The General Theory is difficult; whose fault is that?

Victoria Chick¹

Abstract: Keynes's exposition in the General Theory is certainly not easy. In many places, however, it is not actually misleading, while in others it is. Contrary notions and conflicting ideology are still causing misunderstandings and this elementary ground is revisited here.

Key-words: Keynes; involuntary unemployment; effective demand.

A Teoria Geral é um livro dificil: quem é o culpado?

Resumo: A exposição feita por Keynes na Teoria Geral não é fácil de entender. Em várias partes, entretanto, ela não é verdadeiramente traiçoeira – embora em outras partes seja. Noções contrárias e ideologias conflitantes ainda causam muitos desentendimentos, e este campo elementar das discussões é revisto aqui.

Palavras-chave: Keynes; desemprego involuntário; demanda efetiva.

JEL: B2: E12.

Introduction

Generations of students and even fellow academics have told me, or demonstrated all too clearly, that Keynes's *General Theory* is very difficult to understand. Samuelson, in his bad-tempered assessment written at the time of Keynes's death, blames Keynes:

1 University College London

[The General Theory] is a badly written book, poorly organized (...). It is not well suited for classroom use. It is arrogant, bad-tempered, polemical, and not overly generous in its acknowledgements. It abounds in mares' nests or confusions: involuntary unemployment, wage units, the equality of savings and investment, the timing of the multiplier, interactions of marginal efficiency upon the rate of interest, forced savings, own rates of interest, and many others.(...)

(...) [T]he *General Theory* is an obscure book, so that would-be anti-Keynesians must assume their position largely on credit unless they are willing to put in a great deal of work and run the risk of seduction in the process. The *General Theory* seems the random notes over a period of years of a gifted man who in his youth gained the whip hand over his publishers by virtue of the acclaim and fortune resulting from the success of his *Economic Consequences of the Peace*. (Samuelson 1946: 318-19)

This is only the best known of a string of similar complaints. Harry Johnson, perhaps himself seduced by Keynes's own love of metaphor, wrote:

The General Theory is no seamless garment of tightly woven theory. It is a variegated patchwork applied to the classical coat, which has become frayed and torn by the wear and strain of a society growing and changing too rapidly to be well suited with the same old clothes.[2] The patches are of many cloths and colours; like garments churning in a washing machine they rose to the surface, to be pulled down again by strong currents which again forced them up to the light of day—in the variety and multiplicity of idea circulating in Keynes's head. (Johnson 1974:65). He goes on in this vein for another nine lines!)

Not all complaints arose from unsympathetic sources. Here is Galbraith:

[The General Theory] is a work of profound obscurity, badly written and prematurely published. ...Some of its influence derived from its being extensively incomprehensible. (Galbraith 1975:218)

Keynes, however, puts a burden on the reader as well as the author:

It is, I think, of the essential nature of economic exposition that it gives, not a complete statement, which, even if it were possible, would

² This is an extraordinary statement, which it would be out of place to comment on at length here; but it is important to question the assertion that the economy had *outgrown* corn-economy reasoning, as he suggests. Did a real exchange economy ever exist?

be prolix and complicated to the point of obscurity but a sample statement, so to speak, out of all the things which could be said, intended to suggest to the reader the whole bundle of associated ideas, so that, if he catches the bundle, he will not in the least be confused or impeded by the technical incompleteness of the mere words which the author has written down, taken by themselves.

This means, on the one hand, that an economic writer requires from his reader much goodwill and intelligence and a large measure of cooperation; and, on the other, that there are a thousand futile, yet verbally legitimate, objections which an objector can raise. In economics you cannot *convict* your opponent of error; you can only *convince* him of it. And, even if you are right, you cannot convince him, if there is a defect in your own powers of persuasion and exposition or if his head is already so filled with contrary notions that he cannot catch the clues to your thought which you are trying to throw to him. (from a passage thought to be a draft Preface for *The General Theory*, XIII, 470; emphasis in original).³

See also his annotation to his copy of Hayek's 1931 review of the *Treatise on Money*: 'Hayek has not read my book with that measure of "good will" which an author is entitled to expect of a reader' (reported by Moggridge, as editor, XIII:243).

