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ABSTRACT

J S Mill's enigmatic "Fourth Proposition on Capital" has been brought to our notice by Steven Kates (2015). Kates takes a positive view of the proposition. Our focus is not, however, on Kates, but on the aforesaid proposition. The purpose of this paper is to demonstrate, via close examination of Mill's explanatory examples, just how unsatisfactory are its foundations. We conclude that the doubters are justified: Mill's Fourth Proposition is, demonstrably, a muddle.

Key words: J S Mill's "Fourth Proposition on Capital"; derived demand; Say's Law JEL classification: B12

Introduction

J S Mill's controversial "Fourth Fundamental Proposition on Capital" has recently (2015) been brought to our attention by Steven Kates. The proposition is to the effect that "demand for commodities is not demand for labour". While Mill's pronouncement has for generations been regarded by scholars as a paradox - a puzzle which has bamboozled those seeking an explanation - Kates is perfectly comfortable with it. Contrary to common opinion, he believes the proposition to be not only intelligible, but as well, sound and important.

We do not accept Kates's reading of Mill's proposition. Nevertheless, it is not our intention in this paper to engage directly with Kates as regards his position on this issue.¹ We therefore pass on quickly from the matter of Kates's particular view; it is the validity of Mill's proposition itself, not Kates's interpretation of it, that directly concerns us here. What we plan to do is go back – beyond Kates - to the original text and examine closely the case put forward by Mill in advancing his fourth proposition; our purpose is to determine whether, in the light of that examination, the proposition actually stands up. If in this way we let Mill speak for himself, we shall find that his case for the proposition is unpersuasive. What we wish to show is that Mill, in arguing that "demand for commodities is not demand for labour" fails to demonstrate a coherent understanding of how the macroeconomic system works.

* I am grateful to Steve Meardon and Eric Rahim for valued comment.

¹ Suffice it to say here that Kates, in defending Mill's fourth proposition (Kates, 1998, pp.71-73; 2003, 2015), instead of, as is necessary, engaging in close investigation of the validity of Mill's argument, prefers to re-assert Mill's conclusion, contending that, when viewed (without Keynesian blinkers) from a "proper", classical angle, it is self-evidently true; i.e. understanding the proposition is only a matter of ones's *perspective*. Kates (2003, p.75), referring to the proposition that "demand is constituted by supply", comments, "So inbred have Keynesian ways of thinking become that this conception may simply be beyond the comprehension of a modern economist."

We now turn directly to Mill.

Mill on capital

In the opening chapters of his *Principles*, in dealing with the "requirements of production", Mill explains the nature and role of "capital" in the economy. Capital, he points out, is not synonymous with money: money is no more synonymous with capital than it is with wealth. Capital consists of the real resources which support labour in production.

What capital does for production, is to afford the shelter, protection, tools and materials which the work requires, and to feed and otherwise maintain the labourers during the process. These are the services which present labour requires from past, and from the produce of past, labour. Whatever things are destined for this use – destined to supply productive labour with these various prerequisites – are Capital. (Mill, I, iv, 1)

With capital thus defined, Mill proceeds to enunciate four "fundamental propositions respecting capital". These are: firstly, that industry is limited by capital; second, that capital is the result of saving; third, that capital "although saved, and the result of saving, is nevertheless consumed" (in other words, what is saved does not disappear into a black hole, but is used to "put labour into motion"); and finally, the fourth, especially contentious proposition, famously affirms that "demand for commodities is not demand for labour".

The fourth "fundamental proposition"

Before stating his fourth proposition on capital, Mill warns that it has often been found counter-intuitive and paradoxical:

We now pass to a fourth fundamental theorem respecting Capital, which is, perhaps oftener overlooked or misconceived than even any of the foregoing. What supports and employs productive labour, is the capital expended in setting it to work, and not the demand of purchasers for the produce of the labour when completed. Demand for commodities is not demand for labour. The demand for commodities determines in what particular branch of production the labour and capital shall be employed; it determines the *direction* of the labour; but not the more or less of the labour itself, or of the maintenance or payment of the labour. These depend on the amount of capital, or other funds directly devoted to the sustenance and remuneration of labour. (Mill, 1866, I, v, 9)

The warning to the reader, and the proposition, are re-iterated, more fully:

This theorem, that to purchase produce is not to employ labour; that the demand for labour is constituted by the wages that precede the production, and not by the demand which may exist for the commodities resulting from the production; is a proposition which greatly needs all the illustration it can receive. It is, to common apprehension, a paradox; and even among political economists of reputation, I can hardly point to any, except Mr Ricardo and M Say, who have kept it constantly and steadily in view. Almost all others occasionally express themselves as if a person who buys commodities, the produce of labour, was an employer of labour, and created a demand for it as really, and in the same sense, as if he bought the labour itself, directly, by the payment of wages. ... I apprehend, that if by the demand for labour be meant the demand by which wages are

raised, or the number of labourers in employment increased, demand for commodities does not constitute demand for labour. I conceive that a person who buys commodities and consumes them himself, does no good to the labouring classes; and that it is only by what he abstains from consuming, and expends in direct payments to labourers in exchange for labour, that he benefits the labouring classes or adds anything to the mount of their employment. (Mill, 1866, I, v, 9)

A close examination of the arguments advanced by Mill in support of this Fourth Proposition is in order. His exposition and attempted justification of the proposition is presented at some length (Mill, 1866, I, iv, 9).^{2,3} A number of illustrative cases are proposed by Mill in an effort to give this contentious proposition "all the illustration" it needs. Let us work through these.

