

DEPARTMENT OF ECONOMICS DISCUSSION PAPER SERIES

THE HISTORICAL PLACE OF THE 'FRIEDMAN-PHELPS' EXPECTATIONS CRITIQUE

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Number 399 July 2008

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Abstract

The 'expectations critique', usually attributed to Friedman or Phelps and dated towards the end of the 1960s, in fact originates much earlier. And rather than being an insight properly attributable to a particular individual, it was, by that time, a commonplace of economic discussion. This much is easy to establish. It is argued that the common attribution arises at least in part because the Keynesians unwisely chose to express their disagreement with Freidman in terms of expectations rather than in terms of the existence of the natural rate of unemployment. As a result, forty years later, it has become hard to see that two separate points ever existed.

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Abstract

The 'expectations critique', usually attributed to Friedman or Phelps and dated towards the end of the 1960s, in fact originates much earlier. And rather than being an insight properly attributable to a particular individual, it was, by that time, a commonplace of economic discussion. This much is easy to establish. It is argued that the common attribution arises at least in part because the Keynesians unwisely chose to express their disagreement with Freidman in terms of expectations rather than in terms of the existence of the natural rate of unemployment. As a result, forty years later, it has become hard to see that two separate points ever existed.

I. Introduction

Mythology has it that, until the view was rebutted by Friedman (1968) or Phelps (1967) or perhaps Friedman (1966), the work of Phillips (1958) had convinced the economics profession, and the Keynesians in particular, of the exploitability of an inflation-unemployment trade off. That rebuttal, it is held, came in the form of what is now sometimes called 'the expectations critique' and the substance of that – supposedly innovative – argument was that an ongoing inflation would come to be anticipated, and thereby incorporated in the wage bargain with the result that the Phillips curve would shift upwards one-for-one with expected inflation.

Lundberg (1977), in the presentation speech for Friedman's Nobel Memorial Prize, for example, said

'Friedman was the first to show that the prevalent assumption of a simple "trade-off" between unemployment and the rate of inflation only held temporarily as a transient phenomenon... According to Friedman's theory, a level of unemployment which is held below a structural equilibrium level leads to a cumulative rate of price and wage increase, primarily because of the destabilizing role that expectations play.'

Similarly in the case of Phelps, Holmlund's (2006) presentation said

'Starting in the 1960s, he developed a new theory of unemployment and inflation that highlighted the role of inflation expectations as well as information problems in the labour market.'

So that

'Phelps's hypothesis meant that in the long run — when actual inflation also becomes expected inflation — there will be no relationship at all between inflation and unemployment.'

^{*} I am grateful to Robert Dimand and Peter Oppenheimer who each commented very helpfully on an earlier version, and Thomas Baranga for help in preparing this paper.

Many others, certainly including esteemed researchers, textbook authors, and, one presumes, lecturers, say the same kind of thing. In any case, the point that this is the accepted view surely needs no extensive demonstration.

There are, however, two further dimensions to the perception which might be noted. One is that authors do sometimes note the oddity of the point – apparently – not being made earlier, because it is, after all, rather an obvious one. For example, Sumner (1984) – generally one of the more reflective and better informed writers on the history and significance of the Phillips curve – said (p192),

'The economics profession was slow to appreciate the implications of elementary theory for the Phillips curve. They were first spelt out by Friedman (1966, 1968) and Phelps (1967, 1968), shortly before the collapse of the original Phillips curve and of its relatives became apparent'

In contrast, however, on those rare occasions when it is suggested that the point had been made before Friedman and Phelps, there is remarkably little surprise that the idea – again, apparently – failed to take hold. Hillier (1986), for example, says (p146) that Hicks (1967), 'seems to have spotted' the critique. Indeed he had; and he put it very clearly, saying (p162-163),

'Inflation does give a stimulus, but the stimulus is greatest when the inflation starts ... If the inflation continues, people get adjusted to it. But when people are adjusted to it, when they *expect* rising prices, the mere occurrence of what has been expected is no longer simulating. Nor can the fade-out be prevented by accelerating the inflation; for acceleration of inflation can be expected too'

But for Hillier, this is just an aside, in a footnote, casually appended to a discussion of the importance of the insight of Friedman and Phelps. Similarly, Young, Leeson, and Darity (2004) p115 identify a number of people they say made earlier statements of all or part of the critique and, showing no interest in developing the point, simply change the subject.

