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DID KEYNES IN THE *GENERAL THEORY* SIGNIFICANTLY MISREPRESENT J S MILL?

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Did Keynes in the *General Theory* significantly misrepresent J S Mill?

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Abstract

It has been alleged that J M Keynes, quoting in the *General Theory* a passage from J S Mill's *Principles*, misunderstood the passage in question and was therefore wrong to cite Mill as an upholder of the 'classical' proposition that 'supply creates its own demand'. We believe that, although Keynes was admittedly in error with respect to, so-to-say, the 'letter' of Mill's exposition, he did not mislead readers as to the 'substance' of Mill's conception. The purpose of this paper is to demonstrate that J S Mill did indeed stand for a 'classical' position, vulnerable to Keynes's critique as developed in the *General Theory*.

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Introduction

In setting out in the *General Theory* his critique of the 'classical' analysis Keynes (1936, p.18) accused J S Mill of holding to the doctrine that 'supply creates its own demand', citing as evidence a passage from Mill's (1866) *Principles of Political Economy*. Several critics – for instance, Patinkin (1965), Leijonhufvud (1968), Mundell (1968) - have risen to the defence of Mill, pointing out that he (demonstrably) did not mean by the passage in question what Keynes apparently took it to mean, implying that, with Keynes's mistaken accusation dismissed, there was nothing in Mill's account to which, from a Keynesian perspective, exception could legitimately be taken.

The purpose of this paper is, however, to establish the validity of Keynes's basic charge that Mill's treatment of the question of the adequacy of aggregate demand to ensure full use of the community's productive resources was indeed seriously flawed. We argue that while Keynes did misunderstand the specific purport of the passage he quoted from Mill, he was nevertheless correct in identifying Mill as an upholder of the 'classical' thesis that it is production which determines demand, and not *vice versa*. Mill, as he himself declares, adheres to the doctrine of his father and J B Say, though offering a nuanced version to accommodate the undeniable real world situation of a general excess demand for money and excess supply of goods in a commercial crisis. It would appear that the defenders of Mill against Keynes have failed to appreciate just how unsatisfactory Mill's analysis, taken as a whole, actually is.

The (mis)quotation in question

In attacking what he saw as the fundamental deficiency of the classical theory of employment, Keynes argued (1936, p.18) that:

From the time of Say and Ricardo the classical economists have taught that supply creates its own demand: - meaning by this in some significant, but not clearly defined, sense that the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, in purchasing the product.

The quotation from Mill immediately follows in illustration:

In J S Mill's *Principles of Political Economy* the doctrine is explicitly set forth:

What constitutes the means of payment for commodities is simply commodities. Each person's means of paying for the productions of other people consist of those which he himself possesses. All sellers are inevitably, and by the meaning of the word, buyers. Could we suddenly double the productive powers of the country, we should double the supply of commodities in every market, but we should, by the same stroke, double the purchasing power. Everybody would bring a double demand as well as supply: everybody would be able to buy twice as much, because everyone would have twice as much to offer in exchange.

The critics charge Keynes with misquotation on the ground that Mill did not intend the passage to carry the meaning that Keynes apparently attributes to it. Keynes, it appears, takes the passage as indicating Mill's acceptance of what has been termed 'Say's Identity'¹ - the proposition that all sales receipts are automatically and immediately spent on purchasing goods and services, or, equivalently, that money functions only as a medium of exchange. It can however readily be demonstrated – as the critics have done by setting the passage in context – that that was not the point Mill was making.

The passage in question derives from the *Principles*, Book III, Chapter XIV, where Mill is developing his argument against what he considered the 'heretical' view (attributed to Malthus, Chalmers and Sismondi)² that 'a general oversupply of all commodities in relation to aggregate demand is an occurrence to be feared'. In tackling the issue Mill proposes that

¹ 'We shall refer to the version of Say's law of markets according to which the money value of goods supplied is identically equal to that of goods demanded as Say's identity, a view which precludes attempts to add to money balances out of sales proceeds.' (Hollander, 1985, p.483) See also Patinkin (1965, pp.193-5).

² The trio of 'Malthus, Chalmers and Sismondi' are frequently identified by Mill as the principal proponents of the 'heretical' doctrine that the adequacy of planned aggregate demand to ensure full use of the economy's productive capacity should not be taken for granted.

'the two elements of demand' – 'the desire to possess' and 'the means of purchase' – should each be examined.

Concentrating first on 'the means of purchase', he invites readers to assume that 'the quantity of all commodities produced is not greater than the community would be glad to consume'. The question posed, therefore, is whether, if the community does collectively wish to buy all the commodities it produces, it could possibly be prevented from doing so by lack of purchasing power? The quoted passage gives Mill's answer: no, he says, that cannot happen. The argument is that, when commodities are exchanged on the market, the goods each transactor offers for sale are simultaneously elements of supply and potential instruments of demand. If, as is being assumed, every transactor is able to sell all that he wishes, the value of each individual's effective purchasing power is equal to the value of what he sells on the market; consequently, the value of the total available purchasing power is necessarily equal to the value of total supply. *Ergo*, when members of the community wish to buy all that is on offer, sales cannot be constrained for want of purchasing power.

Thus, as Don Patinkin (1965, p.647) observes, the passage 'cannot refer to the willingness to consume – as Keynes would have it – but to the power to consume. Indeed, when read within the context that Mill specifies, this passage expresses nothing more objectionable than the 'national income equals national product' identity of contemporary social accounting!'

Furthermore, there is in fact abundant evidence that Mill did not subscribe to Say's Identity, but did recognise that agents might, on occasion, prefer to retain money in hand rather than part with it in exchange for commodities. For instance, in his essay 'Of the Influence of Consumption on Production' (1844, p.276) Mill clearly accepts that income receipts may be reserved unspent:

... the effect of the employment of money, and even the utility of it, is that it enables [the] one act of interchange to be divided into two separate acts or operations; one of which may be performed now, and the other a year hence, or whenever it shall be most convenient. Although he who sells, really sells only to buy, he need not buy at the same moment when he sells; and he does not therefore necessarily add to the *immediate* demand for one commodity when he adds to the supply of another. The buying and selling now being separated, it may well occur, that there may be, at some given time, a very general inclination to sell with as little delay as possible, accompanied by an equally general inclination to defer all purchases as long as possible. This is always actually the case, in those periods which are described as periods of general excess.

Several writers, not directly involved in the misquotation debate, have also given Mill's macroeconomics what would appear to be a pretty clean bill of health. G S Becker and W J Baumol (1952, p.374), referring to Mill's account of a commercial crisis, famously remarked that 'in reading it one is led to wonder why so much of the present literature . . . had to be written at all'. Becker and Baumol's commendation of Mill's treatment immediately follows their statement (referring to Mill's essay 'Of the Influence of Consumption on Production') that

it is all there and explicitly – Walras' Law, Say's Identity which Mill points out holds only for a barter economy, the 'utility of money' which consists in permitting purchases to be made when convenient, the possibility of (temporary) oversupply of commodities when money is in excess demand, and Say's Equality which makes this only a temporary possibility.

If that were an adequate summing up of Mill's views, his analysis might seem to involve little to which objection might be taken.

Samuel Hollander (1979, p.475), referring to 'Mill's qualifications to the law of markets', endorses the Becker and Baumol appraisal. Recognising Mill's admission of the possible occurrence of excess supplies of labour and commodities along with an excess demand for money, Hollander seems to be of the opinion that it is merely Mill's 'presumption against a "Keynes-like unemployment equilibrium" that chiefly separates him from a Keynesian position.

Thomas Sowell (1994, pp.48-9) observes that Mill, having disposed of the 'dissidents' goes on to discuss 'the real substance of the issue more clearly and thoroughly than any other classical economist'. He points to Mill's acknowledgement, in both the 'Influence of Production on Consumption' and in the *Principles* that, on the occasion of a commercial crisis, there 'is really an excess of all commodities' and 'an undersupply of money'.