Mill on the implications of the fourth proposition

Mill begins by describing situations which he believes illustrate what the proposition implies.

The proposition that *demand for commodities is not demand for labour* implies that employment must be determined in some other way: Mill holds that it is determined by the amount, not of indirect or *derived* demand stemming from demand for the product of labour, but of *direct* demand for labour constituted by the resources (i.e. capital) an entrepreneur invests to "put labour into motion". Mill presents two scenarios which are intended to show what he understands the proposition to imply. The question is – is he depicting realistic situations which we may expect to observe?

Case (1) is described thus:

Suppose, for instance, that there is a demand for velvet; a fund ready to be laid out in buying velvet, but no capital to establish the manufacture. It is of no consequence how great demand may be; unless capital is attracted into the occupation, there will be no velvet made, and consequently none bought; unless, indeed, the desire of the intending purchaser for it is so strong, that he employs part of the price he would have paid for it, in making advances to work-people, that they may employ themselves in making velvet; that is, unless he converts part of his income into capital, and invests that capital in the manufacture. (Mill, 1866, I, v, 9)

Here we indeed have a situation in which demand for a commodity is not accompanied by a corresponding employment of labour – possibly so, but we would expect that state of affairs to be of no more than temporary duration – not a problem. What reason could there be (if resources, including labour, are potentially available and can freely be moved from one application to another) why the existence of an unsatisfied demand for a particular commodity should not - *as a matter of course* - induce entrepreneurs, on recognising an opportunity for profitable investment, to employ labour in producing that commodity? But

² J A Schumpeter (1954, pp.633-4) observes that Mill's exposition of his fourth principle is "enshrined in a confused and embarrassed discussion that has puzzled followers not less than opponents".

³ The fact that Mill (as reported by Sam Hollander, 1985, p.372) "had difficulty [at this specific point] in expressing his precise intentions" may be not unconnected with the difficulties readers have experienced with this part of Mill's text. (Mill explained in a letter of 1849 that he had been revising this section of his book and had "added two or three pages of new explanation & illustration which I think make the case much clearer".)

Mill seems to hold that the link from demand for final commodities to employment of labour is not so straightforward. Of course, he is correct that if velvet is to be produced, capital must be attracted to velvet production, but (rather oddly) states that, under the circumstances supposed, with "no capital to establish the manufacture", unless the intending purchaser of velvet *himself* saves and converts part of his income into capital, investing that capital in velvet manufacture, there will be no production of velvet. Why, we may ask, does Mill not simply take it that excess demand for velvet will quite naturally bring about increased supply, as, with entrepreneurs drawing on investible funds, resources are transferred from somewhere else in the economy (or created as required) to the manufacture of velvet? Why should the consumer himself have to undertake production?

It rather looks as if Mill believes that, for (in this instance) velvet production to be possible, there must exist *a pre-existing* stock of resources - i.e. of the means of supporting labour in employment - *already at hand for an entrepreneur to use*, before consumer demand can induce the production of velvet. If that condition is satisfied, when a demand for velvet emerges, resources awaiting use – resources which could have been applied in any line of production - are put to the manufacture of velvet. It is the availability of these resources – the argument goes - which makes possible the employment of labour in production: without their being present and ready for use, demand for commodities might exist, but employment could not be created.

We suggest that Mill's position reflects a duality in his understanding of what we now call "derived demand" for labour. As regards the total volume of employment within the economy he understands that to be determined by the availability of capital to support labour in employment.

While, on the one hand, industry is limited by capital, so, on the other, every increase of capital gives, or is capable of giving, additional employment to industry; and this without assignable limit. . . . What I do intend to assert is, that the portion which is destined to their [workers] maintenance, may (supposing no alteration in anything else be indefinitely increased, without creating an impossibility of finding them employment: in other words, that if there are human beings capable of work, and food to feed them, they may always be employed in producing something. ⁴ (Mill, 1866, I, v, 3)

If capital exists, it will be put to use; behind Mill's confidence about that lies his faith in Say's Law – his certainty that, except in the abnormal conditions of a financial crash, the value of intended expenditures on output will match the value of output offered for sale. If that is the case, employment is limited not by the vagaries of intended demand, but by the capability of the economy to supply the necessary resources to maintain labour. Thus, total employment does not correspond to an independently determined volume of planned expenditure; planned expenditure adapts itself to productive capacity. On the other hand, Mill takes the manner in which that labour is deployed across the industries of the system to reflect the pattern of final demand. The *distribution of employment* – unlike the total volume of employment – is set by derived demand. Such a conception would accord with the

⁴ Which of course may be true: but a profit-seeking capitalist system may well fail to deliver what is possible.

proposition that "demand for commodities determines the *direction* of the labour, not the more or less of the labour itself . . . [That depends] on the amount of capital, or other funds directly devoted to the sustenance and remuneration of labour."