Another case is that of Leeson (1997). He reports correspondence in which, he says,

'Milton Friedman has resolved the issue of the intellectual origins of this approach to macroeconomics'

The resolution is that Phillips himself suggested it to Friedman in 1952. It is not completely clear that 'this approach' means the fully fledged expectations critique rather than merely the presumption that expectations will change in more or less predictable ways as circumstances do, or possibly the particular formulation of adaptive expectations better known from Cagan (1956). But presuming that is the intent, one is left to wonder why, beyond describing the matter as a 'profound irony', Leeson expresses no surprise that it lay unconsidered for so long thereafter – not least, apparently, by Friedman. All he does is to say that the argument should properly be called 'the Phillips-Friedman-Phelps critique'.

II. Who invented the expectations critique?

And surely, for any of these authors, ample surprise would be wholly appropriate. But for the constant repetition of the claim, it would be simply incredible that the great economists of the 1960s were so primitive in their understanding of rational behaviour that it took Friedman and Phelps well into the decade to set them straight on such a point. It is hardly that the distinction between real and nominal variables was unknown. Even according to the unreliable historical perceptions of contemporary economics, that is dated no later than Fisher (1930). For current purposes, it is no matter that Fisher (1907) himself, as noticed by Dimand (1999), has traced it all the way back to the unheralded Douglass (1740).

And the importance of expectations generally can hardly have eluded the Keynesians since few works in economics have given more prominence to them than Keynes (1936). Nor can it be that in all the arguments over the interpretation of the *General Theory* this somehow went unnoticed, since Hicks (1936) p240, in his review of it suggested that,

'From the standpoint of pure theory, the use of the method of expectations is perhaps the most revolutionary thing about this book'

Even if it is said that Keynes did not emphasize their application to wage bargainers, it still must be a great puzzle that Friedman (1956a) had seen the importance of expectations in household budgeting and Friedman (1956b) in relation to the calculation of the real interest rate. How did it come to take him – to take Friedman himself – another decade to apply the same idea to wage bargaining? And discussions of the effect of inflation-expectations on money demand, and the possible tendency of inflation to accelerate as a result were certainly very widespread in the 1940s and 1950s.

So it would indeed be surprising if no one had thought of the expectations critique before 1966. And correspondingly, it really should be no surprise that people had. What is perhaps more surprising – at least in the light of the confidence with which the idea is attributed to Friedman and Phelps – is how commonplace it was. It was, quite simply, old hat well before either of those authors had anything to say about it.

Responses to the Phillips curve

If one treats only the period after the publication of Phillips (1958), the point was made clearly at a very early stage. In his own paper Phillips gave no attention to changing expectations no doubt because – contrary perhaps to another myth – he was not advocating inflationary policy, and nor did his data include any long period of continuous inflation. But that issue certainly was considered by Samuelson and Solow (1960). They are often, rightly, credited with bringing the curve to the attention of a wide audience, and, with a rather murkier justification, debited with using it to advocate inflation as a means of reducing unemployment. They did present a 'roughly estimated' Phillips curve for the United States and went on to suggest that to achieve 3% unemployment, prices would have to rise by 4 or 5%, saying (p192)

'That much price rise would seem to be the necessary cost of high employment and production in the years immediately ahead.'

They also (p186) raised the possibility that,

'A period of high demand and rising prices molds attitudes, expectations, even institutions in such a way as to bias the future in favor of further inflation'

And they considered (p193) the obverse, namely that,

'low-pressure demand would so act upon wage and other expectations as to shift the curve downward in the longer run — so that over a decade, the economy might enjoy higher employment with price stability than our present-day estimates would indicate'

Clearly, it can hardly be said that they were unaware of the importance of expectations. But it might be said that they did not presume them all important, and perhaps their paper left the idea of inflation bringing permanent benefits hanging in the air because two of the discussants of the paper addressed the matter – although neither suggested that Samuelson and Solow had made a mistake.

Chandler (1960) p214 said,

'I fear that the very announcement of a government policy to prevent unemployment from falling below some stated low figure... would shift the price-change-unemployment-rate relationship... trade-unions would probably demand larger wage increases and employers would be less disposed to resist them'

That is not perfectly Friedmanite because it does not suppose that the adjustment arises through the experience of inflation – it is rather more like an anticipation of Kydland and Prescott (1977). But the importance of expectations in defeating the policy is clearly marked.

Lerner (1960) – also a discussant of Samuelson and Solow – made a much more inflationist contribution. But even he said, p217,

'As adjustment is made to the inflation it has to run faster and faster to keep output in the same place'

This led him to propose that

'When the damage done by marginal inflation becomes greater than the benefits from the marginal output, we have reached the point where the equalization of marginal social cost with marginal social benefit calls for currency reform. The cycle would then repeat.'