In an early response to Keynes's critical comment on Mill, Frank Knight (1937) anticipated the Becker and Baumol, Patinkin and Sowell theme that if account is taken of Mill's recognition of an emergence demand for money in times of particular uncertainty, nothing is left of Keynes's case against Mill. Knight complained that Keynes made no mention of Mill's analysis of a crisis, and that he seemed to be dealing with classical theory 'at the stage at which uncertainty and monetary disturbances are assumed absent'.

R A Mundell's response (1968) to the misquotation is particularly hostile to Keynes: he airs a suspicion of deliberate misrepresentation – of Keynes mischievously distorting the classical argument to create a straw-man target. Whatever may have led Keynes to interpret the Mill passage in the way he does, says Mundell, the result is to create a false impression that classical treatment of the determination of aggregate demand was fundamentally flawed.

However J R Davies and F C Casey (1977), and Davies further (1979), on the basis of an ingenious piece of literary detective work, reject Mundell's distasteful suggestion that Keynes knowingly misrepresented Mill: they demonstrate pretty convincingly that although Keynes was in error in his use of the quotation, he was guilty of nothing worse than carelessness in failing to check its original source in Mill's work; finding the passage instead in a secondary source where it had been misleadingly 'torn out of context'³, he misread its meaning. Davis

³ Patinkin's phrase (1965, p.647).

and Casey suggest that Keynes presented the quotation in good faith, misrepresentation having occurred through genuine misunderstanding.⁴

Where then does this leave us on the question of the propriety of Keynes's charge against Mill? If Mill, contrary to Keynes's allegation in the *General Theory* did not hold by a crude Identity version of Say's Law, was Keynes's attack on Mill as representing an untenable 'classical' orthodoxy – as the critics argue – simply without foundation?

While it has to be accepted that, in the passage quoted by Keynes, Mill is saying nothing to which Keynes could legitimately object, it must be remembered that the passage in question relates to only one part of Mill's argument (concerning the 'means of purchase'); it does not follow that the rest of his discussion regarding 'the desire to possess' is equally unexceptionable. It is a curious fact that the commentators who have so eagerly pointed out Keynes's evident misunderstanding of these particular observations of Mill have completely ignored the subsequent part of Mill's argument regarding the necessary adequacy of aggregate demand to match supply. Had they given it their attention, they could not have presumed Mill to be 'in the clear' on the issue of the impossibility of a demand-deficient 'general glut': the weakness of his case could not then have gone unnoticed.

We shall look in a moment into the details of Mill's analysis, but before doing so, it is relevant to note that, from another quarter, Mill is hailed as a great upholder of the tradition of thought established by J B Say and James Mill, in fact as the authority credited with giving the *coup de grace* to the contrary doctrine espoused by the 'heretics' (Malthus, Chalmers and Sismondi) that conditions of 'glut' or general unemployment could occur because of an overall deficiency of 'the desire to possess' relative to the production capacity of the economy. We are referring here to the argument advanced by a forceful modern proponent of Say's law of markets (Steven Kates, 1998) to the effect that the Keynesian focus on aggregate demand as the autonomous disturbing factor primarily responsible for fluctuations in output and employment is fundamentally misplaced, and that the old classical authorities – including J S Mill – were correct in their contention that, while general unemployment could (and certainly did) occur, such a state of affairs should not be attributed (Keynesian fashion) to a general deficiency of demand. While we certainly have no intention of defending a Say's Law position against the Keynesian approach, we make the point that Kates's view of how J S Mill fits into the context of the nineteenth century 'general glut' controversy certainly raises the

⁴ It seems highly probable, from disparities of detail (identified by Davis and Casey) between Mill's original text and the similarly inaccurate versions reproduced by Marshall and Marshall (1881), Mummery and Hobson (1889) and Keynes (1936), that Keynes derived the Mill passage at second or third-hand from the Marshalls or from Mummery and Hobson and not directly from Mill's *Principles*. We add, given the fact that Keynes had been reading (with warm approval) Mummery and Hobson just before he amended a draft of Chapter 2 of the *General Theory* to include the Mill passage (see Keynes, 1973, p.653, also p.537), and R F Kahn *subsequently* thought it useful to send Keynes a copy of the Marshalls' text, that it looks very much as if the passage, initially excerpted out of context by the Marshalls, was borrowed from them by Mummery and Hobson and later in turn borrowed from Mummery and Hobson (rather than from the Marshalls) by Keynes for inclusion in the *General Theory*. (J K Whitaker (1975, fn. p.215) refers to Marshall's (apparently habitual) 'loose style of quotation'.)

possibility that Keynes's characterisation of Mill as a proponent of the sort of ideas to which he was objecting may not be as far off the mark as the critics apparently believe.⁵

We now proceed to examine Mill's analysis of the issue of the relationship between aggregate demand and unemployment to determine whether or not Keynes was justified in identifying Mill as an advocate of the 'classical' doctrine which in the *General Theory* he set out to controvert. It is convenient to take Mill's theory of unemployment in two parts – one concerned with the circumstances of a commercial crisis, and a second dealing with the question of the adequacy of effective demand to support full employment in normal, non-crisis, situations.

Mill on commercial crises: a crisis is not a 'glut' as envisaged by the heretics

J S Mill, unlike his father⁶, was fully prepared to admit that a commercial crisis could be responsible for the emergence (at least temporarily) of excess supplies of goods and of unemployment, even generally across the economy; at the same time he argued that such unemployment provided no justification for the 'heretical' thesis that there was reason to fear that want of demand for output could cause economy-wide excess supply and unemployment. In other words Mill's contention was that, despite the observed occurrence from time to time of widespread unemployment, Malthus, Chalmers and Sismondi were completely wrong in their diagnosis that such conditions were the result of an imbalance between the community's demand for goods and services and the ability of the economy to produce goods and services for use by the community.

We begin with Mill's contention that the 'heretics' – thinking of excess supply relative to overall demand – had misunderstood the true nature of a 'commercial crisis'. He emphasises that, as he understands it, a commercial crisis is something very different from, and not to be confused with, a 'general glut'. Malthus's diagnosis of a glut– as interpreted by Mill – was of an economy-wide state of deficient demand, constituting a continuing, long-term depression of activity, a situation which would have developed gradually over time. By contrast Mill (1866, III, XIV, 4) defined a commercial crisis as a sudden and sharp, but merely temporary, self-correcting interruption of normal commercial activity. Such a disturbance he interpreted as the result not of *insufficient* planned demand, but of the opposite state of affairs – of a speculative *excess* of demand, leading to market collapse, a credit crunch and the postponement of expenditure.

⁵ Kates (1998), p.73, summing up on the position of J S Mill in the history of macro analysis, states: 'Mill is the key to understanding the classical law of markets. He sits in a pivotal position at the end of the general glut debates, and his influence was one of the main reasons for acceptance [of the law of markets] throughout the remainder of the nineteenth century and well into the twentieth. In both the essay and in his *Principles* he provided a clear exposition of the reasoning behind the law of markets. Mill focused on the impossibility of demand failure as an explanation for recessions, even while fully recognising that recessions regularly occur.

⁶ Samuel Hollander (1985, pp.489-508) describes how Mill, having in his earliest writings followed his father in denying the occurrence of general overproduction under any circumstances, in time came to admit that, at least on occasions of 'commercial crisis', aggregate spending could undoubtedly be deficient in relation to output and production capacity.

It is a great error to suppose . . . that a commercial crisis is the effect of a general excess of production. It is simply the consequence of an excess of speculative purchases. It is not a gradual advent of low prices, but a sudden recoil from prices extravagantly high: its immediate cause is a contraction of credit.⁷

Mill vividly describes how the excessive spending of a speculative outbreak engenders a crisis. In the scenario he sketches, dealers in a particular market anticipate a rise in price; the extra demand thus induced drives up the price, leading to further speculative buying fuelled by credit expansion. Until doubt sets in the market soars, but eventually the price collapses, and dealers who have bought high find they cannot meet their obligations. In the ensuing panic and general fear of insolvency, traders are desperate to get their hands on ready money, but that proves no easy matter. Everyone is disposed

not only to refuse fresh credit, except on very onerous terms, but to call in, if possible, all credit . . . already given; . . . bankers raise their rate of discount, and withhold their customary advances; merchants refuse to renew mercantile bills . . .