If that is how Mill envisaged the situation, he would appear to be confusing "capital" in the sense of loanable funds with "capital" as physical means of production (wage-goods and equipment). While loanable funds may be accumulated by savers without their having in mind any particular use for their funds, real capital goods will not be acquired and stocked-up by entrepreneurs against a vague possibility that they may find some as yet unspecified application in production. In undertaking investment the entrepreneur will need to know (or at least expect) a prospect much more specific than that. When an entrepreneur in invests in resources with which to "put labour into motion" that he will invest only in those resources which he believes are appropriate to a particular line of production. With resources of different sorts being required for different productive purposes, the notion of investment in real resources without fore-knowledge of the nature of the final demand is implausible: in the case of wage-goods, the perishability of stocks would deter advance provision for uncertain use; nor would there be any profit in supporting workers in employment with no work and no idea of what market there might be for what (if ever employed) they might produce. Since, in reality, entrepreneurs do not hold stocks of ready-to-use real producer goods - nor maintain idle squads of available workers - waiting to be put to use in whatever quantities and directions consumer demand (when it eventually reveals itself) may dictate - the proposition that "demand for commodities is not demand for labour" must be considered highly suspect: we suggest that production and employment are much more closely linked to final demand for commodities than Mill seemed to appreciate.⁵

We agree that, if velvet is to be produced and labour employed in its production, capital (the means of putting labour into motion) must be provided - but not necessarily by the intending buyer of velvet directly employing labour in that manufacture. Would-be buyers need not simply hope that suitable resources happen to be available for use: they may confidently expect that some entrepreneur, someone other than a buyer, may well – *perceiving a market* – decide to manufacture velvet and borrow funds to purchase the real capital necessary for putting labour into motion. The required real capital may thus be made available without the customer having first to save (i.e."employ part of the price he would have paid for velvet") and invest in order to create the resources which are to produce the velvet. The customer's expenditure on velvet repays the velvet entrepreneur's borrowing. Had the customer's spending on velvet not recompensed the entrepreneur for his purchase of labour services and other producer's goods, production of velvet would of course not have been justified, and would not be continued. Thus, while Mill is correct in observing that it is the capital advanced by the entrepreneur which directly employs labour, it is actually spending (or the expectation of spending) on the product by the final purchaser which induces an entrepreneur

⁵ As noted by J H Thompson (1975), W S Jevons [1871](1970) commented critically on Mill's apparent reluctance to interpret demand for labour as being *derived* from demand for output. Jevons objected that Mill seemed to imply that capitalists would "maintain and pay for labour whether or not there is a demand for the commodities produced", and also for suggesting that "production goes on independently of the use to which the produce is to be put".

to advance that capital (directing investment to meeting that specific expected commodity demand) and which repays his investment. Mill makes a mistake in failing to appreciate that the whole operation depends on – *is undertaken in expectation or knowledge of* - the buyer's spending on the commodities to be produced. Demand for labour *does* depend on demand for commodities. It is, after all, the buyer that ultimately pays the costs of production. That is to say, whether demand for labour is *direct* (entrepreneur pays wages directly) or *indirect* (derived demand, purchaser of finished goods indirectly paying the wages), is irrelevant as regards the amount of employment offered.

Thus Mill's curious contention that, in the above case, the consumer who is desirous of purchasing velvet, must invest directly in the production of velvet, may be understood in the light of Mill's apparent reluctance to accept the notion of "derived demand" as nowadays understood. With Mill believing that the buyer's demand for velvet "does no good to the labouring classes" and that only direct demand for labour will create employment, the problem, as Mill sees it, is clear: as no one else is *presently* investing in velvet-manufacturing labour, there is no alternative - it is up to the would-be buyer of velvet to do so. But that is surely nonsense: the buyer's direct demand for velvet can be expected to induce entrepreneurs from anywhere in the economy to take on workers for making velvet.

This example provided by Mill fails to persuade us of the validity of his fourth proposition on capital. Even if full employment exists, demand for a specific commodity may attract labour to that particular sector. Mill appears to make too much of the fact that spending by buyers on a commodity does not *directly* "put labour into motion" in manufacturing that commodity. To say that only the entrepreneur who actually advances to labour wage-goods and other necessities of production creates employment is far too narrow and literal a description of how employment is created. These resources are necessary, but, unless supply does create demand, not sufficient to ensure that labour is employed.

There follows case (2): Mill now directs attention to the opposite situation, supposing that capital is available to support labour, but that on this occasion no market for the output of labour currently exists. Mill's purpose is to demonstrate that, provided the necessary capital is available, labour will be employed – even despite the initial lack of demand for output.

Let us suppose . . . that there is plenty of capital ready for the making of velvet, but no demand. *Velvet* will not be made; but there is no particular preference on the part of capital for making velvet.

But even if velvet is not wanted, labour, says Mill, can still be employed.