Scope of the paper

In this paper I look at three different propositions central to *The General Theory* and some of the responses to them to try to answer the question posed in the title: if *The General Theory* is difficult, whose fault is it? We look for defects of exposition on the writer's part. On the reader's part we look for insufficient cooperation (*pace* Samuelson, even pro-Keynesians must be willing to put in a great deal of work) and 'contrary notions'. The propositions I shall consider are (i) involuntary unemployment, (ii) the principle of effective demand and (iii) unemployment equilibrium. Maurizio Gotti, Professor of English Language at the University of Bergamo, has undertaken (1994) a similar enquiry on a much broader canvas. I too have things to say in such a context (see Chick 2004: 9-11, and the introductory chapters of Chick 1983) but I am in general agreement with Gotti's excellent article and recommend readers to it while I narrow my focus. My survey will also be illustrative rather than comprehensive.

Note that the three propositions are all in Book I, an area Samuelson advocates 'warning the young and innocent away from (...) (especially the difficult Chapter 3)' (Samuelson 1946:319). This to me is an

³ Roman numbers refer to volumes of The Collected Writings of J. M. Keynes.

astounding recommendation, for without them one cannot understand what the book is about at all. Keynes agrees:

[Y]ou [Hawtrey] speak of my other criticisms of the classical theory, apart from my theory of interest, as being no more than side issues, and you go on to say that you must confess that you do not understand my doctrine of involuntary unemployment or full employment. But, heavens, my doctrine of full employment is what the whole of my book is about! Everything else is a side issue to that. If you do not understand my doctrine of full employment, it is perfectly hopeless for you to attempt to explain the book to anyone. (Keynes 1936b, XIV:24)

Involuntary unemployment

The General Theory starts its serious business in Chapter 2. Its main purpose is to affirm the validity of the first 'Classical postulate':

The wage is equal to the marginal product of labour
That is to say, the wage of an employed person is equal to the value
which would be lost if employment were to be reduced by one unit (...)
subject, however, to the qualification that the equality may be
disturbed (...) if competition and markets are imperfect.

and refute the second:

The utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment

That is to say, the real wage of an employed person is that which is just sufficient (in the estimation of the employed persons themselves) to induce the volume of labour actually employed to be forthcoming, subject to the qualification... analogous to the imperfections of competition which qualify the first postulate. (GT⁴ 5, italics in original).

The writer

This is not easy prose.⁵ Not until the bottom of the following page does Keynes ease the reader's burden by identifying the postulates with the demand for and supply of labour, respectively.⁶ Perhaps this initial

- 4 The General Theory of Employment, Interest and Money (Kleynes 1963a)
- 5 Keynes apparently recognised this: 'In regard to [Viner's] criticisms of my definition and treatment of involuntary unemployment, I am ready to agree that this part of my book is particularly open to criticism' (XIV 110). See also VII, Appendix 3, 401, n. 1.
- 6 Nor is it clear whether the first postulate is stated in real or money terms, though it can be shown that it doesn't matter. The second postulate is clearly stated in real terms.

reluctance is explained by his concentration on *actual* employment rather than hypothetical offers of employment or the willingness to accept them that the demand and supply schedules normally represent. In the classical system, where the two postulates hold, actual employment must be on both schedules. Any unemployment must be either frictional or voluntary (GT, 6, 10:15-16). In Keynes's system employment only needs to be on the demand schedule, and involuntary unemployment is possible.

The reader: contrary notions

But our heads are full of contrary notions. The first objection is that employment (and the real wage) must be indeterminate in Keynes's system. How can this be? There are two equations in two unknowns, yet they don't determine employment and the real wage. This offends against basic principles of 'classical' (and neoclassical) economics. The first principle is that prices and quantities (in this case, employment and the wage) are determined by equality of supply and demand in the market in question (here, the labour market), *ceteris paribus*. This, of course, is a technique everyone in Cambridge was steeped in, and even the supersession of Marshall by Walras has done nothing to diminish its position in the core of economic method. Harrod warned Keynes:

The effectiveness of your work (...) is diminished if you try to eradicate very deep-rooted habits of thought unnecessarily. One of these is the supply and demand analysis. I am not merely thinking of the aged and fossilised, but of the younger generation who have been thinking perhaps only for a few years but very hard about these topics. It is doing great violence to their fundamental groundwork of thought, if you tell them that two independent demand and supply functions won't jointly determine price and quantity. Tell them that there may be more than one solution. Tell them that we don't know the supply function. Tell them that the ceteris paribus clause is inadmissible and that we can discover more important functional relationships governing price and quantity in this case which render the s. and d. analysis nugatory. But don't impugn that analysis itself. (XIII: 533-4, Letter from Harrod, 1 Aug 1935)

Well, actually, they are not indeterminate in the theory as a whole, but their determination is not explained by the labour market—nor in this Chapter; that must *wait* for the discussion of the Principle of Effective Demand.⁷

⁷ I gave much space in Chick (1983) to the idea of the GT as a play, in order to prepare the reader for the necessity of waiting for the story to unfold. Today's economists, used to seeing the whole model on the first few pages, are even less suited to this kind of patience than Keynes's contemporaries.

The threat of loss of this method can create much anxiety:

There is an equilibrium when all individuals are choosing the quantities, to produce and consume, which they prefer. *To a conception of equilibrium that is of this type we must hold fast...* (Hicks 1965: 23, emphasis added.)⁸

The second principle to be violated is that the assumption of atomistic agents is sufficient to give equal market power to both sides. The wishes of workers should have as much weight as the wishes of entrepreneurs, otherwise Marshall's scissors have one blunt—or indeed missing—blade. Asserting an asymmetry of power has important political and ideological implications at odds with an unqualified support of capitalism; it is almost as 'bad' as Marx's 'exploitation' (another term for entrepreneurial profit). Patinkin argues:

Involuntary unemployment involves what might be called 'relative coercion': people cannot fulfil their desires as freely as under some other situation which serves as a norm or reference (...) The extent of involuntary unemployment is then measured by the difference between the existing amount of employment, and the amount that would have existed under the norm. (Patinkin 1949:368-9)

It is revealing what people take as the norm. I would say that Patinkin was an idealist. Keynes could be said to be arguing that unemployment was the 'norm', in contrast to what he might have termed the 'ideal' of full employment. He was a realist.

Thirdly, a labour force which is unable to influence its employment level or real wage makes the application of choice theory impossible. Choice theory is taken by many as the only 'sound' microfoundation for macroeconomics. Thus did DeVroey (2003) set off on a wild goose chase, looking for a choice-theoretic explanation of involuntary unemployment (he calls it a 'theoretical explanation', a clear sign that no other explanation counts as theory), when the very adjective 'involuntary' must mean, if language is to mean anything, that it hasn't been chosen.

 $^{8\,}$ This is the cry of a man in fear of drowning. It is remarkable that he managed to negotiate himself past Chapter 2.

⁹ Ironically, one interpretation of 'Keynesian unemployment', which backs up the sticky wage interpretation of Keynes, is that trade unions keep wages artificially high—labour has too much power rather than too little. It is ironic because Keynes specifically states that this case is one of voluntary unemployment (GT8:16).

If these principles are a part of a reader's belief system, rejection of Keynes's assertion is likely, the more so the less examined the beliefs are.

The reader: goodwill

Let us return briefly to the hard work which goodwill and cooperation entail. Note that Keynes defines full employment as 'the *maximum* quantity of employment which is compatible with a given real wage' (GT 12, italics in original), and that a locus of these points defines the labour supply curve. It is not quite a contrary notion but it is an impediment nonetheless, that some people find it nearly impossible, once a line has been drawn in Cartesian space, to think of what properties are possessed by the rest of the space. But to understand this Chapter we must do just this. It is not difficult, actually.

The supply curve is a locus of points with the property that, for each level of employment, the real wage is equal to the marginal disutility of work (MDW) (GT 15—rather far away from the main discussion of the postulates). To the right of this line, the MDW must be greater than the real wage, and it is this that stops more labour from coming forward. This is straight out of Marshall (1948 [1890]:141-2), except that it is applied at the macro level. To the left of the line, the MDW is less than the real wage—so all those lucky enough to get jobs are quite happy thank you and additional labour is available at *each and every* wage up to the frontier, which is the labour supply curve. To the right of the curve, those who drop out of the labour market do so voluntarily or temporarily (frictional unemployment). Full employment as defined above is not a single level of employment: the level that corresponds to full employment is contingent on the real wage.

