Why Quantitative Marxism?

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Paper for the CSE conference on Quantitative Marxism

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Abstract

This paper was presented at a special conference of the Conference of Socialist Economists (CSE, publishers of *Capital and Class*) in 1987, on the topic of Quantitative Marxism. This eventually gave rise to an edited collection (Dunne 1992) in which this paper was developed (Freeman 1992) into a fully-worked out empirical presentation of a set of national accounts in value terms for the UK economy.

The paper arose from the work of an international group established after the publication of *Marx, Ricardo, Sraffa* in 1984 to work on poverty in Europe. This led to work on the social wage which resulted in an unpublished chapter on the social wage in Germany, originally intended for Shaikh's book on this question.

A number of themes in later work appear in it: a pluralist concept of discussion on National Accounts, which later matured into the 'datapedia' concept of data organisation on the one hand, and the pluralist approach to economics that first surfaced in my collaborative work with Andrew Kliman as 'Beyond Talking the Talk' (Freeman and Kliman 2005). There is an early discussion of circuits of revenue which deals specifically with social reproduction, and a detailed treatment of unproductive labour including interest and merchant's capital.

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In 1984 a group from several countries - Britain. Italy, Germany, Belgium, France and Turkey - set out to reproduce, in Europe, the work on National Income measurement being conducted by Anwar Shaikh and his collaborators at the Hew School in New York. I hope it is useful to explain why we did it and the issues we had to address.[1]

Why?

Our group arose from work around the book *Marx, Ricardo, Sraffa* (Freeman and Mandel 1984). In this work we consciously decided to reply to the critics of value theory on their chosen terrain to lay to rest once for all the charge of inconsistency. The debate, however, was fast becoming surreal. Arguments jet-streamed around the upper stratosphere of mathematical theory while crisis stalked the earth. The terms of debate were basically wrong.

Marxist economics passes a scientific test which its critics all fail. It predicts reality. It is above all *empirically* valid. Yet as an empirical science it has developed least. Its qualitative predictions on crisis, profit rates, and unequal exchange are borne out every day – strikingly, with the present crash. But there are almost no *measures* of the quantities governing these predictions.

Worse still there is no agreement on how to measure them. Marxist authors, all in the same general framework, reach qualitatively different estimates of such basic quantities as the rate of exploitation and even its direction of change.

This is unacceptable. How can you have a science which can't even measure its central category? It is also unnecessary. Advances in the collection of statistics since Marx's time, and their widespread publication, bring authoritative techniques for measuring aggregate value quantities within reach.

The benefits would be considerable. We could test hotly-debated hypotheses against real economic data within an agreed framework. With monetarism in disrepute and Keynesianism in disarray - making our work very timely - Marxism could be re-established as *the* alternative account of the world economy. Not least, it can be made meaningful for a new generation by explaining events in terms that everyone can understand.

To take an example: under the Wilson-Callaghan government it was widely accepted that wage struggles caused the 1972-75 surge in inflation and moreover, that workers lost in price rises what they gained in ages. It was also argued that through the Social Contract, though workers might sacrifice wage rises, they would get it back in the 'social wage'.

Marxist economics cannot confirm or deny this from first principles. The point is to *find out*. The study we present to this conference suggests strongly that throughout this period the working class did hang onto the gains it made in strike struggles, and lost them only when the Social Contract began to bite. This is not a small matter!

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[1] Work on this project was supported by the Hamburg Institute for Social Research

Now this has been said before, and other attempts, many of them better, have been made to prove it. But to make such efforts authoritative, to challenge received opinion and research, there has to be more than individual and isolated responses, however outstanding. It is necessary to establish an *authoritative alternative empirical framework and fight for it in the public domain*. This is a collective responsibility - and collective work demands a collective framework.

What?

We set out to measure the classical aggregate value quantities and ratios defined in Volume II of Capital and developed in Volume III to explain the reproduction of social capital, the distribution of the annual product between classes, the relation between exploitation and profit, accumulation and crises. These are:

- Total annually produced variable capital,
- Total annually produced new value.
- Total annually produced surplus value•
- Invested fixed capital,

and hence

- The rate of exploitation
- The rate of profit.