Manufacturers . . . having still the capital and the labour which are the essentials of production, can either produce something else which is in demand, or if there be no other demand, they themselves have one, and can produce the things which they want for their own consumption. (Mill, 1866, I, v, 9)

There is therefore, according to Mill, no question that a market can be found for whatever output is produced by that quantity of labour which the economy is capable of supporting in employment. Output produced will certainly find purchasers. Production and employment cannot therefore be constrained by want of demand for the product: *ergo* - production and employment are limited only by the availability of resources to support labour in employment. Thus Mill: "*The employment afforded to labour does not depend on the purchasers, but on the capital.*" In other words, it is capacity to support labour that determines employment: demand for output performs merely the secondary role of determining how the labour employed is distributed amongst the possible activities in which it may be engaged.

Mill's argument here (case 2) seems more readily intelligible than in the former case, but, nevertheless, doubts arise as to its validity. Two features of the argument may be noted. Firstly, as already mentioned, Mill must be assuming that supply can indeed be relied upon to create its own demand. Only if that is so, can we say that the volume of employment is determined by the quantity of resources available to support labour, and that entrepreneurial expectations regarding demand for output can then place no constraint on the volume of employment offered. Secondly, it is evident from Mill's speculation as to possible sources of demand that he fails to appreciate that capitalists invest money to make more money (M – C - M'), not to acquire goods for immediate consumption (C – M – C). Consequently Mill fails to recognise the possibility that if no opportunity of profitable investment presents itself, funds will be retained, not invested, and spending will fall. Evidently, the adequacy of demand to take up output produced is not an issue to Mill ⁶– demand is sure to come from somewhere. With respect to the volume of employment, all that concerns him is the availability of the resources which put labour into motion.

Our review of Mill's opening defence of the proposition that "demand for commodities is not demand for labour" leaves us still with reservations about the validity of the proposition. Neither of the cases put forward as indicating the occurrence of what the proposition predicts are persuasive: against the first instance, we note that the more likely possibility is that demand for commodities *is* satisfied via the induced demand for labour and other resources it generates; against the second, we make the point that an ability to support labour in employment cannot ensure the actual employment of that labour, unless supply does indeed determine demand.

Implications for employment: direct versus indirect demand for labour

We need to dig deeper into Mill's intended justification of his Fourth Fundamental Proposition on Capital. He defends the proposition through further examples.

Before we come to Mill's main attempt to prove that direct spending on labour is, as regards employment, preferable to buying commodities, note a theme which, misleadingly, underlies his discussion. He several times makes the point that it must be advantageous for labour if, instead of purchasing luxuries for one's own enjoyment, one abstains from such expenditure, and applies the money thereby released to the direct support of labour. Thus:

⁶ See Grieve (2015) for fuller consideration of Mill's "mindset" on this matter.

The proposition for which I am contending is in reality equivalent to the following, which to some minds will appear a truism, though to others it is a paradox: that, a person does good to labourers not by what he consumes on himself, but solely by what he does not so consume.

There cannot be a better *reductio ad absurdum* of the opposite doctrine than that afforded by the Poor Law. If it be equally for the benefit of the labouring classes whether I consume my means in the form of things purchased for my own use, or set aside a portion in the shape of wages or alms for their direct consumption, on what grounds san the policy be justified of taking my money away from me to support paupers? since my unproductive expenditure would have equally benefited them, while I should have enjoyed it too. If society can both eat its cake and have it, why should it not be allowed the double indulgence? But common sense tells everyone . . . that the poor-rate which he pays is really subtracted from his own consumption; . . .no shifting of payment backwards and forwards will enable two persons to eat the same food. If he had not been required to pay the rate, and had consequently laid out the amount on himself, the poor would have had as much less for their share of the total produce of the country, as he himself would have consumed more. (Mill, 1866, I, v, 9)

That is indeed commonsense; the trouble for Mill's proposition is that the poor law story does not tally with the demonstration by which he intends to show that direct spending on labour, as against spending on commodities, must benefit the "labouring classes". In the case of the poor law example, spending which goes directly to the paupers corresponds to saving by the propertied classes - to their depriving themselves of luxuries and handing over purchasing power to the poor. In the case of his attempts to demonstrate as a generally valid proposition that direct spending on labour is especially beneficial to working people, Mill makes the serious error of supposing that *all* direct expenditure on labour services, in the same way as does payment of the poor law rates, implies a direct transfer of purchasing power to workers; or, that is to say, if the beneficiaries are not paupers, increased direct payments to labour mean increased demand for labour, increased wage payments and increased employment.

Let us now examine the examples Mill puts forward with the purpose of proving that direct expenditure on labour services does especially benefit the labouring classes.

Mill poses the question: which course of action is more beneficial to labour – to buy manufactured commodities (indirect or derived demand for labour) or to devote resources directly to supporting labour in employment. As we shall see, however, Mill's argument intended to explain how transferring from indirect to direct spending on labour must necessarily add to the total demand for labour, comes seriously off the rails. He perhaps thinks he is talking about the effects of saving and investment – which would be appropriate – but actually he is not.