And therefore:

When everybody seems to be losing, and many fail entirely, it is with difficulty that firms of known solidity can obtain even the credit to which they are accustomed, and which is the greatest inconvenience to them to be without; but because all dealers have engagements to fulfil, and nobody feeling sure that the portion of his means which he has entrusted to others will be available in time, no one likes to part with ready money or postpone his claim to it. To these rational considerations there is superadded, in extreme cases, a panic as unreasoning as the previous over-confidence; money is borrowed for short periods at almost any rate of interest, and sales of goods for immediate payment are made at almost any sacrifice.

And he acknowledges:

There may easily be, though only while the crisis lasts, an extreme depression of general prices, from what may indiscriminately be called a glut of commodities or a dearth of money.

Thus Mill does admit the possibility of a general excess supply of commodities along with a simultaneous excess demand for money, but at the same time he strongly denies that such circumstances correspond to those of a 'glut' as predicted by Malthus *et al* – Mill holds that a crisis situation can be explained without citing overproduction relative to the wants of the community. As Mill sees the situation, agents are hanging on to their money rather than spending it - not because their needs are satiated with a superabundance of goods but because, in the prevailing circumstances of a crisis, it could quite probably mean commercial suicide to do otherwise.

⁷ That explanation tallies exactly with Mill's earlier observation (in his 1844 Essay, p.279): 'As there may be a temporary excess of any one article considered separately, so there may be of commodities generally, not in consequence of over-production, but from want of commercial confidence'.

In Mill's view, one key factor which distinguishes a commercial crisis from a glut in the sense of Malthus and Sismondi is the source of the upset – he understands a crisis to stem from too much rather than too little demand.⁸ Mill reads the situation as the reaction, which spreads throughout the system, to the bursting of a speculative bubble generated by excessive demand in a particular market. Traders hold back from entering into new commitments because of 'a general mistrust' of each other's solvency; intended expenditures are postponed, and money retained in the face of what are perceived to be exceptional commercial risks. The fall in spending, it may be stressed, is seen as the consequence of prior speculation – 'overtrading' – not as an autonomous source of disturbance.

Secondly, Mill attributes withholding of spending under crisis conditions not to any independently occurring failure of consumption or investment demand, but to anxiety in the markets and the consequent breakdown of the normal commercial mechanisms of lending and borrowing, of purchase and sale. Expenditures out of income receipts are postponed – not cancelled: thus, as Mill (1844, p.276, quoted above p.3) understands the situation, 'he who sells, really sells only to buy, [although] he need not buy at the same moment when he sells'. Corresponding Mill believes that 'restoration of confidence' – dissolution of the prevailing 'general distrust' – is *all* that is required for recovery. Once the 'temporary derangement of markets' has passed, agents, freed from fear of abnormal commercial risks can, he believes, be expected to resume their interrupted activities. When the blizzard of bankruptcies has blown over, business quickly returns to normal.

It is true that this state [of excess demand for money] can only be temporary, and must even be succeeded by a reaction of corresponding violence, since those who have sold will certainly buy at last, and there will then be more buyers than sellers.

Thus, as Hollander notes (1979, p.475; 1985, p.503), Mill's belief in automatic recovery – even a dramatic rebound – precludes recognition of the possibility of persisting unemployment (unemployment equilibrium) of a Keynesian character. This corresponds to the significant difference between Mill's view of a cyclical downturn and Keynes's interpretation of a depression. Compare Keynes's point (1936, p.316) that in a slump it is the 'collapse of the marginal efficiency of capital which renders the slump so intractable'; by contrast, as envisaged by Mill, recovery from a crisis is easy because the situation is not attributed to a problem regarding the profitability of investment *under normal conditions* when the mechanisms of commercial intercourse are working properly. In other words, Mill reads a recession as symptomatic of a temporary 'mechanical' breakdown of the system of settling business transactions rather than an underlying general want of will to purchase goods and services. For Mill, this squares with continued belief in the Say, James Mill, Ricardo proposition that there is no need to worry about a 'general oversupply of all commodities relative to 'the desire to possess'.

⁸ While Mill is correct that that the ultimate source of the upset lies in speculative over-production rather than in satiety of final demand, the immediate cause is nevertheless an actual *deficiency* of effective demand – because of the reluctance or inability of agents to undertake their normal expenditures under crisis conditions.

To sum up on Mill's interpretation of a commercial crisis. We read Mill, in his analysis of aggregate demand over a crisis period, as in effect distinguishing between the 'desire to possess' and effective or actual demand expressed in market dealings. He is however not prepared to admit that the 'desire to possess' can be deficient relative to total production. Mill's position involves a semantic difficulty with respect to the term 'demand'. Let us use 'planned demand' to correspond to Mill's 'desire to possess' - meaning demand which should lead to spending – but only when conditions are right. (Actual or effective demand (above) means demand as expressed in the market.) During a commercial upheaval, planned demand is put on hold, and funds kept in hand against possible emergencies, but when normality returns and everyone's solvency is no longer in question, spending plans which had been shelved under crisis conditions, are brought back into play; planned but postponed expenditures now become actual demand. The implication is, of course, that restoration of a normal level of activity can confidently be expected to accompany, and without delay, the reestablishment of a normal state of commercial trust and confidence. Such, we believe, is Mill's attempt to square the traditional Says Law doctrine with the indisputable fact that on occasion, a general deficiency of demand may be seen to exist.

It is interesting that Patinkin (1965, pp.649-50, footnote 25) should complain that Mill offers no explanation as to how – whether via falling interest rates or the real balance effect – demand is supposed to be stimulated and activity restored following a crisis: it rather looks as if Patinkin has not understood Mill's particular conception of the nature of a crisis. From Mill's perspective there is no need of Patinkin's stimuli to boost demand – *planned demand* has not collapsed; it is merely a matter of allowing sufficient time for the upset in trading conditions to subside, allowing businessmen to resume their ordinary dealings with each other, free from fear of banks collapsing or of debtors being unable to meet their obligations. Planned but temporarily withheld expenditure will *automatically* emerge as effective demand.

While Mill is thus prepared to allow that there may be observed, from time to time when a commercial crisis breaks out, a general excess of demand for money and excess supply of goods, he will not countenance the idea that such a state of affairs is indicative of a general deficiency of planned demand relative to productive capacity as predicted by the 'general glut' theorists. But he does not simply deny that the heretics' claim is supported by real world experience: the principal element of Mill's case against the heretics (to which we now come) is an attempted demonstration that it is actually *impossible* for a general deficiency of aggregate *planned* demand ever to occur. There cannot be a problem with 'the desire to possess'.

Mill's basic argument: planned aggregate demand necessarily corresponds to output produced

We turn now to Mill's thesis that planned aggregate demand cannot fall short of output produced. It may be, as we have just seen, that from Mill's perspective, in the abnormal conditions of a commercial crisis, actual expenditure is temporarily curtailed, but, under normal circumstances actual expenditure (effective demand) will correspond to planned demand which can be guaranteed to match the value of output produced. John Stuart Mill argues in traditional terms, *a la* Say and James Mill, that the very act of supplying goods to the market implies a corresponding demand for goods – *meaning both the ability and the will to buy*. To offer goods to the market is simultaneously to seek their equivalent in return. On this he is quite categorical:

[W]hoever brings additional commodities to the market, brings an additional power of purchase . . . brings also an additional desire to consume; since if he had not that desire, he would not have troubled himself to produce. Neither of the elements of demand [neither 'ability' nor 'desire' to purchase] therefore can be wanting, when there is additional supply; though it is perfectly possible that demand may be for one thing and the supply may unfortunately consist of another. (Mill, 1866, III, IV, 3)

There may, on this argument, be misalignment of supply and demand at the micro level, but there can be no overall excess of supply over demand. But could saving cause a problem? Mill's answer is that a readiness to save would not 'in the smallest degree affect our conclusion'. All savings, he contends (abstracting from the temporary aberration of a crisis), will – must – be productively employed; income which is saved (by the better-off within the community) will automatically pass, via investment, into the hands of the labouring class. And, if workers offer themselves for work, they must have unsatisfied needs – they can therefore be expected to spend the wages they receive. The spending of the workers can therefore be relied upon to offset the savings of the propertied classes. Total planned expenditure is *certain* to equal the value of output produced: output and employment *cannot* be constrained by deficiency of planned demand.