In the process it turns out to be necessary to estimate

- The share of state output accruing to the major classes,
- The unproductive expenses of the capitalist class

Further to this,

- The division of profit into rent. Interest, merchant's profit and profit of enterprise.
- The division of new value between the major departments of the economy (Means of production and means of consumption).

Also necessary, but much more difficult, is

- estimating value transfers between nations resulting from unequal exchange, and the interaction between capitalist production proper and the petty commodity and non-commodity sectors.

We realise that the concept of unproductive labour is controversial and will return later to this point, because while we ourselves have become convinced that it is essential to the transformation of National Accounts, a modus vivendi at least may be possible with those who do not accept this view, which will permit fruitful common work.

Why these quantities? Not least, because by calculating aggregates, the distorting effect of individual deviations can be evened out so that the results are more reliable. But there is a more basic scientific reason. These quantities most directly reflect social reproduction as a whole. And we believe that social reproduction is the key to understanding the movement of a capitalist economy.

Marx thought so. He says it very forcefully in an aside against Adam Smith, who speaks dismissively of the Physiocrats and their Tableau Économique, precursor of Marx's own reproduction schemas.

> *In fact it (the Tableau) was an attempt to portray the whole production process of capital as a process of reproduction... all this depicted in a Tableau which in fact consists of no more than five lines which link together six points of departure or return … this was an extremely brilliant conception, incontestably the most brilliant for which political economy had up to then been responsible.*[2]

Why did Marx take this view? The point is developed at length by Rosdolsky in *The Making of Marx's Capital*.[3]

The commodity, we are told in Chapter I of Volume I of *Capital*, is the unity of use value and exchange value. This dual character of the commodity is the foundation of Marx analysis of capitalism. Where, then, do use-values enter the analysis? Use value is often presented simply as a pre-condition for exchange. Before you can sell it, someone must need it. After that, nothing. This is a limitation of the tradition which introduces Volumes II and III of Capital as an appendix to Volume 1.

Social reproduction is precisely the circulation and reproduction of both exchange values and use values. In it the unity of the two aspects of the commodity, sundered by capitalist commodity exchange, is forcefully reasserted. Because this is a unity of contradictory opposites, however, it is not guaranteed in advance. Crisis - the dissolution of this unity into its opposites - is an intrinsic feature of social reproduction.

For exchange values to circulate, it is not enough that the total value sold equal the total value purchased. Workers cannot eat factories, or build houses with bread. Consumption of each specific use-value, or general type of use-value, has to match its production. If there is shortage, reproduction is interrupted. If there is not enough food people starve, if there is not enough steel houses and cars cannot be built, and so on. If there is too much then a portion remains unsold and exchange values do not fully circulate.[4]

Private decisions on production and investment, taken in the absence of a plan and in ignorance of the eventual total demand and supply, do not ensure that inputs and outputs of use-values balance. The confrontation between supply and demand is reserved for the marketplace - the sphere of circulation.

Moreover, it is circulation as a whole, in aggregate, which eventually settles what will happen. The price of oil, whether there is glut or shortage, whether prices rise or fall, is not in the last analysis determined by what the garage down the road, or Shell, or BP, or even Iran, decides to do: it is the result of all the economic and social processes bearing on the price of, demand for, and supply of oil, all summed up and expressed in the global market for oil.

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[2] Marx (1969)

[3] Rosdolsky (1976),

[4] 'Too much' means ' too much to be satisfied by monetarily effective demand', of course, and not ' too much ' in any absolute sense as the marginalists would have it. The fact that famine can coexist with Food Mountains is yet another illustration of the fact that use-value and exchange value are inextricably combined in the commodity.