He offers, in two parts, an elaborate illustration involving a consumer (a landowner) switching his expenditure between buying manufactured luxuries and spending directly on labour to create on his estate facilities for his enjoyment. The question is – does a change from the one form of expenditure to the other "affect the interest of the labouring classes"? Mill argues that their interest *is* significantly affected: more workers can be supported when

employment is directly provided by the landowner himself. We concentrate initially on the second version of Mill's example which seems to present the clearer exposition of his argument.

To repeat: Mill wishes to demonstrate that - through the extra employment it will create - it is direct spending on labour that benefits workers, rather than spending on produced commodities.⁷ His illustration (Mill, 1866, I, v, 9) goes as follows:

[A] consumer has been accustomed to buy velvet, but resolves to discontinue that expense, and to employ the same annual sum in hiring bricklayers [and other workers]. [The purpose - as Mill earlier described - being that the bricklayers build a house, or excavators dig artificial lakes, or labourers make plantations and lay out pleasure-grounds - none of which activities are intended to add to the productive capacity of the economy.] If the common opinion be correct, this change in the mode of his expenditure gives no additional employment to labour, but only transfers employment from velvet-makers to bricklayers [and others]. On closer inspection, however, it will be seen that there is an increase in the total sum applied to the remuneration of labour. [Emphasis added] The velvet manufacturer, supposing him aware of the diminished demand for his commodity, diminishes the production, and sets at liberty a corresponding portion of the capital employed in the manufacture. This capital, thus withdrawn from the maintenance of velvet-maskers, is not the same fund with that which the customer employs in maintaining bricklayers; it is a second fund. There are therefore two funds to be employed in the maintenance and remuneration of labour, where before there was only one. There is not a transfer of employment from velvet-makers to bricklayers; there is a new employment created for bricklayers, a transfer of employment from velvet-makers to some other labourers, most probably those who produce the food and other things which the bricklayers consume.

In answer to this it is said, that though money laid out in buying velvet is not capital, it replaces a capital; that though it does not create a new demand for labour, it is the necessary means of enabling the existing demand to be kept up. . . . if instead of buying velvet [the consumer] buys labour, he simply transfers this capital elsewhere, extinguishing as much demand for labour in one quarter as he creates in another.

That indeed is what would appear to be happening; but Mill disagrees:

[It is said that] if I employ ± 1000 in hiring labour on the one hand, I annihilate for ever ± 1000 of the velvet-maker's capital on the other. . . . [T]his is confounding the effects arising from the mere suddenness of a change with the effects of the change itself. If when the buyer ceased to purchase, the capital employed in making velvet for his use necessarily perished, then his expending the same amount in hiring bricklayers would be

⁷ Kates (2015, p.51) comments on Marshall's (1947, p.828) reaction to Mill on this: "If one reads Marshall, it is clear he is floundering. Although he would like to present a robust and logical explanation for Mill's conclusion, in the end he finds he cannot. He specifically argues that Mill seems, in his view, to be saying something he could not possibly have been trying to say, that Mill "seems to imply that, to spend money on direct hire of labour is more beneficial to the labourer than to spend it in buying commodities: since that was indeed what Mill was trying to say, it is evident that Marshall can make neither heads nor tails of Mill's logic." Our reading of the matter is that Marshall did correctly appreciate that Mill was saying something he ought not to have been saying, and that Kates fails to recognise confusion on the part of Mill.

no creation, but merely a transfer, of employment. The increased employment which I contend is given to labour, would not be given unless the capital of the velvet-maker could be liberated, and would not be given until it was liberated. But everyone knows that the capital invested in an employment can be withdrawn from it, if sufficient time be allowed. [If the velvet-maker withdraws capital from that manufacture as sales fall off, he] will find himself as rich as before, with undiminished power of employing labour in general, though a portion of his capital will now be employed in maintaining some other kind of it. . . Where there was formerly only one capital employed in maintaining weavers to make £1000 worth of velvet, there is now that same capital employed in making something else, and £1000 distributed among bricklayers besides. There are now two capitals employed in remunerating two sets of labourers; . . .

The proposition for which I am contending is in reality equivalent to the following, which to some minds will appear a truism, though to others it is a paradox: that a person does good to labourers, not by what he consumes on himself, but solely by what he does not so consume. If, instead of laying out £100 in wine or silk, I expend it in wages, the demand for commodities is precisely equal in both cases: in the one, it is a demand for £100 worth of wine or silk, in the other, for the same value of bread, beer, labourers' clothing, fuel and indulgencies; but the labourers of the community have the value of £100 more of the produce of the community distributed among them. I have consumed that much less, and made over my consuming power to them. (Mill, 1866, I, v, 9)

Let us try to work out what has actually happened. What has taken place is that labour has been transferred from production of one kind of goods for luxury consumption to production of services, *these also intended for the provision of luxuries*. If, say, a landed proprietor, enjoying rental income from his property, decides to switch expenditure from (as Mill has it) the purchase of velvet to employing workmen to beautify his grounds, his spending in both instances goes to the support of workers (weavers or landscape gardeners as the case may be) who provide him with luxuries. The same quantity of wage-goods supports in employment the same total quantity of labour. In spending their wages, workers on the estate come into possession of wage-goods which the weavers can no longer command. The fact that the landowner is no longer spending on manufactured products, but on direct labour services, here makes no difference to the overall employment situation: equally in both cases his spending enables labourers to purchase wage-goods. It is not the case, as Mill alleges, that the landowner's consumption of luxuries is replaced by workers' consumption of wage goods; workers continue to purchase the same quantity of wage goods, and the landowner still spends the same amount on luxuries – but of a different sort than before.