We need to look more deeply into the basis of Mill's confident assertion that any volume of savings must, via investment, find its way into the hands of spenders. What relationship does he suppose between investment and employment? Why does he presume that investors are necessarily willing to take up all savings on offer?

Note first with respect to investment that Mill follows classical convention by explicitly including working capital, in particular the means of subsistence of the workforce, in the category of investment or producers' goods. Sometimes, indeed, wage goods destined for the support of workers in production are the only form of producers' goods to which specific reference is made; investment is quite typically envisaged as involving simply the purchase of wage goods to maintain labour, rather than the acquisition of durable capital goods.

This treatment of capital as essentially comprised of wage goods is not of course, in itself, invalid: nevertheless there is a potential for confusion in the proposition that the resources which constitute savings by one party end up as the consumption of another. Whether Mill – giving the impression of supposing that the only spending motive to which attention need be paid in explaining aggregate demand is the desire by one party or the other, to consume – is himself confused, is something we shall have to consider. At any rate, while focusing on consumption spending by the workers, he gives no attention at all to the inducement to invest – that is to say, to the incentive for the capitalists to commit resources to the employment of labour.

In the *Principles* (Book III, Chapter XIV, 'Of Excess of Supply') Mill meets the 'general glut' protagonists head on. He states his intention of dealing with the question of the possible deficiency of aggregate demand by examining separately 'the two elements of demand' – 'the desire to possess' and 'the means of purchase'. This is of course where, so to say, we came in: the famously misquoted passage is introduced to establish that the ability to purchase cannot fall short of the value of output produced. The *ability* to buy thus dealt with, Mill turns to the crucial matter of the *desire* to buy.

Mill is determined to demolish the 'heretical' thesis that 'the general produce of industry may be greater than the community desires to consume'. He seeks to demonstrate that, no matter how large a proportion of their income the wealthy save, demand and employment will not be affected.

For what do these persons do with their savings? They invest them productively; that is, expend them in employing labour. In other words, having purchasing power belonging to them, more than they know what to do with, they make over the surplus of it for the general benefit of the labouring class. Now, will that class also not know what to do with it? Are we to suppose that they too have their wants perfectly satisfied, and go on labouring from mere habit? Until this is the case; until the working classes have also reached the point of satiety – there will be no want of demand for the produce of capital, however rapidly it may accumulate: since, if there is nothing else for it to do, it can always find employment in producing the necessaries or luxuries of the labouring class. . . . in whatever manner the question is looked at, even though we go to the extreme verge of possibility to invent a supposition favourable to it, the theory of over-production implies an absurdity. (Mill, 1866, III, XIV, 3)

In contending that by saving the propertied classes 'make over' their surplus purchasing power to labourers who can confidently be expected to make full use of everything that comes their way, Mill was returning to the argument he had developed earlier in his treatise (Mill, 1866, I, V, 3) against the 'common doctrine' (again associated with Malthus, Chalmers and Sismondi) that 'the unproductive expenditure of the rich is necessary to the employment of the poor'. The point he was attempting to make was that, far from luxury spending by the rich being vital for the well-being of the working class, it is in fact their saving that benefits the labour force. As reassurance to the sceptical Mill proposes the following 'extreme case' to demonstrate that, however much the well-to-do save out of their incomes, an increase in savings will not adversely affect employment through a shortfall of aggregate demand.

As it is allowable to put any case by way of hypothesis, let us imagine the most extreme case conceivable. Suppose that every capitalist came to be of the opinion that not being more meritorious than a well-conducted labourer, he ought not to fare better; and accordingly laid by, from conscientious motives, the surplus of his profits: or suppose his abstinence not spontaneous but imposed by law or opinion on all capitalists, and upon landowners likewise. Unproductive expenditure is now reduced to its lowest limit: and it is now asked, how is the increased capital to find employment? Who is to buy the goods it will produce? There are no longer customers even for those which were produced before. The goods, therefore (it is said) will remain unsold; they will perish in the warehouse. (Mill, 1866, I, IV, 3)

Then comes Mill's characteristic argument:

But this is seeing only one-half of the matter. In the case supposed, there would no longer be any demand for luxuries, on the part of capitalists and landowners. But when these classes turn their income into capital, they do not thereby annihilate their power of consumption; they do but transfer it from themselves to the labourers to whom they give employment. Now, there are two possible suppositions in regard to the labourers; either there is, or is not, an increase of their numbers, proportional to the increase of capital. If there is . . . the production of necessaries for the new population, takes the place of the production of luxuries for a portion of the old, and supplies exactly the same amount of employment which has been lost. But suppose that there is no increase of population. The whole of what was previously expended in luxuries, by capitalists and landlords, is distributed amongst the existing labourers, in the form of additional wages. We will assume them to be already sufficiently supplied with necessaries. What follows? The labourers become consumers of luxuries; and the capital previously employed in the production of luxuries is still able to employ itself in the same manner: the difference being that the luxuries are shared among the community generally, instead of being confined to a few. . . . Thus the limit of wealth is never deficiency of consumers, but of producers and productive power. Every additional capital gives to labour either additional employment, or additional remuneration.

Taking these passages together, the basis of Mill's assurance to his readers that saving, or more specifically, an increase of saving out of current income, poses no threat to the reliable absorption by planned demand of all output offered for sale. His argument may be summarised thus: (i) when the capitalists or landlords save out of their incomes, they do not hoard money, but 'turn their income into capital', which is understood to mean investing their savings in the productive employment of labour; (ii) in doing this, the wealthy savers 'make over the surplus (of their incomes) to the general benefit of the labouring class' or, in other words, do not 'annihilate' but 'transfer' their purchasing power to the labourers to whom they give employment; (iii) the workers – whether or not their number increases – have no problem in utilising the additional purchasing power which comes into their hands. Income not required by the propertied classes for their own consumption, having thus been 'transferred' to the labouring class, is naturally expended in purchasing the goods and services demanded by that class. Either the same workers enjoy a larger share of national output, or additional workers spend their wages on an augmented supply of wage goods. All output produced is absorbed by the consumption of the rich and poor together in society; a general want of planned expenditure is not on the cards.

Whose demand counts?

Let us use a simple model to examine Mill's thesis. Suppose a two-sector surplus-producing economy. The wage goods sector employs 70 units of labour to produce (per annum) £100 worth of wage goods; the luxury goods sector employs 30 labour and produces £40 worth of luxury goods. The wage rate is £1 per unit of labour per annum. The workers spend all their incomes on wage goods, and the capitalists, who employ the workers, spend all their profits on luxuries. The annual wage bill totals £100 (£70 paid in wage goods production and £30 in

production of luxuries), all of which goes to purchase wage goods; total profits are £40 (£30 in the wage goods sector and £10 in luxury goods) and, in the situation initially assumed, those profits are wholly expended on the acquisition of luxury goods. (For simplicity we exclude the possibility that the capitalists consume a share of basic wage goods.)

Suppose there now occurs Mill's postulated outbreak of thrift, with the capitalists deciding to cut out their luxury consumption. What happens then? The capitalists, we are told, 'invest their savings productively', they 'expend them in the employment of productive labour'. (We suppose that wage goods represent all the producers' goods required to support labour in employment.) Thus the capitalists' demand is switched from luxuries to wage goods to be used 'to put labour into motion'. Following this change in the pattern of demand, total employment remains at 100, but wage goods production replaces luxury production; with all labour now engaged in the wage goods sector, the output of wage goods is increased (say, proportionately) from £100 to £143 worth of wage goods. There are then, according to Mill, two possibilities: the labour force increases (say, by immigration) *pari passu* with the increase in the supply of wage goods, or it remains as before.