This is in contrast to what I call a labour-force definition, based on what is considered the work force at the time (able-bodied males between the ages of 16 and 65 might be such a definition in 1936, obsolete now). See for example Pigou:

[T]he amount of employment (...) which exists in any industry, is measured by the number of hours' work (...) by which the employment of the persons 'attached to' or 'occupied in' that industry falls short of the number of hours' work that these persons would have been willing to provide at the current rate of wages under current conditions of employment. (Pigou 1913:16, quoted in Corry 1997:215)

10 Some alternative employment or source of income must be assumed, and that was quite a difficult point even in the 1930s. There may also be a backward-bending segment at very low wages, where moonlighting is essential for subsistence, as well as at very high wages, when preferences shift more toward leisure.

The first part of the statement is a labour-force definition. But 'willingness to provide' could be consistent with Keynes's definition. Pigou's reply to Keynes's query in 1936 about his understanding of labour supply (XIV: 54) was more ambiguous. Although he replied (XIV: 54) that he was assuming a backward-L-shaped supply curve, with the horizontal portion at the 'stipulated wage', the following shows that for him in the end the labour-force definition was dominant:

By defining common words in uncommon senses, as with savings and income in his earlier book, and 'full' employment—which was compatible with a large volume of unemployment—in his later one, he caused much confusion among persons less agile-minded than himself. (Pigou [1949?] quoted in E. S. Johnson 1977:37)

The 'large volume of unemployment' Pigou was missing was frictional and voluntary unemployment, which Keynes says clearly (GT, 6) are compatible with 'classical full employment' and therefore no disturbance to the second postulate. We have to conclude that Pigou did not extend the kind of goodwill which appreciates that another author has different definitions, and indeed a different agenda, from one's own. That agenda was, in Chapter 2, to make a sharp contrast with classical theory on its own terrain, by bringing in a type of unemployment for which, though classical economists recognised its existence, their theory couldn't account.

The backward-L labour supply curve

Let us take a close look at this curve, as it has such a long history and high textbook profile. It was used with devastating effect to the Keynesian project in Modigliani (1944). Does no one realise that in terms of Keynes's definition, the horizontal portion of the curve is completely illegitimate? Remarkably, it has never, to my knowledge, been challenged on this ground. On the horizontal portion, the real wage if always greater than MDW, the inequality steadily decreasing toward equality as the line is approached. This is clearly inconsistent with the definition which applies to the upward-sloping portion. Those who use this formulation are trying to express an important practical point about the reluctance of workers to accept *money* wages lower than the current wage, or, in Pigou's case, the short-term stability of what he calls the stipulated wage. But the notion of a 'current wage' is, because of its contingency in time, out of place in the context of a static, hypothetical concept such as a supply curve. What definition they give to 'labour supply' is anybody's guess; if a definition consistent with both parts is forthcoming. I should like to hear it.

Involuntary unemployment defined

With the proposition that involuntary unemployment is represented by a position to the left of the labour supply curve in our minds, let us look at the first definition proper of involuntary unemployment:

Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, both the aggregate supply of labour willing to work for the current moneywage and the aggregate demand for it at that wage would be greater than the existing volume of employment. (GT 15)

Darity and Young (1997:15) call this paragraph 'excessively complicated' (22), Corry 'rather tortuous' (1997:220). By no standard of transparency or lucidity does it pass muster. But we may find that, once it is unravelled, it has the virtue of precision. We must work. First, note that it is a hypothetical statement, a test, if you like, by which to judge whether this type of unemployment exists. Start with a small rise in the price of wage goods. Why small? A large change might provoke a strike or demands for new wage negotiations, so with only a small change the money wage can be taken as settled. A rise in the price of wage-goods lowers the real wage. Thinking of our usual curves in the usual way (i.e. starting at their intersection) we would expect to find that the aggregate demand for [labour] at [the current money-wage] would be greater that the existing volume of employment'. OK so far: demand curves slope downward. But what sense can be made of the claim that 'the aggregate supply of labour willing to work for the current money-wage' will be greater than before? Answer, none—because we started where there was no involuntary unemployment. We started in a place where the test was bound to fail.

