Written Exam for the B.Sc. or M.Sc. in Economics winter 2014-15

History of Economic Thought

Final Exam/ Elective Course/ Master's Course

December 15, 2014

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

This exam question consists of three pages in total

1. What causes a *Wicksellian cumulative process*? What happens during such a process, and what may end it?

2. Neoclassical writers – in particular Marshall and Wicksell - struggled with the *possibility of increasing returns to scale* in production. Assume perfect competition (MR = p), why would increasing returns to scale leave an equilibrium in the market unstable? Marshall introduced under increasing returns to scale what he called "external economies ". These would let an increase in demand cause lower prices even when the individual firms face increasing marginal cost curves. How is that working?

   Wicksell had a different response to the possibility of increasing returns. He argued that increasing returns was in fact unthinkable, as the average cost curve of the individual firms would be U-shaped. Why is that so, and why would such a shape of the AC-curve prevent us from having increasing returns to scale?

   The introduction of imperfect competition (Joan Robinson) and monopolistic competition (Edward Chamberlain) in the 1930s would be removing the possibility of unstable equilibria even with increasing returns to scale. Why is that so? Make a figure of an equilibrium with imperfect / monopolistic competition. How do we see on such a figure whether we have decreasing or increasing returns to scale?

3. *Compare Keynes' and Friedman's analyses of the labour market* – how is unemployment explained in the two models?

   First, read this quote from Friedman's Nobel lecture (The Journal of Political Economy, Vol. 85, June 1977, reprinted as Ch. 1 in Milton Friedman on Economics, Selected papers).
   [Friedman gives a summary of the Philips curve and argues that it does not fit the data as the trade-off between employment and inflation is not stable. He then presents his Natural Rate Hypothesis]

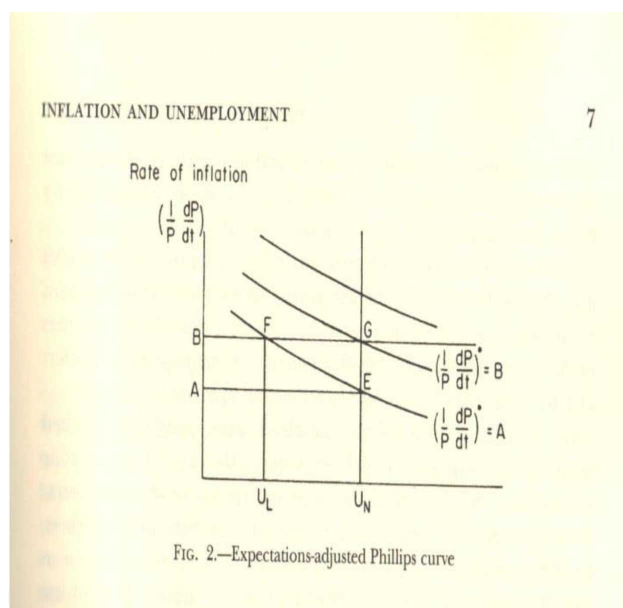
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FIG. 2.—Expectations-adjusted Phillips curve

“(my) Alternative hypothesis is depicted in figure 2 (above). Each negatively sloping curve is a (standard) Philips curve….for a particular anticipated…rate of inflation. Start from E and let the rate of inflation for whatever reason move from A to B and stay there. Unemployment would initially decline to U_L at point F, moving along the curve defined for an anticipated arte of inflation…of A. As anticipations adjusted, the short-run curve would move upward, ultimately to the curve defined for an anticipated inflation rate of B. Concurrently unemployment would move gradually over from F to G.

Unemployment in G and E is what Friedman calls the natural rate of unemployment (U_N). Later in the same paper, Friedman discusses what determines this magnitude:

“….There is a tendency to take it for granted that a high level of recorded unemployment is evidence of inefficient use of resources, and conversely. This view is seriously in error. A low level of unemployment may be a sign of a forced-draft economy that is using its resources inefficiently and is inducing workers to sacrifice leisure for goods that they value less highly than the leisure under the mistaken belief that their real wages will be higher than they prove to be. Or a low natural rate of unemployment may reflect institutional arrangement that inhabit change. A highly static rigid economy may have a fixed place for everyone whereas a dynamic, highly progressive economy, which offers ever-changing opportunities and foster flexibility, may have a high natural rate of unemployment…..”

Now, compare this with Keynes’ opening chapter of The General Theory of Employment Interest and Money (1936).
[Keynes gives a summary of classical (we would call it the neoclassical) theory of the labour market]. “There are two fundamental hypotheses. In equilibrium, (1) The wage is equal to the marginal product of labour and (2) The utility of the wage when a given volume of labour is employed is equal to the marginal disutility of that amount of employment”.

[Keynes then goes on explaining why these conditions may not after all give us full employment. From p 8 onwards, he says]
“They (the Classical school) do not seem to have realized that, unless the supply of labour is a function of real wages alone, their supply curve for labour will shift bodily with every movement of prices……Whilst workers will usually resist a reduction of money-wages (= nominal wages), it is not their practice to withdraw their labour when-ever there is a rise in the price of the wage-goods (= a fall in the real wages)…..It is not very plausible to assert that unemployment in the United States in 1932 was due either to labour obstinately refusing to accept a reduction of money-wages (= nominal wages) or to its obstinately demanding a real wage beyond what the productivity of the economic machine was capable of furnishing.”

[Keynes goes on with further arguments and then sums up] “…there are two objections to the second postulate of the classical theory. The first relates to the actual behavior of labour. A fall in real wages due to a rise in prices, with money wages (=nominal wages) unaltered, does not…cause

the supply of available labour to fall below the amount actually employed prior to the rise of prices……….
"But the other, more fundamental, objection, which we shall develop in the ensuing chapters (the rest of the General Theory) flows from our disputing the assumption that the general level of real wages is directly determined by the character of the wage bargain…..For there may be *no* method available to labour as a whole whereby it can bring the wage-good equivalent of the general level of money-wages (= the real wages) into conformity with the marginal disutility of the current volume of employment."

We would like you to focus on the differences between these two statements!

a. Apparently, Keynes believes that the supply of labour depends on both the nominal and the real wage rate – does Friedman agree?
b. What is Keynes' justification for thinking that workers would behave differently when they are asked to accept a cut in their money wages and when they suffer a decline in real wages due to an increase in the general price level?
c. Keynes argues that the nominal wage rate is inflexible downward. Now, compare with the quotes from Friedman. Here we consider an *increase* in the money wage rate due to a general increase in the demand for goods in the economy. Had there been a *decrease* in in the demand for goods, would that have changed the adjustment process sketched by Friedman?
d. Keynes tells us that there may be no method for workers bring down their real wages and restore full employment even if they were willing to do so – that is what he will elaborate in the following chapters of the General Theory. Basically, destructive expectations may call for expansionary economic policies. Compare this with Friedman's thoughts on the determinants behind the natural rate of unemployment.