Before considering these alternative scenarios regarding the size of the labour force, we ask: why should it be supposed in the first place that labour released from luxury production will *automatically* be re-deployed to the production of wage goods? If the overall current demand for output has suddenly slumped (and in Mill's story, nothing else apart from the onset of thrift seems to be happening) why should capitalists in these circumstances wish to *expand* production capacity by so increasing the stock of resources as to be able to put 43% *extra* labour 'into motion'? If workers actually are transferred from producing luxuries to producing wage goods, the current supply of wage goods will, it is true, be consumed by the whole existing (100) labour force, but – the question is - who is to consume the *additional* supply of wage goods that will result from the altered pattern of production? The profitable transfer of workers between sectors will depend not on the fact that the present workers are sure to consume the wage goods their wages command, but on the *capitalists*' expectations about the existence of a market for the extra output of wage goods (£43) which the expanded workforce (from 70 to100) in the wage goods sector would produce in the future.

And, *if* that increased output of wage goods were to be taken up by a proportionate increase in the total employment (from 100 to 143) same issue arises again: the means to support a *further* increase in the number employed (from 143 to 204) will be created – but will these resources be put to use? Again, it is not their own demand for wage goods that ensures employment of workers, but the *employers*' expectation that there will be sufficient future demand to yield a profit on the further output these 204 units of labour will produce.

The way in which Mill tells the story is misleading. Extra workers may well consume the additional supply of wage goods, but, if they do, it is not – as Mill would seem to imply – these workers' own natural willingness to purchase wage goods that is the critical factor in ensuring that an extra supply of wage goods does not go to waste. Additional employees will be able to buy wage goods *only if the capitalists think it worthwhile to invest in their employment*. In our example, the unemployed producers of luxuries, will be transferred to

wage goods production only if the capitalists believe that an additional supply of wage goods (beyond what these workers transferred to that sector will themselves consume) can be sold at a profit. And so on – for an increased output of wage goods to be taken up via additional employment, the determining factor is always the capitalists' expectations that profit can be made (that surplus value can be raised) from the sale of the surplus output that will be produced. It would seem therefore that Mill is focusing on the wrong motive for expenditure. He makes much of the workers' readiness to spend, but that is beside the point. As regards the *generation* of demand, it is the motivation of the capitalist employers that is crucial - whether or not the capitalists consider future prospects of profit (and future labour requirements) sufficiently attractive to justify 'putting into motion' the labour in question. The workers cannot be regarded as independent agents whose needs create an alternative source of demand which will automatically compensate for a cut in consumption by the propertied classes.

The alternative possibility envisaged by Mill is that following the postulated outbreak of thrift amongst the wealthy, no increase takes place in the number of available workers and the surplus luxury goods are distributed to the existing workforce. Presumably the supposition is that the capitalists attempt to take on more labour, and that the supply of labour being completely inelastic, real wages are bid up bringing the workers to a luxury-goods-consuming level of income. At any rate, Mill is again arguing that the workers will consume what the thrifty capitalists have left aside. Consider what this means in terms of our example. The output of luxury goods previously purchased out of profits is now acquired by the workforce. In other words the workers have command not only of the current output of wage goods, but of everything else produced – the wage bill paid by the employers constitutes purchasing power over all national output. The rate of profit is reduced to zero with the disappearance of the capitalists' share of output. That does not seem conducive to equilibrium at full employment in a capitalist economy.

Let us pause to take stock. Why was Mill so confident that, even in the (notional) extreme case of the propertied classes being stricken by conscience into giving up luxury living, aggregate demand for the economy's output would be kept up? There seem to be two possibilities. On the face of it, it might appear that, in focusing on the readiness of workers to spend on consumption, Mill had simply lost sight of the critical fact that the capitalists' willingness to undertake investment is the crucial factor in ensuring that the available supply of wage goods does not go to waste: the workers' purchasing power depends on their being employed. Did Mill fall into the error of imagining that consumption spending, financed by the 'transfer' of purchasing power to the labourers, was *all* that mattered in maintaining the level of demand in the face of increased saving by the well-to-do? Could his mode of representing capital goods by wage goods have led to led to that confusion? ⁹

⁹ Note that Hollander (1985, pp.374-5) admits that Mill's discussion of these matters is less than satisfactory; thus: '... the increased outflow of wage goods is at the expense of other categories of commodities and should not be confused with the net expansion of output resulting from the expanded capacity of the system. Mill seems to have confused the two.'... [Mill states] "the production of necessaries for the new population, takes the place of the production of luxuries for a portion of the old". Hollander comments, 'This may be true,

While it is certainly the case that the incentive for capitalists to invest receives no explicit consideration in Mill's argument to the effect that the savings of the wealthy are offset by the spending of the workers, it is difficult to believe that he could have taken workers' readiness to spend on consumption goods to be the sole factor in maintaining demand and employment. It is clear enough from Mill's account – even though nothing whatever is said about the prospective profitability of investment - that it is investment which effects the transfer of purchasing power from savers to workers. And as regards investment, Mill was well aware that 'the producer's object and aim is to derive a profit from his capital'. Bearing in mind that he devotes a whole chapter of the Principles (Book II, Chapter XV) to explaining that a prospect of profit is the necessary inducement for capitalists to postpone consumption, put in personal effort and to risk resources on investment, it is improbable that in the context of his 'maximum savings' example Mill simply overlooked the investment incentive: he must have had some explanation of investors' behaviour in mind. What we suggest - going by what Mill says elsewhere – is that he took it for granted that properly-directed investment in the employment of labour must necessarily (crisis conditions aside) be profitable to the capitalist, implying that there is no cause to fear that savings may not always be accompanied by an equal volume of intended investment.

Saving, Investment and Profits

On what grounds is Mill's confidence that planned investment can be relied upon to match savings based? Does he rely on changes in the rate of interest to bring savings and intended investment into equality? While he does speak elsewhere of the rate of interest as determined by demand and supply of loanable funds, in the context of his maximum savings example, there is no hint at all of interest playing an equilibrating role. There is no suggestion that, with the postulated sharp increase in savings, interest falls so as to bring savings and investment into line by mutual adjustment – no sign that Mill sees the balancing of saving and investment as the *ex post* outcome of a market process. Mill's position appears to be that no 'balancing' is required – that whatever addition is made to savings, an equal amount of investment will automatically fill whatever savings gap emerges. This belief would, in turn, have to depend on the presumption of adequate profitability to the investor of *whatever* volume of investment was required to match the current volume of savings.

As to the profitability of intended investment, Mill holds that (at least so long as the direction of investment is appropriate and resources are available at acceptable cost) the capitalist can be confident of profit on his outlay. The generation of profit, Mill believes, is the natural and characteristic outcome of investment in the employment of productive labour. He explains what he understands to be the true source of profits:

It thus appears that the two elements on which, and which alone, the gains of the capitalists depend, are, first, the magnitude of the produce, in other words the productive power of labour; and secondly, the proportion of the produce obtained by the

but it does not in itself explain the source of purchasing power for the *net* flow of output from the expanded national capacity once in place.'

labourers themselves; . . . These, therefore are . . . the circumstances which determine the rate of profit: and it cannot be in any way affected except through one or other of them. . . . And there is no other combination of circumstances, in which the general rate of profit of a country, in all employments indifferently, can either rise or fall. (Mill, 1866, II, XIV, 7)

For Mill, that is to say, the source of profit lies in the ability of productive labour to produce a surplus of output over the renewal of all means of production including the maintenance of the labour employed. He insists – no qualification allowed – that the only factors on which the profit of the capitalist depends are the productivity of labour and the share of the surplus over all other costs of production which falls to labour. As Mill fully appreciates (*Principles*, II, XV, 7) he is simply reiterating Ricardo's theory of profit. What is significant in the present context is that Mill apparently accepts, without any reservation, all that Ricardo's analysis might be taken to imply. As to the implications, Ricardo himself states:

There cannot then be accumulated in a country any amount of capital which cannot be employed productively, until wages rise so high in consequence of the rise of necessaries, and so little consequently remains for the profits of stock, that the motive for accumulation ceases. (Ricardo, 1821, p.193)

Joseph Schumpeter and Samuel Hollander each spell out the full implications of the unqualified Ricardian theory. Thus Schumpeter (1954, p.261, fn.8) 'except for a rise in the real value of wages, investment is possible to an infinite extent without depressing the rate of profits'. Likewise Hollander (1979, p.522): 'The Ricardian position [is] that in the absence of the operation of diminishing returns, or any other force causing 'real' wages to vary, the demand for investment funds based upon capital productivity will be infinitely elastic . . .' That, we believe, is exactly how Mill interpreted Ricardo's theory: his presumption seems to have been that, given appropriate conditions in respect of productivity and real wages, the profitability of investment can be taken for granted. The trouble is that Ricardo's abstraction from, or neglect of, the implications for anticipated profits of expected market conditions makes unreserved adoption of his theory of profits completely inappropriate for Mill's defence of the Say's Law proposition that demand depends on supply. The fact that under given circumstances the productivity of labour may be such as to make possible a *physical* surplus of output over all costs including the wage bill, does not mean that at the same time market conditions, that is to say the state of demand for output and expected prices, are necessarily such that the investor can look forward to a corresponding return in terms of surplus value. Output must be expected to sell at a profit in terms of value to induce an investor to commit his resources to productive activity.