A fuller application of the expectations-argument would put paid to that, but the idea may have been intended to be tongue-in-cheek, to judge by the terms in which his commentary on optimal policy continued:

'the orgies of inflation and the mornings-after of currency reform and devaluation are just what is prescribed by the sober application of the rational principles of maximization of benefits.'

But it hardly matters – it is clearly understood that accelerating inflation would be required to maintain high employment.

There were a few genuine advocates of inflation from the period. The most prominent in the 1950s was surely Sumner Slichter. Responding to him Haberler (1960) p51 said,

'as creeping inflation continues, more and more people will expect further rises in prices and will take stops to protect themselves...labor unions will ask for high wage increases in order to secure real improvement...'

On the next page, discussing the view that acceleration can always be prevented by monetary policy he says,

'That belief forgets that once a creeping inflation tends to accelerate – because wages, interest and other cost items are increased in anticipation of rising prices – the policy of keeping the price rise to a creep must have the same results, ie, unemployment, as would prevention of the price creep in the first place.'

And that there was only 'one condition' that would make for the effectiveness of inflationary policy, namely,

'if unions, and everybody else, could be fooled indefinitely to regard, despite rising prices, exactly balancing increases in money incomes as representing increases in real income'.

This would seem to be a complete statement of the critique, with all its Friedmanite characteristics, but several years earlier.

But perhaps the clearest anticipation of Friedman from this period is in Bronfenbrenner (1963). He criticised inflationary policy (p116) because of the consequences when,

'pressure-group leaders' and members' money illusions are eroded to the extent that further inflation becomes prominent in their standard expectational pattern.'

and offered the 'conjecture' that the Phillips curve

'may have quite different parameters depending upon the anticipated pattern of public monetary and fiscal reactions, and through these reactions upon the strength of employer resistance to union wage demands'

Unlike Friedman, this presumes imperfect competition in the labour market, but it can hardly be said the understanding of expectations is any less than Friedman's or

Phelps'. Indeed, the most striking thing about the piece is that Bronfenbrenner even drew a set of Phillips curves – each representing what he called different rules of policy – to illustrate the point. A high inflation policy would result in a higher Phillips curve, etc. Phelps (1968) drew that diagram, and so did Friedman, but not in his Presidential Address. One has to look to Friedman (1975) and, more famously, Friedman (1977) for his presentation of it.

The expectations critique before the Phillips curve

It is yet another myth, of course, that Phillips was the first to remark on a relationship between inflation and unemployment. The general idea probably surprised no one at any point in history, but the statistical formulation of it is something – unlike Douglass' distinction between real and nominal interest rates – that should properly be attributed to Fisher. His original publication of it in Fisher (1926) lay unnoticed until republished as Fisher (1973). But in any case, the Keynesian era saw plenty of discussion of the consequences of continuous price change before it heard of the 'Phillips curve'. So, consequently, it is no surprise to find versions of the expectations critique in that period as well.

One example comes from Scitovsky (1940-41) p70, note 3. He was thinking of continuous disinflation, but the argument is clear enough. He says

'It may be well to remark here that continuously falling prices need not imply losses for entrepreneurs. As soon as they get accustomed to such a state of affairs, they will calculate the marginal value of productivities of the factors of production on the expectation of falling prices and pay them correspondingly'

That excerpt makes it sound as if this thought might have been expected to surprise his readers, but it is a quarter of a century before Friedman.

Keynes never viewed inflation as a sensible means of reducing unemployment, but the anti-Keynesians often suggested that Keynesianism would work only if it did bring inflation. And – long before Friedman – they found it easy to take the step of saying that expectations would adjust.

Morton (1950) who is, incidentally, the source to which Bronfenbrenner (1963) attributed his argument, made the point fairly fully, and is another person who could be read as anticipating not just Friedman and Phelps but Kydland and Prescott as well. He said that if it became understood that government guaranteed full employment, workers would seek higher wages and employers would have little reason to resist. The consequence would be inflation. But then, he said, (p33-4),

'In a modern paper money regime, any planned inflation will be immediately discounted. If a government deliberately plans that prices will be 10 per cent higher at the end of every year than at the beginning, the anticipated price rise will be discounted at once by holders of goods and securities. They will immediately raise prices ... It will then be found necessary to permit prices to rise at once... and then to permit even further inflation'.

And that needs no further elaboration.