But Mill's understanding – as explicitly stated - is that, with the new employment of men on the estate, there are now *two* funds available to support labour in employment. Could that be true? Has the *direct* employment of labour by the landowner – as Mill seems to believe – somehow achieved a net increase in the supply of capital? Where has the alleged increase in capital come from?

Mill is evidently confused about the situation. He admits that if the demand for wine and silk had suddenly collapsed without warning, the capitalists employing labour in the manufacture of these goods would have lost their investments – no sales receipts being received to cover

the outlays incurred. But what he does suppose is that the entrepreneurs in wine and silk came to anticipate falling demands for their products, and have been able to run down their production in such a way as not to produce any quantities which cannot be sold. They thus escaped loss – though they have no incentive to re-borrow in order to re-invest and continue operating in these sectors. Mill's contention that the entrepreneurs concerned, having skilfully manoeuvred out of wine and silk production, are "as rich as before, with undiminished power of employing labour" is irrelevant and misleading. It is not the wealth of the entrepreneurs that counts here: it is the availability of capital to allow them to operate and the capital which supported their operations in wine and silk has now been withdrawn. A new demand for goods of some sort, and new investment of capital, is required if these entrepreneurs are to continue providing the same employment to labour. In asserting that there are now two capitals available to support labour in employment, Mill is illegitimately altering the terms of the discussion: from considering the effects of an altered pattern of consumption, he is now directing attention to a different state of affairs in which a new (unspecified) element of demand has been added, inducing (conveniently for Mill's argument) an increase in capital which supports increased employment of labour.

To confirm that what actually has occurred is not as Mill describes it, consider what happens with the £1000 (annual sum) which Mill represents as originally being spent on velvet by the landowner. The landowner no longer wants to buy velvet, but prefers to employ men to beautify his estate. We suppose he informs the velvet maker of his intention and that the latter stops production and releases labour from his employment. Therefore no velvet goes to waste, all that has been produced is purchased. The manufacturer of velvet has sold his last batch for £1000, allowing him his accustomed profit. From the sales proceeds he repays his bank the funds initially advanced; all his obligations are now covered, but there no incentive for him to continue with velvet production. At the end of the day we see that it was ultimately the landlord's £1000 which funded the production of velvet over the past year. (The bank, on expectation of the landowner's purchase of velvet, provided the entrepreneur with a loan permitting him to acquire working capital for velvet production.) The entrepreneur's spending on wages and other costs of producing velvet represents derived demand - derived from the landlord's (expected) demand for velvet. The landowner, for his part, is now embarking on a new venture, using his income (£1000) of the next period (no bank loan needed) to employ labourers, directly, to work on his land. The £1000 which previously enabled velvet production is lost to that sector – by the landlord's reallocation of his spending it has been transferred to a different application. The landlord has switched the funds which previously paid for the capital applied in support of labour in velvet production to a new use supporting work on his estate. Mill is incorrect in his interpretation of the situation: the same amount of capital as before is supporting labour in employment - no new capital has come into being. Demand for commodities is demand for labour.

Consider briefly, before we proceed further with this discussion, Mill's complementary example examining the consequences of our landowner making the opposite spending decision – ceasing to employ workers on his estate, and instead buying in manufactured luxuries. This example predicts (again incorrectly) the equivalent result. In this case Mill's

understanding is that, initially, two capitals are supporting labour – that of the landlord and that of the manufacturer of luxuries. Mill's contention is that when the landowner releases his workers, rather than the landlord's capital simply being transferred from maintaining estate workers to supporting workers in luxury production, a net loss of capital is experienced. The mistake in Mill's analysis is that the landowner's capital does not evaporate – with his change in spending plans the resources which previously supported his directly-employed workers are now drawn to the support of the new employees manufacturing luxury goods. Contrary to what the Fourth Proposition asserts, replacing direct expenditure on labour by indirect support does not mean a net reduction in the capital supporting labour in production. The landowners's decision simply augments whatever capital was previously employed in the production manufactured luxuries.

Yet another example

Having already - at some length - gone through what he understands to be the consequences of the landowner's alternative spending decisions, Mill evidently feels compelled to add, in an extended footnote (Mill, 1866, I, v, 9), a complementary (very similar) illustration of the different effects supposed to follow from spending on luxury goods for one's own consumption against spending directly on the employment of labour. What he wishes (again) to demonstrate is that "the change from hiring labourers to buying commodities for personal use" will "deprive labourers of employment". He tells it thus:

[A] rich individual, A, expends a certain amount daily in wages or alms, which, as soon as it is received, is expended and consumed, in the form of coarse food, by the receivers. A dies, leaving his property to B, who discontinues this item of expenditure, and expends in lieu of it the same sum each day in delicacies for his own table. . . . the question is, whether B's expenditure gives as much employment or as much to his poorer neighbours as A's gave food.