Now start at a point to the left of the labour supply curve—any point, chosen arbitrarily. It is obvious that there are additional workers willing to work, even at the lower real wage, unless the initial position was very close to the supply curve (another reason for stipulating a small rise in price). The higher price of wage-goods implies a higher demand for them. This means that producers are keen to raise their level of production, to reap the new profits. They will offer more employment and it will be accepted: 'both the aggregate supply of labour willing to work for the current money-wage and the aggregate demand for it at that wage would be greater that the existing volume of employment'. The beauty of this definition is more easily seen if the thought-experiment is done in money terms, for the rise in price will shift the demand-for-labour curve to the right.

Whether it is legitimate to call this curve a demand for labour curve will be addressed in the next section.

There is much else in Chapter 2, though none of it quite so illustrative of our central themes of persuasive writing (a test Keynes does not score high marks on here), goodwill and contrary notions (where many interpreters – many more than we have discussed, score badly too).

The principle of effective demand

In the context of contrary notions I raised the question of the apparent indeterminacy entailed by Keynes's construction. But actually, the 'labour market equations' are not two equations in two unknowns but two equations in *three* unknowns: employment, the money wage and price. In Chapter 2 Keynes makes much of the fact that workers and producers bargain for a money wage, and it is in money that workers are paid. That does not preclude workers having in mind an expected future price level when bargaining—of course they do—no one has to tell a Brazilian that. But it is still true that the bargains are struck in money (GT 13) and workers are paid in money, and while producers have influence over prices, workers have none. The influence of workers as consumers is variable and indirect.

In a Ricardian one-good system, corn (a general term for grain) is the unit of bargaining. Workers are also paid in corn. Only if *both* these conditions are met do we actually have two equations in two unknowns. It follows that *even in the classical system*, if money is introduced, the two equations are not enough. This is the substance of Keynes's critique of the real exchange economy (XIII:408-11). Mishan, in a remarkable article (1964) that has only just come to my attention, makes exactly this point, though not in this language:

[T]he marginal product of labor can no more be regarded as representing the demand curve for labor in a 'classical' monetary framework (...) than in a Keynesian framework: indeed (...) such a demand curve is, like that in a Keynesian system, primarily derived from the effective demand for goods. (Mishan 1964:610)

It might well be argued that in Keynes's system wages and prices are determined in different markets and by different actors, as they surely are. This argument has been made in the context of saving and investment with great effect, yet it has never been pressed in the context of wages. (This may be due to generations of sticky-wage and fix-price Keynesians.) They are also determined at different points of time in the production

process: wages at the time of hiring and beginning to produce output, prices at the end of the production process when the goods are placed on the market.

Chapter 3

Chapter 3 could be described as the core of *The General Theory*. There, Kevnes sets out the determination of employment in terms of the demand for and supply of output. There are two levels of explanation: the determination of employment within a 'day', the length of time for which employment and output decisions are fixed; and the short period, in which the production decisions of entrepreneurs are put to the market test but investment has not yet affected supply conditions. Within the confines of the 'day', employment is determined by aggregate supply, Z = Ö(N), and producers' expectations of the proceeds forthcoming from the employment of N workers. Where the two curves intersect is called the point of effective demand. Wages and prices are, of course, embedded in both curves—but not as a ratio, because firms seek (money) profits and the two variables play different roles. Provided the level of employment thus determined is no higher than the full employment level at the going wage, employment will be at the level so determined. with no intervention from labour's wishes.

The goods are then put to the test of the market, to confront the actual level of aggregate demand. This, as everyone knows, comprises consumption, which Keynes here writes as a function of employment, and investment, whose determinants will be explained in later chapters. On the basis of market results, producers' output and employment strategies may be revised, or, if their expectations are fulfilled, we have short-period equilibrium (GT 29). What could Samuelson find so difficult about that? Moggridge (VII, Appendix 1:385), which lists corrections to the first edition of *The General Theory*, remarks that these do not cover 'more substantial errors such as the unsatisfactory presentation of aggregate supply and demand on page 29', but he does not say what he finds wrong.