Outside the realm of employment policy *per se* the point was equally well recognized. Indeed, advocating steady mild inflation for the rather modern reason that it would make the operation of monetary policy more effective, Vickrey (1955) saw the adjustment of expectations as both essential and inevitable. He said (p90) that for acceptance of his argument,

'The key condition ... is that the inflation be 'generally anticipated.' If we have a system whose stability depends on the steadily continuing inflation not being anticipated...it will be upset when individuals eventually learn, as in time they must, to expect the inflation'

He obviously thought the idea of adjustment to ongoing inflation was perfectly ordinary. And indeed, one can find more popular expressions of it as well. Leudicke (1957/1957) is an editorial in *The Journal of Commerce*. The author was no research-economist, but he said, (p21-2),

'The fact of the matter is that people have a 'natural inclination' to consider the purchasing power of money as stable until they finally awaken from this money illusion. From then on, they consider rising prices (or falling prices in the case of deflation) as normal.

The existence or lack of 'inflation-consciousness' on the part of the business community and/or the public makes all the difference in the world.

. . .

The initial employment-boosting effects of inflation disappear as soon as wage escalation becomes the rule. Inflation then will spend itself on higher prices and no longer on high employment and production'

Another demonstration of the breadth of understanding of the point at this time can be found in The Committee for Economic Development's report *Defense against inflation* (1958) which, in discussing the idea of a continuous 'creeping inflation' said, p40-41,

So long as the nation's workers are trying to get real gains higher than the gain in output per man-hour, the tendency will be for them to go on demanding increases that are successively larger...

The very condition said to create the 'need' for creeping inflation ... sets up conditions in which creeping inflation cannot be held at a creep'

That august body, it will perhaps be recalled, was not an organization of the most prescient and innovative scholars, but was, by its own account (p81) 'composed of 150 leading businessmen and educators'.

Friedman (1958) p252 said much the same thing at about the same time, and it is surely one of the greater oddities of the story that this contribution is rarely noted. But in any case, even these are not the first.

The expectations critique before the *General Theory*

Notwithstanding that the charge of inflationism was a favourite attack of the orthodox against the Keynesians, it would be a mistake to suppose that no earlier author had ever thought of inflationary policy as being some sort of cure for unemployment. Consequently, there is no reason to limit the enquiry to the period after the *General Theory*. If we look before it, then Robertson (1922/1928) is one notable character who considered it. He in fact supported the occasional use of inflationary policy, saying (p140)

'we should not refuse to wink at a little judicious use of the money-pump, if the tyres of industry seemed to be sagging unduly'

But he also recognized the problem with this, putting in the precisely Friedmanite terms of the distortion of labour supply by deception. He said, (p139),

'Of course the stimulus of rising prices is partly founded in illusion. The salaried official and the trade unionist have been beguiled into accepting employment for a lower real reward than they intended. Even the business leader is the victim of illusion: for he is spurred on not only by real gains at the expense of his debenture-holder and his doctor and even (with a little luck) of his work-people, but also by imaginary gains at the expense of his fellow business men'

These remarks – or others like them – cannot have been anything obscure since Kaldor (1959), paragraph 10679, in his evidence before the Radcliffe Committee, recalled Robertson 'often' noting the connection between inflation and cheating someone, and the expectations critique can also be found – presumably again penned by Robertson – at paragraph 98 of the first report of the Council on prices productivity and incomes (1958).

The search could clearly go on, but must be stopped. One last case deserves consideration. In the year of the *General Theory*, Simons (1936) – 'my teacher and my friend' as Friedman (1967) p1 called him, as well he might – said (footnote 12),

'The literature of money, however, seems on the whole...to minimize the prospects of automatic adjustment through anticipations, under a definite and stable monetary constitution.

This criticism is conspicuously applicable to the usual discussions of 'justice' as between debtors and creditors. It is clear that, given a minimum of uncertainty as to money, differences in the monetary rules would tend to be compensated by differences in interest yields...

Thus far, he appreciates the importance of expectations generally, but he goes on to apply the insight to the labour market, saying,

If the monetary constitution called for a rising, instead of a stable or a declining, price-level, economic behavior would be modified considerably in

every sphere – in the labor market, among employers and labor leaders as well...'

Unlike Robertson's that discussion was not precisely about the employment-effects of inflationary policy, but it does demonstrate a clear understanding of the point about expectations.