From the case as stated, it seems to follow that while A lived, that portion of his income which he expended in wages or alms, would be drawn by him from the farm in the shape of food for labourers, and would be used as such; while B, who came after him, would require, instead of this, an equivalent value in expensive items of food, to be consumed by his own household: that the farmer, therefore, would, under B's regime, produce that much less of ordinary food, and more of expensive delicacies for each day of the year than was produced in A's time, and that there would be that amount less of food shared, throughout the year, among the labouring and poorer classes. This is what would be conformable to the principles laid down in the text.

This story is further evidence of the fact Mill confuses the results of directly employing labour specifically to add to the productive resources of the economy with the direct employment of labour to do anything at all. Suppose a surplus producing economic system which, over each period of production, reproduces with a surplus all the wage goods and other items of capital consumed in that period. The surplus output (provision having been made for replacement of

resources currently used up) is available to support labour⁸ in production, whether that labour is used to provide luxuries for wealthy members of the community, means of subsistence for those unable to work, or to create additions to the stock of resources which maintain labour in employment.

In reviewing the alternative spending patterns of Messrs A and B we are looking at alternative uses of the economy's surplus-producing capacity. When A is in charge, the surplus supports labour in producing "coarse food" for workers and the poor. It is not however specified by Mill what the workers thus supported are doing to earn their wages. One possibility is that, as in the earlier example, the workers are (on his estate) providing for the enjoyment of their employer (possibly even as "menial servants"); another is they are engaged in the production of capital goods to increase the productive capacity of the economy and probably also increase its ability to support labour in employment. Under B's regime workers are transferred from whatever they were doing to being maintained in the production of luxury items. What are the implications of the change from the programme favoured by A (basic foodstuffs for all) to that chosen by B (luxuries for himself)?

In B's luxury-goods-producing situation workers supported out of the surplus are not contributing in any way to enhancing the economy's existing capability of producing output or providing employment. In the situation favoured by A, the implications with respect to employment depend on what exactly these surplus-supported workers were doing. If they were engaged in the same sorts of activity as were the estate workers in Mill's previous example, or were servants, they were doing no more for the system's productive or employment capabilities than B's suppliers of luxuries. But if they happen to have been engaged in supplying producer goods which, in due course, could be used to support (additional) labour in employment, these workers would then have been making it possible for extra employment opportunities to emerge in the future. *Only if that had been the case* would the change from A's to B's pattern of expenditure have an adverse effect on employment.

If workers under A make luxuries, and continue to do so under B, there are is no negative effect on employment – even if they were *directly* supported by a landowner's expenditure initially, and come to be supported *indirectly* by demand deriving from the landowner's purchase of commodities. Only if workers are shifted out of the production of investment goods (which can expand the productive system) to the production of luxury commodities (which can achieve nothing in that regard) will the change in spending from A's preference to B's cause the employment potential of the economy to fall. It is the use to which the surplusemployed labour is put that matters with respect to employment and *not* (as Mill seems to have thought) the *procedure* by which they are "put into motion" – whether by an employer's *direct* expenditure on their services (situation with A) or *indirectly*, via a consumer's purchase of the output they produce (situation with B).

A serious misunderstanding

⁸ i.e. available to support *other* labour in production – labour other than that already engaged in current (surplus yielding) production.

We reckon that Mill makes the error of supposing that the direct employment of labour by a wealthy consumer *necessarily* has the same beneficial implications for employment as would saving out of income accompanied by investment expenditure. This confusion completely vitiates his efforts to prove the proposition that it is direct demand for labour - not indirect or derived demand – that benefits the labouring classes by creating employment. Not all direct demand for labour – not every switch from indirect demand for labour to direct demand - will produce that outcome. Only if direct demand for labour, resulting from genuine saving by the propertied classes, puts into motion labour which creates the means of adding to the economy's productive and labour supporting capabilities, will that demand (if, of course, accompanied by an appropriate increase in demand for output) in due course bring about a higher level of employment.

At this point we may note that Sam Hollander's take on this issue is not at all satisfactory. He fudges his appraisal of what Mill says, and so, in effect, disguises Mill's confusion. This is how Hollander (1985, p.373) puts it:

The fourth proposition carried with it the implication that net investment financed by reduced expenditures upon 'luxuries' generates an increase in the aggregate demand for labour. One of Mill's illustrations actually involves an increase in expenditure on housebuilding labour for personal rather than commercial purposes, but the same principle applies; indeed the general effects upon employment of increased expenditure on service labour . . . financed by reduced consumption of luxury goods will be precisely the same as those of increased investment similarly financed.

But, emphatically, "the same principle" does *not* apply.⁹ Our point of criticism of Mill's analysis is precisely that the effect of transferring expenditure from luxury commodities to service labour does not, as envisaged by Mill, necessarily imply creation of employment. Hollander appears to miss the point that Mill does not specify reduced consumption by the landowner: Mill places all the onus of accounting for the supposed increase in employment on the landowner's *change to direct employment* of labour. Mill's illustration is misconceived – he should have been talking about *investment* financed by cutting luxury expenditure, but he was not; to repeat: he was arguing that increased *direct* employment of labour - for any purpose - is enough to bring increased employment.