All systems which single out a particular aspect of social reproduction - whether it be use-values alone, as in neo-Sraffian simultaneous equation systems, or exchange values alone, as in some of the more economistic presentations of the tendency of the rate of profit to fall, or 'aggregate demand' (demand for what, it is not clear) in Keynesian models - make a great error, because social reproduction is precisely the contradictory unity of the circulation of exchange values and of use values, and you cannot rip either of these out of its context and make it the sole motor of economic dynamics.

Equally, you cannot start from individual acts or sectors of exchange, whether the wage-relation in the factory, or the local economy of a region, or even the analysis of money, in order to study the motion of capitalism as a whole. Each of these is governed by the process of reproduction as a whole, is subordinate to it and conditioned by it. They can and should be studied, but the starting point is global social reproduction.

This is not just a theoretical precise but a statement about reality. Therefore, to study this reality in all its complexity, the starting point of empirical research has to be aggregate social reproduction. We have to move to the production of *National Accounts* which, essentially, systematically account for the production, distribution and consumption of all annual new value. Use-value enters this system precisely at the point where we ask, not just how much is produced, but 'where is it produced' and 'where is it consumed'.

Of course, the more detailed the breakdown and disaggregation of the accounts, the more refined the treatment of use-values. To date, however, it is noteworthy that no complete accounting for values exists even for the most basic departments of the economy (general categories of use-value) cited by Marx, namely Department I, subdivided into the production of circulating and fixed capital, and Department II, subdivided into the production of wage-goods and luxury goods. It must be a top priority for all Marxists to rectify this.

Side by side with any sectoral breakdown of production, of course, comes the breakdown of the *components of demand*: i.e. replenishment of circulating constant, replenishment of fixed capital, accumulation, unproductive consumption - above all the state, and the private consumption of wage-earners and capitalists.

The basic analytical distinction made by Marx in this respect is the distinction between *capital* and *revenue*, which generate demand according to quite distinct laws: generally speaking capital generates demand determined by its thirst for the maximum individual rate of profit, whilst revenue generates demand according to more variable social and political laws which depend on historical circumstance and the origin of the revenue.

Value National Accounts therefore have to identify and quantify, not just the circuits of capital, which are relatively well-known, but circuits of revenue. For this, we think it becomes rather important to identify circuits of revenue which command unproductive labour - particularly the state - because the laws governing the state's demand for commodities are rather different from those governing private demand for commodities. This is particularly important in trying to assess the effects of the worldwide drive towards privatisation.

In summary, we aim for the production of a comprehensive scheme of Value National Accounts showing the origin, circulation and destination of annually produced new value, disaggregating production at least into the Major categories of use-value identified by Marx (Capital goods, possibly distinguishing circulating from fixed constant capital; consumer goods, possibly distinguishing wage-goods from luxuries); and disaggregating the consumption firstly into exchanges against capital and exchanges against revenue, and then into various circuits of revenue.

What transformation should, then, be applied to the raw data of National Income Accounts and other published statistics?

How?

Five major issues have to be confronted:

> 1) the problem of productive and unproductive expenses and labour: the state, banking, commerce and rent.
>
> 2) the measurement of capital stocks
>
> 3) the place of petty commodity production in reproduction
>
> 4) value transfers between nations
>
> 5) skilled labour

Our construction of value national accounts takes place in three stages:

1) Allow for the role of the state: calculate the share of state benefits and revenues attributable to each of the major classes so produce a revised estimate of the value appropriated by these classes after circulation is complete;
2) Separate out productive and unproductive expenses and adjust the raw quantities of values accruing to property and values accruing to wage earners derived in (1). This produces Marx's classical V and S.
3) Calculate capital stocks and the rate of profit.

Our group has thus only confronted some of the issues needing solution. At some point corrections will be needed for international transfers of value, which are mainly concealed by unequal exchange; for skill differences between nations; and,

Why these transformations?