It should be clear, then, that neither Friedman nor Phelps has any claim to being the originator of the expectations critique – nor does Hicks or Phillips, for that matter. And there is neither some unknown figure – like Douglass – to whom the argument could be attributed, nor any particular major author – like Fisher – in whose forgotten work the idea can be found prematurely, but originally, delivered. But no matter, because the point of the exercise here is not to make the kind of indignant protest over academic priority that Hands (2006) has noticed is so unusual in economics. Nor is the point to wrestle with every detail of the way it was put by different authors in the hope, perhaps, of attributing uniqueness of presentation where it belongs – wherever that may be. These courses of action are simply unavailable because for as long as the relevant questions had been asked, the expectations critique was far too easily recognized, far too mundane, for 'discovery' reasonably to be attributed to any single person. But nor – it must be made clear – is the point to expand upon the thoroughly unoriginal observation that there is nothing new under the sun.

The important point that emerges directly, I suggest, and it is a point about the broad development of post-War macroeconomics, is that by the time of the contributions of Friedman and Phelps, the 'expectations critique' was so routine as to be banal. Whatever anyone may later seem to remember, it was an everyday observation, as ordinary as a painted fence. It is possible that Simons and Scitovsky felt they had a surprise for their readers, but none of the others did. To some it was simply a matter of asserting sound money common sense in the face of dangerous ideas. To others it was more a matter of accepting the inevitable – or welcoming it, in the case of Vickrey. None of these wanted to claim originality, hardly any felt there was reason to attribute it to anyone else in particular.

And most of the figures I have considered – and there are many left unconsidered – are neither minor characters, and nor was their work on this point obscure. Simons, Scitovsky, and Robertson are presumably not to be categorized as unknown figures. And which ordinary monetary economist – or ordinary economist of any kind – of the 1960s would have been ignorant of the work and views of Morton, Bronfenbrenner, or Haberler? At the American Economic Association meeting of 1959, Chandler, Lerner, and Samuelson and Solow – although they gave varying emphasis to it – all noted the problem. Had no one turned up to hear them? And the contributions of Leudicke and the Committee for Economic Development surely make clear that this point was not one of high scholarship even a decade before Friedman and Phelps' famous contributions.

Nor is it right to say that whereas earlier authors had been aware of it, it is Friedman and Phelps who take credit for persuading the profession of the expectations critique. This is apparent from the fact that it seems that no one before them ever doubted it. Most of those quoted above treated it as obviously true, and I would not know where to look for someone who denied it. Indeed the point is perhaps best made by the

context of the quotation from Hicks noted by Hillier. Hicks was discussing Classical economists' views on monetary stabilization, and suggested that JS Mill had seen the possibility of monetary stimulus being effective in the short-run, but – thought Hicks – he had not known what to say about the long run. Hicks continued,

'Nowadays, I think, we know the answer. We know it in theory, and we have seen it confirmed in practice...'

followed immediately by the remarks quoted by Hillier. That is surely the point – even if Mill might have found the issue puzzling in the middle of the nineteenth century, by the 1960s it was a humdrum point, a view anyone would have been expected to accept, something which, quite simply, 'we know'.

III. Explaining the myth

But let me be quick to dispel any impression that Phelps and Friedman made no important contributions in this general area. They both made arguments which were and are – in different ways – very important. And it should also be noted that neither of these authors, at least in the works conventionally cited as the sources of the expectations critique, made any claim to having devised it.

On the contrary, Phelps (1967) could easily be quoted to demonstrate that he thought it an unsurprising claim when he adopted it, and in Phelps (1968) he notes that von Mises, Fellner, and Wallich had emphasized the problem. They could presumably be added to the roll call. Phelps (1970) p20 even quotes part of the passage from Robertson noted above. But in any case, Phelps' contribution is not to be doubted. Of the scientific breadth and moral significance of his achievements Dimand (2008) leaves no doubt. On the particular point of the expectations critique, what is perhaps significant is the argument he built on it. That was to the effect that depending on the social discount rate and the speed of adjustment of expectations, and assuming that the 'natural' equilibrium rate of unemployment is undesirably high, there is an optimal rate of inflation-acceleration up to some rate of inflation. It is a thoroughly theoretical treatment, and certainly an expert one, but the point of it is not to condemn the Phillips curve. Rather, it is to advocate its exploitation. And so perhaps one is led to suppose it is this detailed work in exploring its consequences that explains the attribution of the critique to him.

To understand the attribution of the critique to Friedman one needs, I suggest, to look to what it was in his contributions that was innovative, and in more detail to the reaction – the lack of reaction, in fact – that it produced. Friedman's innovation was that he constructed an argument about the actual effectiveness of policy which presumed, without greatly emphasizing, that demand policy is effective *only* when it induces mistaken anticipations. The striking feature of his Presidential Address is not, in fact, the repetition of the old story that to the extent that policy depends on deception, it will not work for long; but rather the new, and previously unconsidered presumption, quietly introduced, that nothing but such deception will work at all.