There has, of course, been a vast literature on these functions, relating the aggregate supply function to its Marshallian foundations and deriving the microfoundations of the expected aggregate demand curve, in particular. This literature, though fascinating, need not concern us except for one point, which will come up later.

The writer

Although I think Keynes's meaning is quite clear, his language is not. This chapter is marred by using the terms 'aggregate demand function' both for the level of demand which producers expect in order to form their output strategy—to find the point on their supply curves where the expect to maximise their profits—and aggregate demand as it is manifested in the marketplace (C + I):

[L]et D be the proceeds which entrepreneurs expect to receive form the employment of N men (...), which can be called the $Aggregate\ Demand\ Function$

(...)

The value of D at the point of the aggregate demand function, where it is intersected by the aggregate supply function, will be called *the effective demand*. (GT 25; I have italicised 'expect'; other emphases are in the original)

The amount of labour N which the entrepreneurs decide to employ depends on the sum (D) of two quantities, namely(...) consumption, and (...) investment. D is what we have called above the effective demand. (GT 29)

This inconsistent usage seems to have dogged Keynes's thinking all the way to publication. Robertson (letter to Keynes, 3 February 1935, XIII: 497) wrote:

everything is made to turn on the difference between D, the sum for which output can actually be sold, and D', the sum for which it was expected it would be sold (...)

But on p. 23 [XIV 373] D is quietly in a footnote defined in terms of expectations, as it is on p. 63 [XIV 424]. The difference between D and D'(...) has become obliterated, and D' is never heard of again.

Moggridge remarks that 'at some stage this paragraph was crossed out in pencil' [XIII:498, n. 1]. The reason could be this: Keynes in his reply (20 February 1935) to this and a further letter says that D' is 'the age-old supply function' (XIII:513). Robertson replied (11 March 1935): "I can see that I have been stupid over D" (XIII:520). Moggridge tells us (ibid., n. 1) that 'In 1940 while going through these papers, Robertson added the following: "But fancy labelling a supply curve D?'!" At least we were spared D' in the printed version, though it seems to have persisted into the third proof, being changed to Z just before publication.

Among the proofs we have

By effective demand I mean the sum for which the current output can actually be sold; and by the state of effective demand I mean the schedule (...) D = f(N) (XIV 370, original italies).

Effective demand is equal to the sum of [C and I]. [To this there is a footnote:] More precisely (...) to the expectation of this sum (XIV:373).

Amadeo (1989) has interpreted this muddle most generously. He suggests that the progressive substitution of aggregate demand for effective demand throughout the book is the result of Keynes's wishing to avoid the interpretation that unemployment is the result of producers' incorrect expectations—that he wanted to make sure that no one was in doubt that involuntary unemployment could occur even if expectations were correct. There is support for this view in Keynes's statement that if he were to write the book again he would start with the assumption that short-term expectations were fulfilled (XIV:181). For a long time I thought that was exactly what he had done in Chapter 3, but Andy Denis has persuaded me that the point of effective demand merely indicates what aggregate (actual) demand would have to be if price and profit expectations are to be fulfilled.

Before we leave the role of the writer on the principle of effective demand, let us look at the definition of full employment in Chapter 3:

An alternative, though equivalent, criterion [of full employment] is (...) a situation in which aggregate employment is inelastic in response to an increase in the effective demand for its output. (GT 26)

This is certainly less turgid than the earlier definition, but would you identify it with the earlier definition? While it is clearly equivalent at a given wage, where at full employment an attempt to raise output meets with no further willingness to work, what of increased employment along the labour supply curve? To my mind this criterion too easily evokes the 'labour-force' definition of completely inelastic labour supply—too specialised an assumption for a general theory and not what Keynes had in mind.