The raw data of national statistics already embodies the assumptions and preconceptions of its collectors. For example, by assessing ' households ' as a single group, statistical offices obliterate the origins of their incomes in different types of property. The published statistics simply don't distinguish between people who live by working and people who live off other people's labour.[5] Indeed wage statistics themselves don't separate out those whose wages are really a disguised

[5] More precisely, between private revenue originating in variable capital and private revenue originating in surplus value. Of course, because some workers also own a few shares and some shareholders do a bit of (productive) work. The distinction does not precisely divide the population into capitalist and workers any more than do welfare economics' distinctions between social classes based on standard of living. What it does, is explain the dynamics of a real economy much better.

appropriation from profits - so that a company director is treated as playing the same role in reproduction as a street sweeper.

A second level of problem arises because prices deviate systematically from values - not principally because of the tendency of the rate of profit to equalise which, Shaikh (1984) suggests, distorts average aggregate prices less than commonly held - but because aggregate prices incorporate large components which are not the result of commodity exchange at all, such as taxes and interest.

Interest is a classic case. When you pay interest you get nothing in return. There is no exchange of equivalents. It is a one-way transfer of value. Yet capitalist firms constantly strive to have their interest payments treated as a cost of production - i.e. as a component of the value of their output. The statisticians incorporate interest payments in different ways at different times, in different countries and even in different tables.[6]

A third type of problem arises not because of ideological fetishes so much as the general social conditions of capitalism. Thus, capital stock is notoriously hard to estimate, and everyone admits it. Capitalists not only lie, but lie differently to banks and to tax collectors. The loss in value of a productive asset resulting from technical obsolescence is in any case hard to assess.

Nevertheless information can be extracted which is not openly presented. Buried in the personal sector accounts lies the property income of households. Buried in the income of central government we find figures such as the proportions of income tax paid on earned and on unearned income.

There are also limits to falsification. The statistics, and our research, bow down to the same reality. Marx comments that, in disputes between statisticians and theoreticians, the statisticians are right 99% of the time. Statistics are not especially morally uplifting, but at the end of the day the books have to balance. A fact of life which a practiced academic dissembler can banish from debate with the wave of the hand has a habit of reappearing in some clerk's account books, especially towards the end of the tax year or the business cycle. The capitalists either go along with Metternich and Sir Robert Armstrong and treat reading as an inherently subversive activity, or they have to let the public get at a portion of the truth in the blue books.

Therefore, on the one hand the data must be transformed. It cannot be used as published. But on the other, it *can* be transformed, and the time is ripe for it. That is why we are convinced of the importance of this field of study.

Also, because we transform data, and moreover transform it according to a definite procedure grounded in value theory, this ' empirical ' work is not 'empiricist'. If we simply accepted the data without transforming it using theoretical categories, a charge of empiricism would be valid. But it is absurd, in the name of avoiding empiricist errors, to shy away from measuring and testing

[6] Thus the British blue book treats interest as a cost of production in its value added accounts, but not in any other. Since GOP has to be the same whether calculated by value-added or final demand or factor incomes, there is therefore a totally arbitrary quantity in the value-added accounts called 'adjustment for financial services' which neatly subtracts out all the interest costs to balance the books. This issue is dealt with at greater length in the paper on British National Income submitted to this conference.

hypotheses, which can and must be the basis of every field of knowledge with pretensions to be a science.

We therefore take issue with schools of thought which says that attempts to measure are misguided because the categories of Marxist theory are in principle unknowable. We have to distinguish between problems which are in principle unsolvable, and problems which are technically complex. There will certainly be quantities which cannot be directly calculated and have to be estimated, perhaps inaccurately. There will even be some quantities which can neither be calculated nor estimated, but which *could* and *should* be measured, so that an argument will be needed and a fight will be had, to have the necessary data collected and published. Maybe they won't be properly estimated for years to come. The point is, however, that unlike 'utility' or 'Marginal satisfaction', value quantities are by definition and by nature measurable, so that if we take our science seriously we cannot indefinitely postpone the attempt to do so.

We do not feel there is any call to shrink from open debate about the merits of the published statistics. One of the ironies of the present situation is the unacknowledged debt which National Income Statistics owe to Marxism. Input-output statistics are a lineal descendant of Marx's reproduction schemas. The present National Income Statistics and even the idea of collecting then do not arise out of the marginal school.