Having given an account of Wicksell's idea of the natural rate of interest in similar terms, Friedman said that monetary growth could lower unemployment to a certain target – he chose the example of 3 per cent – by causing employees to believe real

wages had risen and employers to believe they had fallen. It would be uncontroversial that if monetary policy has that effect, employment will rise. But having done nothing more than explain the effect in more detail and present the expectations critique, he moved directly to saying, (p11),

'In order to keep unemployment at its target level of 3 per cent, the monetary authority would have to raise monetary growth still more. As in the interest rate case, the 'market' rate can be kept below the 'natural' rate only by inflation. And, as in the interest rate case, too, only by accelerating inflation.'

This was certainly not something that should have been thought unexceptional. Orthodoxy of the time held both that, in the right circumstances, an increase in demand could lower unemployment without raising inflation; and perhaps that inflation might be associated with high employment for reasons not arising from the deception of wage bargainers. The first point follows naturally from the possibility of involuntary unemployment. The second would arise from any argument to the effect that positive inflation might smooth the operation of markets – one variety was the basis of Vickrey (1955), another, greatly popularized by Schultze (1959) has more recently been revived by Akerlof, Dickens, and Perry (1996).

It must rank as a great curiosity of history that Friedman's opponents made so little effort to attack his argument for its crucial, unstated assumptions. Almost no one sought explicitly to insist on the possibility of involuntary unemployment, and only a few – like Rees (1970) and Tobin (1972) – restated theories of the Phillips curve that might be proof against the expectations critique. Rather, the usual response was to seek to test the hypothesis that the Phillips curve moved one-for-one with expected inflation, with a view, of course, to showing that it did not. Solow (1968) and (1969) were two, similar, attempts to do this. He thought it clear that Friedman was mistaken, and many others reached the same conclusion.

Those early results were, of course, quite properly doubted. There are two outstanding reasons. The first is that few if any of Friedman's econometric critics expressly offered any theory that would make sense of a stable Phillips curve – although a gesture towards Schultze or Vickrey was all that would have been required. Either could explain the existence of a trade off even after expectations had adjusted. It is reasonable, perhaps, to suppose that these unstated arguments were simply assumed by the authors in question, but in the absence of an argument, one could be forgiven for feeling that it was Friedman's enunciation of the critique which, far from persuading people of it, caused it to come into doubt. Certainly, the impression might have been created, and appears more strongly in retrospect, that these authors were seeking to defend an indefensible position – namely that expectations could be perpetually in error.

Secondly, it was clear from the beginning that there was no practical way to be sure how to model the evolution of expectations. Quite apart from the fact that Friedman had himself suggested that expectations might change very slowly, it was therefore impossible reasonably to dismiss his view because one – or even several – particular formulations led to its rejection. With the application of rational expectations, of course, these results came to be seen as entirely unreliable, but even the older methodology stopped leading to the rejection of the expectations hypothesis in the

1970s. The result was that in due course the Keynesians' early econometric victories proved hollow, and no other battles had been engaged.

It so happened that the worldwide wage explosion was almost simultaneous with the use of the expectations critique by Friedman and Phelps, and that must have contributed to their seeming particularly prescient. So it is understandable, up to a point, that these developments would lead to them being credited with having identified the crucial weakness with the – supposedly – previously prevailing views. Since Friedman, particularly, had won the only battle that had in fact been joined, and things had turned out in the kind of way he suggested they would, it was all too easy to suppose that the ground on which that battle had been fought represented his contribution to the argument. His own account of the history of thought in Friedman (1977) certainly presented the matter that way. Indeed, he went out of his way to depict the acceptance of the Phillips curve and its subsequent rejection by a theory which both explained its results and showed their limitations as a demonstration of the scientific credentials of economics.

But whether this is a sufficient explanation must be open to doubt. It is, after all, not merely that the expectations critique is attributed to people who did not devise it, but that it is also, with essentially no dissent whatever, attributed to entirely the wrong period. More than this, it is treated as a great insight when it was in fact quite pedestrian. One should recall that in 1967, Hicks thought nothing of it – it was simply something that today we understand; and in 1959, Kaldor remembered it as an old perception.

And whilst the disinclination of most economists to concern themselves with the history of thought has been noted often enough, this case stands out because if there is one piece of intellectual history that is part of the repertoire, it is that the great insight of Friedman and Phelps led to the abandonment of the Phillips curve, the end of Keynesianism and the transformation of macroeconomics. It cannot be disinterest in history that leads to this point being so conscientiously made.