Readers

On the whole, readers of this chapter have been sympathetic and constructive in teasing out the implications of aggregate demand and supply. But there has been one major subversion of Keynes's meaning: the substitution of income for employment in these functions, resulting in Samuelson's famous 'Keynesian cross'. This formulation, 'innocuous as it is for the Aggregate Demand Function (...) deprives the Aggregate Supply Function of any reference to the behaviour of an economy with a specific market structure' (Pasinetti 1997:85, citing Tarshis 1979). In other words, it robs *The General Theory* of a foundation in the theory of

profit maximising firms and made it vulnerable at the time of 'stagflation', which it couldn't explain. A similar effect was obtained by Hicks's (1937) substitution of the equality of saving and investment for the equality of aggregate supply and demand.

Pasinetti (1997:93) has noted the remarkable fact that Keynes nowhere states the Principle of Effective Demand and doesn't use the phrase in the book except for the chapter title. Pasinetti has a special understanding of the meaning of a 'principle' as something so fundamental as to be pre-theoretical. On a more mundane level, surely the principle is that the demand for labour is determined by the point of effective demand in the 'day' and aggregate demand in the short period: employment is determined in the goods market.

It is a desire to reinforce this principle that has led readers to protest that what Keynes called the demand curve for labour (and in this paper we followed him) is not a demand curve (Mishan 1964, Davidson 1983, Riach 1995). Of course they have a point: demand is determined elsewhere. But if expected price is substituted for price, the curve is directly derivable from the points of effective demand traced along the aggregate supply curve as expectations change. In that sense it conveys features of the demand for labour, even though all its variables are determined elsewhere and the causality is reversed. In Chapter 3 producers can nearly always hire as much labour as they want (though they may need to raise wages if they start at full employment) (GT 29); this tells us that, while the whole area of the supply-of-labour curve is in play, firms are assumed always to be on the demand curve—that is, they have the power to maximise their profits.

The great mystery to me for as long as I have been involved with *The General Theory* is why Keynes never referred to Marshall's notion of the derived demand for labour (Marshall 1948 [1890], Ch. 6 section 1: 381-3). Surely Chapter 3 amounts to generalising this idea, with the important addition of uncertainty regarding the demand for output, to the macroeconomic level.

Unemployment equilibrium

To my knowledge Keynes does not use the phrase unemployment equilibrium, but without doubt he has the concept:

[T]he economic system may find itself in stable equilibrium with N at a level below full employment (...).

(...) If the propensity to consume and the rate of new investment result

in a deficient effective demand, the actual level of employment will fall short of the supply of labour potentially available at the existing real wage, and the equilibrium real wage will be *greater* than the marginal disutility of the equilibrium level of employment. (GT 30, original italics)

That seems perfectly clear, but the economist's mind is usually full of contrary notions. How can there be equilibrium when markets do not clear? (an indication of not having understood Chapter 2). Equilibrium cannot exist if there are unexploited opportunities, and unemployment is such an opportunity. Wages are sticky; if they fell, full employment would be restored. Everyone knows these responses. So the concept was transformed into unemployment disequilibrium or, worse, equilibrium unemployment. Keynes prepared the ground well for those willing to work, but these contrary notions are as alive today as they were in Keynes's time—perhaps more so.

Conclusion

Nobody comes out of this exploration as perfect—and I'm sure that applies to the present author too. Keynes's exposition is certainly not easy, but in many places it is not actually misleading, while in others it is. Contrary notions and conflicting ideology are still causing misunderstandings. I hope that justifies revisiting this elementary ground again.

References

- AMADEO, E. J. (1989). Keynes's Principle of Effective Demand. Aldershot: Edward Elgar.
- CHICK, V. (1983). Macroeconomics after Keynes. Cambridge, MA: MIT Press.
- CHICK, V. (2004). "On Open Systems" Revista de Economia Política 24:3-16.
- CORRY, B. A. (1997). "Keynes's use of the term 'involuntary unemployment': a historical perspective". In ARESTIS, P. & PALMA, G. & SAWYER, M. (eds.). Capital Controversy, Post Keynesian Economics and the History of Economic Thought: Essays in Honour of Geoff Harcourt, vol I. London: Routledge.
- DARITY, W. Jr & YOUNG, W. (1977). "On rewriting Chapter 2 of *The General Theory*". In Harcourt and Riach, 1977.
- DAVIDSON, P. (1983). "The marginal product is not the demand curve for labour and Lucas's labour supply function is not the supply of labour in the real world". *Journal of Post Keynesian Economics* 5:105-17. Reprinted in DAVIDSON, L. (ed.). *Money and Employment: The Collected Writings of*