It is evident that Mill's understanding of investment determination is questionable. He does not seem to appreciate that a prospective value surplus, not just a potential surplus of physical output is essential for production and investment to be undertaken. He insists (1866, II, xiv, 7) that 'profit arises, not from the incident of exchange, but from the productive power of labour, and the general profit of the country will always be what the productive power of labour makes it, whether any exchange takes place or not'. But what if, say, a brick maker producing more than enough bricks to make a profit if these bricks are sold, finds stocks of unsold

output building up, because investors elsewhere in the economy are for some reason reluctant to risk their capital? It certainly does matter to the brick maker whether 'exchange takes place or not'. Nor does it follow – as Mill claims (1866, II, XV, 6) – from the fact of the physical productivity of the economic system that, 'if the labourers of a country collectively produce twenty per cent more than their wages, profits will be twenty per cent, whatever prices may or may not be'. Mill seems to be missing the point that the twenty per cent surplus of real items must be sold for money if the employers are to profit from the employment of these labourers. For the transformation of a physical surplus into a value surplus – which of course is what the capitalist is seeking - exchange and prices do matter. Mill certainly appears to us to be labouring under a misapprehension when he dismisses as superficial misunderstanding the 'popular' view that 'it is by the sale of their goods that [capitalist] replace their capital and add to its amount'.

Mill's several 'fundamental propositions concerning capital' indicate a general belief that, to explain levels of output, investment and employment within the economy it is to supply-side factors - the availability of producers' goods and the availability of labour - and not to conditions of demand for output that we should look. As a corollary of the unexceptional proposition that 'industry is limited by capital', Mill states:

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 [of capital] which is destined [to the maintenance of labourers] may (supposing no alteration in anything else) be indefinitely increased, without creating an impossibility of finding them employment: in other words, if there are human beings capable of work, and food to feed them, they may always be employed in producing something. (Mill, 1866, I, V, 3)

Accordingly, that demand for output should not be seen as a constraint on investment and employment is affirmed explicitly in Mill's 'fourth proposition concerning capital':

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, IV, 9) (Emphasis added)

That proposition is accompanied by Mill's argument (1866, I, V, 9) that it is to the benefit of the labouring class if a well-to-do individual saves from his income, rather than spending his abundant purchasing power on luxuries. Mill's point is that saving adds to the stock of capital available for the employment of labour – more wage goods are produced and accordingly more workers employed; the alternative is that luxury goods are enjoyed by the wealthy consumer with no increase in employment. So Mill asks, would those who (*a la* Malthus) advocate spending rather than saving by the rich follow the logic of their position, and argue that it is more beneficial to the poor for the well-to-do spend on

luxuries rather than directly contribute some portion of their incomes to the poor by paying the Poor Law dues? We see again here how Mill takes it for granted that purchasing power put aside from consumption will *always* be employed to buy goods and services, whether it is directly transferred into the hands of paupers (plausible) or into indirectly, via the hands of business borrowers, as payment to labourers who, it is assumed, are sure to be employed (questionable).¹⁰

From Mill's perspective, all available resources can safely be put into capital accumulation. The volume of worthwhile investment cannot be limited by want of demand for output. Demand comes into the reckoning only in the secondary role of determining the appropriate distribution among the various sectors of the economy of the savings-determined volume of investment. And so Mill concludes, with a blast directed at the 'heretics':

Nothing can be more chimerical than the fear that the accumulation of capital should produce poverty and not wealth, nor that it will ever take place too fast for its own end. Nothing is more true than that it is produce which constitutes a market for produce, and that every increase of production, if distributed without miscalculation among all kinds of produce in the proportions which private interest would dictate, creates, or rather constitutes, its own demand. (Mill, 1844, p.278)

Note that, in considering capitalists' willingness to invest under normal conditions (that is, in the absence of the dramatic circumstances of a commercial crisis), Mill makes no mention whatever of the phenomenon he emphasised so strongly as affecting investors' behaviour under crisis conditions – liquidity preference. Mill certainly understands how, when in a crisis confidence collapses, the result is a desperate desire for the security which derives from holding money; but that insight is not carried over to his general discussion of investment behaviour. That is surely inconsistent: if uncertainty about investment outcomes in the particular circumstances of a commercial crisis causes businessmen to withhold expenditure on producers' goods, is it not readily conceivable that, more generally, uncertainty with regard to the longer-term results of investment projects might also cause investors to hold back from committing their capital? Even if a businessman is reasonably confident of the solvency of those with whom he is currently dealing there remain plenty of reasons for uncertainty as to the prospects of a venture under consideration. But Mill seems to believe that, at all times other than those of a commercial crisis, there is nothing to hold back investors, if they have resources to hand, from spending. Investors, he apparently supposes, can always be confident of a positive outcome from exploiting the opportunities which, it is presumed, will necessarily present themselves.

There is surely here a serious inconsistency in Mill's thinking. It might seem that, in his account of crises, Mill had opened a door to a realistic consideration of investment decision-making generally under normal circumstances – in other words, under conditions that is to say, not of crisis, but nevertheless of uncertainty. That door was however slammed shut when he came to consider the contention of Malthus and the others that situations could arise in which – even without the drama of a commercial crisis – investors might be unwilling to risk their resources on the acquisition of illiquid capital goods. The possibility is not admitted that, even though resources may be available, opportunities for the profitable utilisation of these resources in investment may not appear to exist anywhere in the economy.

¹⁰ 'I conceive that a person who buys commodities and consumes them himself, does no good to the labouring classes; and 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 amount of their employment.' (Mill, 1866, I, V, 9)

Mill's perspective

It seems clear that, at root, on the question of the possibility of an economy-wide want of demand, J S Mill remained loyal to the doctrine of his father and J B Say. Making the point in the *Principles* (1866, Book III, Chapter XIV, 4) that 'a general over-production of commodities' is not something to be feared, Mill acknowledges his predecessors and mentors,

... it is but justice to two eminent names, to call attention to the fact that the merit of having placed this most important point in its true light belongs principally, on the Continent, to the judicious J B Say, and in this country to Mr Mill.

That acknowledgement is, we think, highly significant: we read it as the explicit give-away that Mill's understanding of the working of a macro economy is – despite his admission of the possibility in certain circumstances of an excess demand for money and excess supply of commodities - diametrically opposed to that of Keynes.

Keynes holds that it is effective demand that induces production; Mill's position is that production creates demand. The doctrines of Messrs Say and James Mill are so firmly ingrained in his mind that he cannot see any merit in the alternative view – that 'the desire to possess' might, on occasion, be insufficient to take up all the output the economy is capable of producing. He does - perforce, because the observed facts of a general flight to money and excess supply of commodities in times of crisis cannot be denied - break with the received view, but (as we have seen) makes a point of emphasising that such a state of affairs as he admits is not - as argued by 'Malthus, Chalmers and Sismondi' - attributable to a deficiency of planned demand. Mill is trying desperately to save the Say-James Mill position that production guarantees an equivalent volume of planned demand. His argument seems though to involve an element of sophistry – he has it that 'the desire to possess' is reliable and no source of trouble, while at the same time admitting that 'actual' demand may indeed be deficient. Thus according to Mill, demand (in one sense) is determined a la Say and James Mill by production, while simultaneously demand (in another sense) may indeed fall short of the value of output produced. But Mill cannot have it both ways. From the 'heretical' perspective, what is relevant to the determination of output and employment is actual demand as expressed in the market; agents may harbour a plan or 'desire to possess', but if for whatever reason they do not act, regardless of the supposed 'desire to possess', excess supplies of goods and labour will appear. Actual unemployment corresponds to actual demand.