Moreover neoclassical economics pays a penalty for its sins. It cannot forecast crises and many other economic phenomena. People who make investment decisions are on balance more interested in accuracy than ideological correctness, because it has a more direct effect on their individual profits. For this reason there is always a strong interest, particularly in financial circles. In any discipline or method which proves itself by results. The more accurately Marxism can explain phenomena which others cannot, the stronger will be its claims for changes in the accounting system.

Marxist attention to the rate of profit has provoked strong interest and even original research - including some good pamphlets published by the Bank of England on the rate of profit.[7] Of course. We cannot expect miraculous conversions of people whose entire social interests stand opposed to Marxism. But we can end should engage in debate about accounting techniques and principles in which we can expect to win grudging recognition from anyone with a modicum of scientific integrity.

However…

Of all aspects of the calculation, the most controversial is unproductive labour. Because this is a subject of past and present disputes, a few words are in order.

Value theory discussions in Britain have been marked by a level of acrimony which not appropriate for scientific debate. In the absence of practical tests, vehemence tends to substitute for proof. The natural law which determines that small nations have long anthems also operates.

There is no call for a dozen competing schisms when it comes to empirical work. Let us suppose, for example, that there are two views on the state. Fine: we produce two sets of figures. The differences can then be seen very concretely, and furthermore we can each draw on each other's

[7] See. for example, Bank of England (1978)

results. At the end of the day one can move from one set of figures to the other by means of a definite and simple set of additions and subtractions.

Translating theoretical differences into different sets of figures will not wish them away. It will make them a lot more meaningful. I suspect, also, that many of the differences may turn out to be more semantic than real.

This said, there is a very powerful substantive argument in favour of systematically accounting for unproductive expenses in general which immediately confronted us in empirical work.

The issue might have been a lot clearer had a different term been in common use; for example non-private-profit-creating labour, which precisely defines what is at issue.

It hits you in the face as soon as you start work on national accounts, because you find that at least two areas which Marx treats as unproductive are treated quite differently from ordinary production by the *capitalist national accountants themselves*. These are the state and banking.

The state is special in the accounts because it is non-profit-making. By this, we don't mean that it is inefficient. It occupies a quite different place in the accounts. Its expenditure is treated as a form of final demand, and it is not treated as adding any value or selling any product.

The immediate reason is not hard to see: it does not *trade*. It sells no commodity. The rules which regulate whether or not you receive the state's attentions are not the same as the rules which decide whether you receive a commodity. State service is governed by *public law*, not by what you pay. Indeed one of the surest ways to get the state's attention is to fail to pay it.

Now, one may attempt, if one wants, to account for the labour of the state in the same way as private labour. Impute a profit to state labour, and hence a value added; treat taxes as a purchase and net out all transactions between the state and private capital exactly as one would if it were a private company, and in general treat the state as a special form of private capitalist.

This would have some strange effects. First, it means one would have to have a big argument with the National Income Accountants to say that they were quite wrong to treat unproductive labour in the same way as Marx, and in the name of Marxism we urge them to stop.

Second, its imputed profit would be fictitious and would not correspond to anything in its accounts (unlike private capitalists).

Third, the state would vanish from the accounts as a distinct entity. If the state is no different from all other private capitals it must logically take its place beside them, in the 'commercial, industrial and financial' appropriation accounts. Taxes paid by households would be a component of expenditure on final demand. The state's expenditure would cease to be figure in final demand because it would be like any other trading company, selling to the public. All taxes paid by industry and all benefits received become a transaction internal to the business sector and would be netted out of the accounts.

Fourth, but not least, we would be completely at a loss to explain privatisation. If the state is *simply* a private capitalist for accounting purposes, then privatisation will not express itself in our system of accounts at all. Since these accounts, in our view, should be drawn up to express the real process of circulation, we have to conclude either that this way of presenting the accounts is wrong and the state is something distinct, or that privatisation is a meaningless exercise.