One can only speculate. But there is a certain utility in dating the discovery of the expectations critique late in the Keynesian era. For one thing, it helps to provide the profession with a collective excuse for the inflation of the 1970s. Whilst there are other aspects to this – one is explored in Forder (2005) – it should be apparent that with the inflationary failures of that period so evident, it is convenient to be able to lay the blame as fully as possible on a single mistake. There is no fundamental flaw in the system, and perhaps not in the operators; there was one error and that has now been corrected. By this line of thinking, the myth of Friedman's insight is made to seem to provide what might be called an absolution through logical insight.

It is also the case that according to the conventional presentations, attempts to exploit the Phillips curve were at the center of Keynesian policy. Although a history may be fictitious, it still benefits from being internally consistent, and that requires that the 'failure of Keynesianism' be explicable in terms of the discovery of the flaw in reasoning about the Phillips curve. One could not tell even a superficially convincing story to the effect that practical Keynesianism revolved around a stable Phillips curve if one acknowledged the common sense status of the expectations critique all through the period.

So the deprecation of Keynesianism, the wisdom of the post-Friedmanite orthodoxy, and the scientific status of economics are all buttressed by this particular piece of amnesia. One should perhaps not be too surprised that such a convenient myth persists.

IV Conclusion

A proper understanding of the development of the expectations critique is no point of detail in the history of economics. Rather, it goes to the heart of the textbook understanding of the progress of macroeconomics. Our history, as it is told, simply cannot be right. And it clearly raises a doubt – not that the doubt has never been raised before by other means – as to whether the rejection of Keynesianism had any sound basis. Indeed, such an understanding might also change the way economics is approached, with it seeming appropriate to give more attention to the history of thought. Not only would that, perhaps, avoid the embarrassment of proclaiming as proof of scientific status the restatement of a platitude; but it might also seem that if the great contribution of the monetarist revolution was so fully anticipated in the work of their predecessors, not least the Keynesians, that other gems might be lurking there as well. Indeed, the following reassessment might be considerable.

references

- Akerlof, G., W. Dickens, and G. L. Perry (1996) "The macroeconomics of low inflation." <u>Brookings Papers on Economic Activity</u> **27** (1): 1-59.
- Bronfenbrenner, M. (1963) "A sample survey of Commission on Money and Credit Research Papers." <u>Review of Economics and Statistics</u> **XLV** (February): 115-119.
- Cagan, P. (1956) The Monetary Dynamics of Hyperinflation, in <u>Essays on the Quantity Theory of Money</u>. ed M. Friedman. Chicago, University of Chicago
- Chandler, L. V. (1960) "Discussion." American Economic Review 50 (2): 212-215.
- Committee for Economic Development (1958) Defense against inflation. New York.
- Council on prices productivity and incomes (1958) First Report. London, HMSO.
- Dimand, R. W. (1999) "Irving Fisher and the Fisher Relation: Setting the record straight." <u>Canadian Journal of Economics</u> **32** (3): 744-750.
- Dimand, R. W. (2008) "Edmund Phelps and modern macroeconomics." <u>Review of</u> Political Economy (January)
- Douglass, W. (1740) <u>A discourse concerning the currencies of the British plantations</u> in America.
- Fisher, I. (1907) The rate of interest. New York, Macmillan.
- Fisher, I. (1926) "A statistical relation between unemployment and price changes." International Labour Review (June): 785-792.
- Fisher, I. (1930) The theory of interest. New York, Macmillan.
- Fisher, I. (1973) "I discovered the Phillips curve." <u>Journal of Political Economy</u> **81** (2): 496-502.
- Forder, J. (2005) "Why is central bank independence so widely approved?" <u>Journal of Economic Issues</u> **39** (4): 843-865.
- Friedman, M. (1956a) <u>A theory of the consumption function</u>. Princeton, Princeton University Press.