Conclusion

We have reviewed the section of Mill's *Principles* devoted to expounding his "Fourth Fundamental Proposition on Capital" which states that "demand for commodities is not demand for labour". Alternatively, Mill's contention amounts to the proposition that to create

⁹ Hollander attempts to justify his statement, thus (p.373): "The point is that a change in consumption patterns from luxury consumption to either investment or to services (for personal use or otherwise) entails the redirection of currently utilized resources towards the production of goods which will sooner or later be placed at the disposal of workers in the form of wages or technological capital." But how exactly does the landowner's new pleasure garden come to be placed, even if indirectly, "at the disposal of the workers"? Maybe Hollander has in mind the famous royal bed at the alehouse in Dunfermline (Adam Smith, [1776], (1976) II, iii, 39)?

employment an entrepreneur must directly provide the capital required to support that labour in production. We remain unconvinced that this Fourth Proposition makes sense.

Mill initially describes two macroeconomic situations which are intended to represent conditions in accord with the proposition. These are meant to show, firstly, that, even if demand for a commodity exists – corresponding employment may not - i.e. demand for commodities does not ensure employment of labour; and, secondly, that if resources to maintain labour in employment do exist, employment will certainly be generated, even if initially demand for commodities is wanting - i.e. supply can be relied upon to create its own demand. But neither illustration convinces.

As regards the first instance, Mill seems to imagine an obstacle which prevents entrepreneurs, in the normal course of events, from applying funds to exploit apparently profitable opportunities, and thus drawing labour into employment, in consequence of an expected demand for commodities. The imagined obstacle would appear to lie in Mill's peculiar belief that only entrepreneurs directly applying capital to the employment of labour can create employment. With respect to the second implication, the presumption is that a use can always be found for capital that is available – that supply will indeed create its own demand. From Mill's perspective, it is availability of resources, not demand for output that limits the amount of employment which can be created.

We are of the opinion that Mill's lengthy discussion intended to prove that direct spending on labour, not the purchase of commodities produced by labour, benefits labour by creating employment, fails to make his point. It appears that Mill confuses the consequences of a purchaser employing labour directly to provide consumption services (e.g. laying out pleasure gardens, or, for that matter, acting as household servants) with saving via which labour is employed in manufacturing commodities to be added to the stock of producer goods capable of supporting labour in employment. Despite what Mill says, whether labour is directly or indirectly supported in employment is not the point. What does matter is the purpose for which an entrepreneur (or other employer such as Mill's landowner) takes labour into employment: whether to produce goods for investment (including wage-goods) or, alternatively, to produce luxuries which add nothing to the productive capacity of the economy.

Mill's whole approach is imbued with the vision of the working of the economy he shared with his father and J B Say: conditions of supply take precedence over demand in explaining levels of output and employment. Mill's treatment of the issue of the relationship between demand for commodities and the production thereof seems like an attempt to reconcile the irreconcilable – he would have brought supply and demand side factors more satisfactorily together had he taken capacity to support labour in employment as setting a *limit* to the volume of employment that could be offered in an economy rather than the determinant of the *level* of employment actually established. Furthermore, his attempt to demonstrate through examples that only direct demand for labour can create employment fails through his confusing the consequences of a direct advance of wage-goods, etc (for whatever purpose)

with employing labour, *whether directly or indirectly*, in adding to the economy's stock of those resources which can put labour into motion.

There is confusion in Mill's thinking. He does not succeed in proving his proposition that "demand for commodities is not demand for labour". We conclude that Mill's Fourth Proposition on Capital is not only a paradox, but, more importantly, a muddle.

References

- Grieve, R H (2015), "On Keynes's Alleged Misrepresentation of Mill". *Journal of the History of Economic Thought* (forthcoming).
- Hollander, Samuel (1985), The Economics of John Stuart Mill. Oxford: Basil Blackwell.
- Jevons, William Stanley [1871] (1970), *The Theory of Political Economy*. Harmondsworth: Penguin Books.
- Kates, Steven (1998), Say's Law and the Keynesian Revolution: How Macroeconomic Theory Lost its Way. Cheltenham: Edward Elgar.
- Kates, S (2003), Two Hundred Years of Say's Law. Essays on Economic Theory's Most Controversial Principle. Cheltenham: Edward Elgar.
- Kates, Steven (2015), "Mill's Fourth Fundamental Proposition on Capital: A Paradox Explained". *Journal of the History of Economic Thought*, 37, pp.39-56.
- Marshall, Alfred [1920] (1947), Principles of Economics (8th edition). London: Macmillan.
- Mill, John Stuart (1866), *Principles of Political Economy*. London: Longmans, Green, Reader and Dyer.
- Schumpeter, Joseph A (1954), History of Economic Analysis. London: Allen & Unwin.
- Smith, Adam [1776](1976), *An Inquiry into the Nature and Causes of the Wealth of Nations*. Oxford: Oxford University Press.
- Thompson, James H (1975), "Mill's Fourth Fundamental Proposition: A Paradox Revisited." *History of Political Economy* 7 (2): 17