- Paul Davison, vol. I, London: Macmillan, 1990.
- DE VROEY, M. (2003). Involuntary Unemployment: The Elusive Quest for a Theory. London: Routledge.
- GALBRAITH, J. K. (1975). Money: Whence it Came and Where it Went. London: Andre Deutch.
- GOTTI, M. (1994). "The General Theory as an Open-ended Work". In MARZOLA, A. & SILVA, F. John Maynard Keynes: Language and Method. Aldershot: Edward Elgar. Translated from the Italian edition (1992) by Richard Davies.
- HAYEK, F. A. (1931-2). "Reflections on the Pure Theory of Money of Mr. J.M. Keynes", *Economica*.
- HICKS, J. R. (1937). "Mr Keynes and the 'Classics': a suggested interpretation". *Econometrica* 5:147-59.
- HICKS, J. R. (1965). Capital and Growth. Oxford: Oxford University Press.
- JOHNSON, E. S. (1977). "Keynes as a Literary Craftsman". In PATINKIN, D. & LEITH, Clark J. (eds.). *Keynes, Cambridge and The General Theory*. London: Macmillan. Reprinted in Johnson and Johnson 1978, 30-37. Page references to reprint.
- JOHNSON, E. S. & JOHNSON, H. G. (1978). In the Shadow of Keynes. Oxford: Basil Blackwell.
- JOHNSON, H. G. (1974). "The Social and Intellectual Origins of *The General Theory*". *History of Political Economy* 6(3):261-77. Reprinted in Johnson and Johnson 1978, 65-83. Page references to reprint.
- KEYNES, J. M. (1936a). The General Theory of Employment, Interest and Money. London: Macmillan.
- KEYNES, J. M. (1936b). Letter to Hawtrey, 15 April 1936, XIV 23-28. Part of a long correspondence, XIV 2-55.
- KEYNES, J. M. (various years) *The Collected Writings of J. M. Keynes*, D. E. Moggridge, ed. London: Macmillan. Referred to by their volume numbers.
- ______ VII The General Theory of Employment, Interest and Money.

 ______ XIII The General Theory and After Part 1: Preparation.

 _____ XIV The General Theory and After, Pt 2: Defence and development.

 _____ XXIX The General Theory and After: a supplement.
- LEKACHMAN, R. (1964). *Keynes'* General Theory: *Reports of Three Decades*. New York: St Martin's Press; London: Macmillan.
- MARSHALL, A. (1948 [1890]). *Principles of Economics*, 8th edition, New York: Macmillan.
- MISHAN, E. J. (1964). "The demand for labor in a classical and Keynesian framework". *Journal of Political Economy* 72 (6):610-16.
- MODIGLIANI, F. (1944). "Liquidity preference and the theory of interest and

- money". Econometrica 12:45-88.
- PASINETTI, L. L. (1997). "The principle of effective demand". In HARCOURT & RIACH (1997), pp. 93-104.
- PATINKIN, D. (1949). "Involuntary unemployment and the Keynesian supply function". *Economic Journal* 59:360-83.
- PIGOU, A. C. (1913). *Unemployment*. Home University Library of Modern Knowledge, London: Williams and Norgate.
- PIGOU, A. C. [1949?]. cited by E. S. Johnson 1977 as from 'The King's Memoir'. Presumably 'John Maynard Keynes, 1883-1946, Fellow and Bursar'. A memoir prepared by direction of the Council of King's College Cambridge. Cambridge, printed for King's College, 1949.
- RIACH, P. A. (1995). "Wage-employment determination in a Post Keynesian world". In ARESTIS, P. & MARSHALL, M. (eds.). *The Political Economy of Full Employment*. Aldershot: Edward Elgar.
- SAMUELSON, P. A. (1946). "The General Theory". Econometrica 14 (July), reprinted in Lekachman 1964:315-30. Page references to reprint.
- TARSHIS, L. (1979). "The aggregate supply function in Keynes's General Theory". In BOSKIN, M. J. (ed.). Economics and Human Welfare. New York: Academic Press.

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