does not negate the importance of inheritance. Let us assume that all wealth is passed on to children, both by workers and by capitalists and they save the same ratios of their incomes year after year; then assuming that their populations grow at the same rate, the same wealth inequalities will continue into the future. Savings add to what is inherited, and what they add is in turn bequeathed to children. So placing them on different footings does not appear justified. In fact children, even before they formally inherit, will have some user rights over their parents' wealth, in which case we do not have to discuss *formal* inheritance at all. We could even imagine each family, whether of workers or of capitalists, living for ever, its size growing at 1 percent per annum, and its total income, no matter from what source, being divided between consumption and savings in the stated proportions.

Put differently, the suggestion that if savings are larger relative to inheritance, then wealth inequality gets reduced does not stand scrutiny. In the above example suppose there is a 25 percent increase in the savings ratio across the board, i.e. capitalists save 25 percent of their income instead of the 20 percent they were saving earlier, and workers save 6.25 percent of their income instead of the 5 percent they were saving earlier. Let us assume that the profit and wage shares do not change, either because we have fixed coefficients of production and these shares are determined by the respective bargaining strengths (of the workers and capitalists), which do not change; or because the "production function" itself is such that even with factor incomes determined by "marginal productivity", the relative shares of wages and profits do not change (such a production function is called a "Cobb-Douglas Production Function", after its original formulators Cobb and Douglas, and has been much used in neo-classical theoretical models).

Then at the new "steady state", with the same growth rate, the capital-output ratio would have gone up by 25 percent, the rate of profit would have fallen by 25 percent, but the wealth inequality between a worker's family and a capitalist's family would have remained exactly 1:9. Wealth inequality in other words would have remained completely unchanged even when savings ratios went up.

8

⁷In the case of fixed coefficients, this would happen entirely through reduced capacity utilization.

The Mobility of Capital

This brings me to the second basic problem with the Piketty logic, even within its own theoretical paradigm. It is based on the assumption that each country's capital is invested in that country itself, that American capital is invested in America, French capital is invested in France, British capital is invested in Britain, and so on. The conclusion that a country's growth rate is determined exclusively by the growth rate of that very country's population in "efficiency units" (or that the income growth rate of a group of countries is determined by the growth rate of that group's population in "efficiency units"), i.e. that labour shortages cannot be overcome through immigration of labour or emigration of capital, is patently unrealistic. Applying its conclusions to a real world where migration possibilities clearly exist*is logically flawed*.

Piketty may argue that historically such migration, at least between the first and the third world, has been meager: third world labour has not migrated freely to the first world, and first world capital has not migrated freely to the third. But then the question must be raised: why has this *not* happened? Theoretical analysis must then begin, like in the case of "the dog that did not bark", with this particular question.

In the era of globalization, capital is far more mobile internationally than it has ever been in its entire history. In fact, the colonial period was characterized by a segmentation of the world economy where capital from the north did not move freely to the south, despite being juridically free to do so, except to certain limited spheres like plantations and mines; and labour from the south was not *allowed* to move freely to the north. While labour is still not allowed to move freely from the south to the north, capital is more mobile from the north to the south, including to areas like manufacturing, than it has ever been in the past. But then the fact that the growth rate of population in the twenty-first century in the advanced capitalist countries will slow down ceases to be a matter of any great consequence *for the capital of these countries themselves*.

Capital of these countries can go on accumulating, unconstrained by any labour scarcity, despite the slowing down of their *domestic* population growth (in "efficiency units"), simply by migrating to the third world economies which are saddled with massive labour reserves. (These reserves themselves were created by the encroachment of advanced country manufactured goods into their markets, which displaced pre-capitalist producers through a process often referred to as "deindustrialization").

I am not saying that this would necessarily happen, but it is a possibility which needs to be considered in the context of the Piketty argument. The question then arises: is such a diffusion of capitalism likely to absorb the massive third world labour reserves? Piketty does not consider this question because for him there is always full employment everywhere. But the moment we move away from that fairy-tale, we have to recognize the fact that even in countries like India, the high growth rates of recent years have been accompanied by a non-diminution of labour reserves. (The former socialist countries were the only examples in history to my mind where growth *did* absorb labour reserves, to a point where labour scarcity became a serious problem. The fact that capitalism *in the metropolis* substantially used up its

labour reserves without of course fully eliminating them, which it never can, was to a large extent the result of massive emigration from Europe to the temperate regions of white settlement, like Canada, Australia, New Zealand, and the United States⁸).

Now, any substantial emigration of capital from the advanced capitalist countries to the third world would keep the rate of return on capital of these countries above their domestic growth rates, but for reasons very different from what Piketty suggests. These reasons would have to do with globalization of capital rather than any greater-than-unity elasticity of substitution between labour and capital along some "production function".

If this phenomenon of capital migration from the metropolis to the third world is considered together with the possibility that the latter's labour reserves still do not get exhausted, then the implications of such a *denouement* for wealth and income inequalities are quite profound.

٧

Globalization and Wealth Inequality

The possibility of migration of capital from the advanced to the underdeveloped countries, which breaks the segmentation that existed in the world economy in the colonial period, implies that the wage rates of workers in the advanced countries now get influenced by third world labour reserves. Even if they do not actually decline to compete with third world wages, they certainly do not increase. As long as third world labour reserves are not exhausted, we get a non-increasing vector of real wage rates around the world, even as labour productivity increases, which means that the share of wages in world output comes down while the share of surplus increases.