- Friedman, M. (1956b) The Quantity Theory of Money A Restatement, in <u>Studies in the Quantity Theory of Money</u>. ed M. Friedman. Chicago, University of Chicago
- Friedman, M. (1958) The supply of money and changes in prices and output, in <u>The relationship of prices to economic stability and growth. Compendium of papers submitted by panelists appearing before the JEC 85th Congress, 2d Sess, March 31 1958.</u>
- Friedman, M. (1966) What price guideposts?, in <u>Guidelines, informal controls, and the market place</u>. ed G. P. Schultz and R. Z. Aliber. Chicago, Chicago University Press
- Friedman, M. (1967) "The monetary theory and policy of Henry Simons." <u>Journal of</u> Law and Economics **10**: 1-13.
- Friedman, M. (1968) "The Role of Monetary Policy." <u>American Economic Review</u> **58**: 1-17.
- Friedman, M. (1975) <u>Unemployment versus inflation?</u> London, IEA.
- Friedman, M. (1977) "Nobel Lecture: Inflation and unemployment." <u>Journal of Political Economy</u> **85**: 451-472.
- Haberler, G. (1960) <u>Inflation its causes and cure</u>. Washington DC, American Enterprise Institute.
- Hands, D. W. (2006) "Priority fights in economic science." <u>Perspectives on science</u> **14** (2): 215-231.
- Hicks, J. R. (1936) "Keynes' theory of employment." Economic Journal
- Hicks, J. R. (1967) Critical essays in monetary theory.
- Hillier, B. (1986) <u>Macroeconomics: Models, debates and developments</u>. Oxford, Blackwell.
- Holmlund, B. (2006) Presentation Speech of the Royal Academy of Sciences for Edmund S Phelps' Nobel Memorial Prize in Economics, 2006.
- Kaldor, N. (1959) Evidence to the Radcliffe Committee. London, HMSO
- Keynes, J. M. (1936) <u>The General Theory of Employment, Interest and Money</u>. London, Macmillan.
- Kydland, F. and E. Prescott (1977) "Rules rather than discretion: the inconsistency of optimal plans." Journal of Political Economy **85**: 473-491.
- Leeson, R. (1997) "The trade off interpretation of Phillips's dynamic stabilization exercise." Economica **64** (253): 155-171.
- Lerner, A. P. (1960) "Discussion." American Economic Review 50 (2): 215-218.
- Leudicke, H. (1957/1957) Editorial. Journal of Commerce, Feb 13.
- Lundberg, E. (1977) Presentation Speech of the Royal Academy of Sciences for Milton Friedman's Nobel Memorial Prize in Economics, 1976.
- Morton, W. A. (1950) "Trade unionism, full employment, and inflation." <u>American</u> Economic Review **40** (March): 13-39.
- Phelps, E. S. (1967) "Phillips curves, expectations of inflation and optimal unemployment over time." <u>Economica</u> **34** (August): 254-281.
- Phelps, E. S. (1968) "Money wage dynamics and labor market equilibrium." <u>Journal</u> of Political Economy **76** (July-August): 678-711.
- Phelps, E. S., ed. (1970) <u>Microeconomic foundations of employment and inflation theory</u>. New York, Norton.
- Phillips, A. W. H. (1958) "The relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861-1957." <u>Economica</u> **25** (November): 283-299.

- Rees, A. (1970) "The Phillips curve as a menu for policy choice." <u>Economica</u> **37** (August): 227-238.
- Robertson, D. (1922/1928) Money. Cambridge, Cambridge UP.
- Samuelson, P. A. and R. M. Solow (1960) "Analytical aspects of anti-inflation policy." <u>American Economic Review</u> **50** (2): 177-194.
- Schultze, C. L. (1959) "Recent inflation in the United States." <u>Study of employment</u>, growth and price levels, Joint Economic Committee, US Congress Sept 1959
- Scitovsky, T. (1940-41) "Capital accumulation, employment and price rigidity." Review of Economic Studies 8 (2): 69-88.
- Simons, H. (1936) "Rules versus Authorities in Monetary Policy." <u>Journal of Political Economy</u> **44** (1): 1-30.
- Solow, R. M. (1968) Recent controversy on the theory of inflation: An eclectic view, in <u>Inflation: Its causes, consequences, and control</u>. ed S. W. Rousseas. Wilton, Connecticut, Calvin K Kazanjian Economics Foundation
- Solow, R. M. (1969) <u>Price expectations and the behaviour of the price level</u>. Manchester, Manchester University Press.
- Sumner, M. T. (1984) The history and significance of the Phillips curve, in <u>Surveys in economics</u>: Macroeconomics. ed D. Demery. London, Longman
- Tobin, J. (1972) "Inflation and unemployment." <u>American Economic Review</u> **62**: 1-18.
- Vickrey, W. S. (1955) Stability through inflation, in <u>Post-Keynesian economics</u>. ed K. Kurihara. London, Macmillan
- Young, W., R. Leeson, and W. J. Darity (2004) <u>Economics, economists, and expectations</u>. London, Routledge.