This conflicts with common sense. By all reasonable standards of judgement the state is a different type of entity from a private capitalist and one should expect this difference to show in the presentation of the accounts.

More important, it undermines our ability to *model* capitalism. The whole point about state expenditure and receipts is that they are determined on the terrain of *political* struggle, and not by the interplay of market forces. Otherwise what is the point of the battery of laws with which the Tory government is equipping itself to restrain local government spending? If a sector of the economy obeys different laws to the rest it has to have a distinct place in the accounts or these accounts will not be able to model the real world.

It may be that this point is conceded. But the matter does not stop there. Capitalism in its 'pure form' exists nowhere. In no nation, even the most industrialised, is all human labour producing commodities in the employ of private capital. The complete accounting for human labour in any society has to include, alongside labour which directly creates surplus value in the employ of a private capitalist, at least the following:

- Unpaid labour which creates use-values and indeed exchange-values, such as domestic labour or slavery;
- Paid labour which is directly exchanged against revenue to produce use values. and not hired by a capitalist to produce commodities e.g. state labour; labour in non-profit making bodies such as clubs and unions; paid domestic servants, au pairs, childminders and the like;
- Paid labour which exchanges against capital, but is engaged in pure circulation and neither produces nor works up a commodity e.g. the labour of bank workers, which yield their employers a profit but in the form of interest charges, a sort of financial tax;
- Paid labour which circulates already produced commodities, in the strict sense of 'changes of titles to goods', but add nothing to their value. In fact it is this sector which generates the most controversy, because circulation is always bound up with aspects of production such as warehousing and transport, etc. and because this sector both buys and sells commodities, unlike the others. It is also the most practically difficult to estimate.
- Slightly distinct from unproductive labour, but nevertheless strictly speaking demanding separate treatment, petty commodity producers such as peasants and handicrafts people;

Commodity exchange has existed from the dawn of antiquity but it has never existed in isolation from other forms of organisation of labour. Therefore, commodity producers always find themselves exchanging goods, and labour services, with the rest of society. In slave-owning societies, large scale production uses slaves to produce commodities which are sold on the market, as well as for private need. Also, slaves themselves are commodities. The surplus feudal or peasant produce is invariably exchanged with artifacts from the towns, in growing quantities with the onset of capitalist production proper.

Domestic labour exists in a constant dynamic relation with, and alongside of paid labour and is in fact brought into direct comparison with it every time a potential worker takes a decision 8S to whether to produce something for private use directly, or buy it, or buy a gadget to produce it - a not unimportant fact when analysing why labour time remains the foundation of value.

Moreover this is not a ' historical survival ' which can be discounted because it will fade away as capitalism becomes the dominant mode of production. On the contrary, in centrally planned societies state production coexists with commodity production both internally and externally, and there is ceaseless exchange between the two. The issue 'what is privatisation' pales into insignificance beside the question 'what is the concrete role of the market reforms in the centrally planned economies?' It does not augur very well for Marxism if its answer to this question is 'nothing of substance’.

We can, of course, choose to reduce all forms of labour to a single, homogeneous quantity and produce, simply, labour accounts for every society. These would be no different in form for any society from ancient Egypt to modern Russia. They would simply show, on one side, the total new labour, and on the other, its destination.

However, such accounts would completely fail to distinguish the *distinctly capitalist* sectors of the economy because it would treat them as no different from the others.

We would have a very good picture of how society's resources were being used (not, of course, unimportant). But we would not have a picture of how that society moved. And we would not have a starting point for modelling its dynamics. Because all the decisive social processes which have led from ancient Egypt to modern Russia would have been eliminated! Abolition of slavery, introduction of alienable private property in land, creation of the modern proletariat and modern capital - all gone, the only differences remaining being the level of technological development, the pure 'means of production'. We would, in fact, be left with a technical determinist model. The 'social relations of production' would cease to inform our analysis.