Since the savings ratio out of surplus incomes is higher than out of wage incomes, this redistribution produces a tendency towards "under-consumption", and hence a stagnationist effect on the world economy. But let us assume, for argument's sake, that there is no actual stagnation because with technological change there is a tendency towards "capital deepening", i.e. for the capital-output ratio to increase over time, as Lenin and Tugan-Baranovsky had visualized, which counteracts this stagnationist tendency.

We assume in other words that these two forces, acting in opposite directions, balance one another exactly. This need not of course happen in real life, but its non-happening, while it does not vitiate the argument presented below, only makes the emerging scenario more complex to visualize. We eschew such complexity and assume that the growth rate of the world economy remains unchanged at some level g which is determined by the pace of accumulation, and has nothing to do with the rate of growth of the work-force of the world in "efficiency units". Let us see what such a world would look like.

⁸For a discussion of this emigration see Utsa Patnaik 'Capitalism and the Production of Poverty' T G Narayanan Lecture *Social Scientist* Vol.40 Nos.1-2, Jan.-Feb. 2012

At this growth rate the world labour reserves will not necessarily diminish in relative terms. If the rate of growth of labour productivity p happens to be such that (g-p), which is the rate of growth of labour demand, is less than the rate of growth of labour supply, then the world labour reserves will never get exhausted; on the contrary they will grow in relative size. The experience of third world countries like India with high but "jobless" growth suggests that this is a very real possibility. And even a slowing down of the world population growth may not cause an exhaustion of world labour reserves.

This non-exhaustion of world labour reserves would of course mean not only that income inequalities would increase (since the share of surplus will increase over time at the expense of wages), but also that wealth inequalities will increase, which in turn will further exacerbate the growth in income inequalities.

The reason for the increase in wealth inequalities in such a situation is quite simple. Since workers' incomes grow more slowly than that of the capitalists (even though the workers also own some wealth), the workers' savings also grow more slowly than those of the capitalists. And since savings that are realized constitute additions to wealth, this means that capitalists' wealth grows faster than that of the workers. We thus get a picture different from the one drawn by Pasinetti, where the wealth shares of the workers and the capitalists remained constant over time; we get instead a picture of increasing wealth inequality. This increase in wealth inequality incidentally will be visible not just at the world level but within each country as well, since the rise in the share of surplus will be manifest everywhere.

When we add to the wealth inequality arising from *this source*, the inequality that additionally arises owing to the dispossession of peasants and traditional petty producers through what Marx had called the process of "primitive accumulation of capital" (which is very much underway in the world economy in the era of globalization), and also the inequality that arises owing to "centralization of capital", the prospective increase in wealth inequality in the years to come appears immense indeed.

Marx had analyzed centralization of capital in terms (apart from the "pooling" of capital through banks and stock-exchanges) of the fact that big capital drives out small capital owing to its superior capacity to introduce new technology. No matter what the empirical significance of this particular channel, two additional channels are of great importance. One is big capital's capacity to sniff out prospective investment projects with higher rates of return; and it can do so in the global arena since its capacity to "go global" is greater than that of small capital. The other is the fact that the *variability* of the rate of return on big capital is less than on small capital, which also means that it is less affected by crises in particular sectors and has larger "staying power".

From the foregoing discussion, I would draw two conclusions: first, that world wealth and income inequalities are all set to rise sharply in the coming years, exactly as Piketty hypothesizes. And second, the reason for this lies not in what Piketty believes, namely that the slowing down of world population growth will create tightness in world labour markets (and hence a slowing down of world output growth) but for precisely the opposite reason, namely that there will be no tightness in world labour markets, no diminution in world labour reserves, and hence no tendency for an increase in the vector of world real wages even as world labour productivity increases. The rising world wealth and income inequalities in short are intimately linked to the process of globalization we are witnessing.

Concluding Observations

Piketty's suggestion for wealth taxation, as a transitional demand, is unexceptionable. I say "transitional demand" because it cannot possibly be realized without a significant mobilization, not just of world public opinion, but of the forces of class resistance against growing wealth inequality, for which it is useful as a consciousness-raising demand; but precisely when such mobilization has occurred on a scale large enough to make a difference on the terrain of wealth taxation, this very mobilization would have shifted people's demand to a terrain beyond wealth taxation, to the abolition of the capitalist system altogether.

The tragedy of all such demands, like for a progressive wealth taxation, is that they make sense (as *non-transitional* demands) only if they can be easily accomplished, i.e. without any need for a massive mobilization; but they are not in fact easily accomplished, which is why when the massive mobilization does occur because of which they could be accomplished, this very mobilization pushes the demand beyond mere wealth taxation.

Michal Kalecki who had shown as early as in 1937 that capital taxation, which served to reduce inequality in society, was also the best way to finance government expenditure for raising employment in the economy, had ended his essay by saying: "It is difficult to believe however that capital taxation will ever be applied for this purpose on a large scale; for it may seem to undermine the principle of private property." He had gone on to quote a part of Joan Robinson's remarkably insightful comment: "Any government which had the power and the will to remedy the major defects of the capitalist system would have the will and power to abolish it altogether, while governments which have the power to retain the system lack the will to remedy its defects." While reading Piketty we should not forget this basic insight of Joan Robinson.

⁹M.Kalecki, "A Theory of Commodity, Income and Capital Taxation" in *Selectd Essays on the Dynamics of the Capitalist Economy 1933-1970*, Cambridge University Press, Cambridge, 1971.

¹⁰Joan Robinson's remark is contained in her review of R.F.Harrod's book *The Trade Cycle* which appeared in *The Economic Journal*, December 1936.