The fact that Mill's thinking was dominated by the conventional doctrine is clear not only from his tribute to his father and J B Say, but from his categorical rejection of the contrary views of Malthus, Chalmers and Sismondi. We haven't here the space to review in detail the analyses of Say, James Mill and other upholders of the 'law of markets' with which Mill was in accord, but Steven Kates (himself a present-day proponent of that 'law') conveniently summarises (2003, pp.2-3 and p.7) the substance of the orthodox doctrine as understood in the early nineteenth century. Thus:

There [was] clearly no need to fear that insufficient demand will lay an economy low. This was the core conclusion of the law of markets, that whatever else might befall an economy, too little demand relative to production would never occur.

Or, in other words:

Demand is constituted by supply. Aggregate demand is not independent of aggregate production but is identical with it. A community's purchasing power is constituted by its value added.

Kates adds that

[T]he one issue that was raised was that saving might be excessive yet this too, was seen as unimaginable. Capital formation could not be too large irrespective of how much of a nation's resources might be devoted to it. . . . [James] Mill thus denied that demand deficiency could occur and in particular that it could not occur due to oversaving. He insisted that because demand is constituted by supply the purchasing power to buy everything produced was there and because of the infinity of demand all available production would be absorbed into sales.¹¹

Such was the climate of opinion in which J S Mill grew up, and such were the views to which, in principle, he consistently remained wedded. Probably in much the same way as it is difficult today for an economist of Keynesian persuasion to see world from the perspective that production determines demand, so it must have been difficult for one brought up in the Say-James Mill tradition to comprehend the radically different conception espoused by the 'heretics'. As Kates (above) puts it, the situations predicted by the 'heretics' were, from the orthodox viewpoint, 'unimaginable'. J S Mill, himself revealing a want of imagination in failing to grasp what the 'heretics' were getting at, complained (1866, III, XIV, 1) that [their] 'doctrine appears to me to involve so much inconsistency in its very conception, that I feel considerable difficulty in giving any statement of it which shall be at once clear, and satisfactory to its supporters'.

Mill was however very clear about what he himself believed to be the correct understanding of the working of the economy. We have already quoted his categorical assertion of the basic Say-James Mill theory of aggregate demand – the proposition that: '[W]hoever brings additional commodities to the market brings an additional power of purchase . . . brings also an additional desire to consume; since if he had not the desire, he would not have troubled himself to produce'.

As we understand Mill, the above proposition – that production determines demand – is fundamental to his thinking: it underpins all of what he says about aggregate demand, output and employment. Thus: (1) As we have already noted, in his account of commercial crises, Mill was anxious to reconcile the view of his father and J B Say with the observed phenomena of a crisis, which left him in the rather awkward position of arguing that a 'general glut' of commodities is actually possible, but not because the 'desire to possess' has failed. (2) Mill's

¹¹ As we have seen with J S Mill, the threat that saving out of income might upset the Say-James Mill applecart is snuffed out by turning savings into a form of consumption.

several 'propositions concerning capital' make sense only on the understanding that an autonomously occurring general deficiency of demand is an impossibility – that if production capacity is created, and goods are produced, corresponding additional demand can be relied upon to match that supply. (3) The contention that capitalists' profits are determined by the productivity of labour and the share of output going to labour depends for its validity on the presumption that there is no problem in finding a market for the output produced. We incline to the view that Mill's contention that (given appropriate conditions of productivity and wages) that investment without limit will be worthwhile derives from the Say's Law belief that no constraints need be feared from the side of demand, rather than, *vice versa*, that the Ricardian theory of profit justifies confidence in Say's Law.

The very act of supply, Mill emphatically states, implies a corresponding 'desire to possess'. That conception of economic activity can be represented by the expression C-M-C: commodities are produced, sold for money and the money used to buy other commodities. The purpose of economic activity is to acquire commodities (for consumption); the producer either consumes his own product or exchanges it for the products of others. Money is no more than an intermediary which facilitates exchange – the cycle begins and ends with commodities; sales receipts will be re-spent: even if the possibility of some delay in completing the business is allowed, no transactor intends to pull out of the market in the middle of the exchange process with money in hand instead of goods. In that situation 'the means of purchase' and 'the desire to possess' are both automatically present: it is in fact the desire to possess goods that induces the supply of goods to the market.

That schema may adequately represent what happens in a pre-capitalist economy with, say, cultivators taking produce to weekly markets and exchanging their surplus corn or cabbages for the clothes or tools brought to market by village craftsmen; but it does not describe what underlies commercial activity in a capitalist economy. The object of the capitalist is to turn money into more money – to realise surplus value by employing capital in productive activity. The appropriate representation is therefore: M-C-M'. Money is used to buy goods (including labour services) which are transformed though a process of production into goods of greater value, which are then sold at a profit, at a rate calculated in terms of money The capitalist, having started with a quantity of money capital aims to complete the cycle not with goods, but with money - *more money* than he started with. The purpose of the operation is to capture surplus value, not end up with an expanded stock of goods.

J F Henry (2003, p.193) focuses on this fundamental feature of capitalist reality, making the point that the economic world as envisaged by Say and the Mills is '*not* the economy that exists'. He cites Keynes (and Marx) as making exactly the same point. Thus Keynes (1933) in an early draft of what would become the *General Theory* (Keynes, 1979, pp.66-82), distinguishes between what he calls a *real-wage* or *co-operative economy* and an *entrepreneur economy* (i.e. between a system in which returns are certain to cover costs and one in which that is not guaranteed¹²), and remarks:

¹² 'In a co-operative or neutral economy, in which sales proceeds exceed variable cost by a determinate amount, effective demand cannot fluctuate; and it can be neglected in considering the factors which

The distinction between a co-operative economy and an entrepreneur economy bears some relation to a pregnant observation made by Karl Marx. . . . He pointed out that the nature of production in the actual world is not, as economists seem often to suppose, a case of C-M-C', i.e. of exchanging commodity . . . for money in order to obtain another commodity . . . That may be the standpoint of the private consumer. But it is not the attitude of *business*, which is a case of M-C-M', i.e. of parting with money for commodity . . . in order to obtain more money.¹³ This is important for the following reason.

The classical theory supposes that the readiness of the entrepreneur to start up a productive process depends on the amount of value in terms of product which he expects to fall to his share; i.e. that only an expectation of more *product* for himself will induce him to offer more employment. But in an entrepreneur economy this is a wrong analysis of the nature of business calculation. An entrepreneur is interested, not in the amount of product, but in the amount of *money* which will fall to his share. He will increase his output if by doing so he expects to increase his money profit, even though this profit represents a smaller quantity of product than before.

The explanation of this is evident. The employment of factors of production to increase output involves the entrepreneur in the disbursement, not of product, but of money. The choice before him in deciding whether or not to offer employment is a choice between using money in this way or in some other way or not using it at all. . . . The only question before him is to choose . . . that way which yields the largest profit in terms of money.

It is worth noting that Thomas Chalmers (1832, pp.164-6), in a passage which Mill must have read, saw very clearly the situation of the capitalist entrepreneur. (Emphases in original):

[W]hen a merchant brings commodities to the market, it is not generally in quest of other commodities to be given in return for them; . . . That is not the way of it. The proper object of the merchant is not to obtain, in return for the articles in which he deals, any one species of commodities more than another; but it is to extend his general power of purchasing all commodities. . . . The great object of the monied capitalist, in fact, is to add to the *nominal* amount of his fortune. . . . To advance his capital, as *estimated in money*, is the only way in which he can advance his interest as a merchant.