We make this *reductio ad absurdam* not to ridicule doubters but to explain what we think is at stake in the productive labour debate in relation to value national accounts. This is why the term 'unproductive labour' is perhaps unfortunate, because of all the connotations of moral inadequacy, inferiority, and the like, which go with it and which have obscured the debate. Unproductive labour is not a synonym for parasitic labour. It is a strictly scientific concept which is used in Marxist analysis to distinguish between those sectors of the economy which are organised as capitalist commodity production and those which are not. It means this, and only this.

In our accounts, we need to dray this distinction, because the laws of motion of production organised to produce profit are quite distinct from the laws of motion of production organised in other ways; and because there is a constant interaction *between* capitalist commodity production and all other economic activities which is part and parcel of the dynamics of a capitalist society.

Having reached this point we are sure that many who are hesitant about the concept of unproductive labour wiIl be saying to themselves 'this is a wasted polemic: these points are not at issue; of course the state should be treated distinctly.’ In this case, we say, fine: this is a useful clarification. If we accept that the state has to be treated differently, precisely and to the extent that it is not a trading body, seventy-five percent of the different is removed. Then we move from a qualitative discussion into a quantitative one.

But having once accepted that there is a sector of society which produces use-values but does not produce surplus value, we must then enquire if there are others. Here, one is obliged to ask the question 'what is really meant, what is the decisive thing about the state which forces us to treat it differently.' If we reach agreement on this then a further twenty percent of the difference also vanishes.

Our answer is Marx's. At the first level of enquiry, we find that it does not produce commodities. And on deeper enquiry we find that it therefore cannot realise surplus value, because surplus value is realised only in commodity exchange. Of course it can *transfer* value. Taxes transfer value to the state, and state services transfer value to the recipient. Theoretically the state could even appropriate surplus value, by taxing everyone very heavily and accumulating a hoard. Indeed this probably describes the relation of the feudal absolutist state to the merchants and the artisans. But you cannot say that appropriating surplus value is the same as realising it. The whole point we have just tried to establish is that *not every transfer of value is a commodity exchange*.

The state is the most obvious because it neither creates nor appropriates surplus value (or if it does appropriate it, does so by direct levies and not through trade. Does it end here?

The simplest way to approach this is to examine the concrete sectors which we treat as unproductive (non-private-profit-creating) in our national accounts.

The consumption of this labour takes place in a number of distinct spheres which tend to be lumped together under the general category of unproductive labour. This is perhaps misleading, because there is no unproductive labour ' sector ' and certainly no unproductive ' type' of labour. What we find are' a number of quite distinct sectors each with a quite distinct relation to capital and each of which has to be dealt with separately. Of these the most important in modern capitalist society are:

- the state;
- banking:
- merchant, i.e. commercial capital;

A smaller sector termed 'non-profit making private bodies' in the British national accounts and deals with things like clubs, charities, trade unions and the like. In addition, various forms of domestic service.

Since these issues are dealt with at greater length in other papers to this conference we shall leave it here.

References

Bank of England (1978). 'Factors relating to the rate of profit in 27 British Industries'. Bank of England Working Paper

Dunne, P. (ed.) (1992). *Quantitative Marxism.* Cambridge: Polity.

Freeman, A. 1992. 'National Accounts in Value Terms: The social wage and profit rate in Britain, 1950-1986' in Dunne, P.(ed) (1992). *Quantitative Marxism.* Cambridge: Polity.

Freeman, Alan and Kliman, Andrew (2005): *Beyond talking the talk: towards a critical pluralist practice.* Published in: Post-Autistic Economics Review No. 40 (1. December 2006): pp. 26-53.

Marx, K. (1969). *Theories of Surplus Value*. Vol. I, Chap. VI, p344, London: Lawrence and Wishart.

ONS: *The Blue Book* (1986).

Rosdolsky, R. (1976). *The making of Marx's Capital*, Chapter 3 'Karl Marx and the Problem of Use-value in Political Economy'. London: Pluto Press.

Shaikh (1984).), 'The Transformation from Marx to Sraffa' in Mandel, E. and A. Freeman (eds) (1984) *Ricardo, Marx Sraffa.* London: Verso.