... [T]he great aim of every trading capitalist is, to increase his fortune estimated in money. Commodities are not his terminating object, save in the spending of his revenue, and when he purchases for the sake of consumption. In the outlay of his capital, and when he purchases for the sake of production, money is his terminating object.¹⁴ If he starts at present with a certain sum expressed in pounds, shillings and pence, the great

determine the volume of employment. But in an entrepreneur economy the fluctuations of effective demand may be the dominating factor in determining the volume of employment.' (Keynes, 1979, p.80)

¹³ Compare Marx: 'The path C-M-C proceeds from the extreme constituted by one commodity, and ends with the extreme constituted by another, which falls out of circulation and into consumption. Consumption, the satisfaction of needs, in short use-value, is therefore its final goal. The path M-C-M, however, proceeds from the extreme of money and finally returns to that same extreme. Its driving and motivating force, its determining purpose, is therefore exchange-value.' (Marx, 1867/1976, p.250)

¹⁴ Quoted, with approval, by Marx (1867/1976, p.254, fn.7)

end of his exertion or enterprise is, that after the current speculation is completed, he might start anew on another speculation, with a larger sum, expressed as before in pounds, shillings and pence; whether these have meanwhile increased or decreased in value.

Chalmers concludes:

Had this consideration been kept in view, we feel persuaded that the doctrine of the impossibility of a universal glut would never have been framed.

Chalmers's observation goes straight to the heart of the matter – he perceived very clearly that the proponents of the orthodox doctrine had failed to understand the nature of commercial operations in a capitalist economy, and the motivation which powers the system.

It is from Mill's adherence to the goods for goods (*C-M-C*) conception of economic activity that the fundamental difference between his and the alternative 'heretical' (and Keynesian) vision stems. Mill's analysis of aggregate demand and employment is inappropriately tied to the conditions of a pre-capitalist, pre-industrial world. Mill's treatment fails to engage with the realities of his contemporary world. In the pre-industrial context the very act of going to the market implies a corresponding desire to acquire other goods to bring home.

But in a capitalist system (Keynes's entrepreneur economy) the object of the exercise is to come away with a larger sum of money than that with which the entrepreneur started. The use money receipts to buy goods means not the natural completion of a market operation already started, but embarkation on a *new* venture. The potential for trouble is recognised when it is appreciated that the reinvestment of the proceeds from a completed operation is not automatic. Whether or not the entrepreneur applies his funds to a new project will depend on his assessment of (necessarily uncertain) future market conditions and the prospective profitability of the project; it is perfectly possible that an entrepreneur may come to the conclusion that the present is not an opportune time to commit his own (or borrowed) funds to a risky venture of uncertain prospects. Caution – that is to say, liquidity preference - may be the dominating consideration in the mind of the investor and a demand for money, or comparably safe assets, may consequently take the place of orders for new capital goods.

The critical difference between the *C-M-C* conception of Sayian orthodoxy and the *M-C-M*' conception of Marx and Keynes is that while the former envisages market activity as consisting of routine exchanges in which goods are offered in order to acquire goods, the latter recognises significant features of the real-world economy. Thus: (1) that in a capitalist system the purpose of a commercial venture is to turn money into more money; (2) that receipt of money from sales is not an intermediate stage in a market operation, but marks the results and completion of an operation; and (3) that money receipts will be re-spent on a new venture only if expectations of profit are, in the mind of the investor, sufficiently attractive to offset the inherent risks of a new operation. With *C-M-C* supply of goods is indeed demand for goods; with *M-C-M*' it is the expectation of sales, that is, the effective demand for goods, that induces expenditures on labour and other resources necessary to supply these goods to the

market. Production and employment require prior investment in fixed and working capital and investment depends on future sales and expected profitability. Demand determines supply.

It would appear that Mill, apparently without realising what he was doing, was propounding an analysis of aggregate demand which might have been applicable to the case of a precapitalist agricultural economy, in which goods *are* offered to buy goods. But as regards a capitalist industrial system, his analysis was wide of the mark.

Conclusion: no significant misrepresentation

We suggest that, in the light of the views expressed by Mill, Keynes's characterisation of Mill as an orthodox upholder of the 'classical' doctrine that 'supply creates its own demand' should not be considered misleading or inaccurate. Keynes did, it is true, misinterpret the passage he cited from Mill, but he did not misrepresent Mill's fundamental position – it was indeed the case that Mill held by the doctrine that 'the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product'.

While Mill did not accept 'Say's Identity', nor agree with his father and Say that an excess demand for money along with an excess supply of goods could never occur, he was nevertheless adamant in his contention that to explain the level of activity within the economy, it was to production - not demand - that one must look. The idea that the very act of producing for the market implies a corresponding intention to purchase from the market is categorically not Keynesian. As Marx said of Hegel, so Keynes might have said of Mill – that he required 'to be set the other way up' – that aggregate planned demand should be recognised as the independent determinant of output and employment, rather than demand being understood as a mere reflection of supply.

References

Becker, G A and W J Baumol (1952), 'The Classical Monetary Theory: The Outcome of the Discussion', *Economica*, 19, pp.355-76.

Chalmers, T (1832), *On Political Economy in Connexion with the Moral State and Moral Prospects of Society*. Glasgow: William Collins. Reprinted by Augustus M Kelley, New York, 1968.

Davis, J R and F J Casey, Jr (1977), 'Keynes's Misquotation of Mill', *Economic Journal*, 87, pp.329-30.

Davis, J R (1979), 'Keynes's Misquotation of Mill: Further Comment', *Economic Journal*, 89, pp.658-9.

Henry, J F (2003), 'Say's Economy', in Kates S (2003), pp.187-98.

Hollander, S (1979), The Economics of David Ricardo. London: Heinemann.

Hollander, S (1985), The Economics of John Stuart Mill. Oxford: Basil Blackwell.

Hollander, S (1987), 'Mill, John Stuart as an economist'. In *The New Palgrave: A Dictionary of Economics*, ed. J Eatwell, M Milgate and P Newman. London and Basingstoke: Macmillan, pp.471-6.

Kates, S (1998), Say's Law and the Keynesian Revolution: How Macroeconomic Theory Lost its Way. Cheltenham: Edward Elgar.

Kates, S (ed.) (2003), Two Hundred Years of Say's Law, Cheltenham: Edward Elgar.

Keynes, J M (1936), The General Theory of Employment, Interest and Money. London: Macmillan.

Keynes, J M (1973), *Collected Writings*, Vol. XIII, *The General Theory and After, Part 1, Preparation*, ed. D Moggridge. London and Basingstoke: Macmillan for the Royal Economic Society.

Keynes, J M (1979), *Collected Writings*, Vol. XXIX, *The General Theory and After: A Supplement*. ed. D Moggridge. London and Basingstoke: Macmillan for the Royal Economic Society.

Knight, F H (1937), 'Unemployment and Mr. Keynes's Revolution in Economic Theory', *Canadian Journal of Economics and Political Science*, 3, pp.100-23.

Leijonhufvud. A (1968), On Keynesian Economics and the Economics of Keynes. New York: Oxford University Press.

Marshall, A and M P Marshall (1881), *The Economics of Industry* (2nd edition). London: Macmillan.

Marx, K (1867/1976), Capital, Volume One. London: Penguin Books.

Mill, J S (1844), *Essays on Some Unsettled Questions of Political Economy*. Vol. IV of Collected Works of John Stuart Mill, ed. J M Robson (1963-85), Toronto: University of Toronto Press.

Mill, J S (1866), *Principles of Political Economy* (People's Edition). London: Longmans, Green, Reader and Dyer.

Mummery, A F and J A Hobson (1889), *The Physiology of Industry*. New York: Kelly and Millman (1956).

Mundell, R A (1968) Man and Economics. New York: McGraw-Hill.

Patinkin, D (1965), *Money, Interest and Prices* (2nd edition). New York: Harper & Row.

Ricardo, D (1821), The Principles of Political Economy and Taxation. London: Dent (1966).

Schumpeter, J A (1954), History of Economic Analysis. London: Allen & Unwin.

Sowell, T (1994) Classical Economics Reconsidered. Princeton NJ: Princeton University Press.

Whitaker, J K (ed.) (1975), *The Early Economic Writings of Alfred Marshall*. London: Macmillan for the Royal Economic Society.