2018 will mark the 50th anniversary of Friedman's and Phelps respective contributions about the natural rate of unemployment. We take the opportunity of the AFSE conference to present several papers of our team, the aim of which is to offer complementary appraisals of these two path-breaking contributions to macroeconomics. The AFSE-Gide joint session is organised around four papers by Michaël Assous, Michel De Vroey, Aurelien Goutsmedt and Goulven Rubin and Sylvie Rivot.

**Challenging Friedman:**

**Solow's early reaction to expectations-augmented Phillips curve**

Michaël Assous (Université Paris 1)

Soon after Friedman delivered his Presidential address at the Eightieth Annual Meeting of the American Economic Association in December 1967, Solow attempted to understand critically Friedman's 'natural rate of unemployment' argument. In three lectures written in Oxford while Solow was Eastman Professor and Fellow of Balliol College in 1968-1969, he presented a model postulating non-linear short-run Phillips curve and multiple long-run vertical Phillips curves. In the specific case where the economy may either tend to an excess-demand equilibrium or to one with excess supply, he seriously considered the possibility of coordination failures. In such a case, "the interesting possibility thus emerges that the economy may be jolted out of an underemployment equilibrium and transferred to a new 'initial' position from which it
might find its way to an inflationary excess-demand equilibrium, or vice versa. » (Solow 1970, p. 13).

By means of unedited correspondence and unpublished manuscripts from Solow’s archives, the paper aims at exploring this modeling strategy. We hence hope casting new light on how Keynesians in the 1970 came up to challenge Friedman and, more generally, developed new arguments to address stagflation issues.

Integrating the labor market in the IS-LM model: the ‘old/new Keynesian’ contrast

Michel De Vroey (Universitécatholique de Louvain)

The aim of our paper is to confront the depiction of the labor market in two generations of Keynesian macroeconomic textbook, the first associated with traditional Keynesianism and the second with ‘new Keynesian’ macroeconomics. The builders and developers of the IS-LM model (Hicks, Modigliani, Hansen and Klein) regarded as a rationalization of the argumentation which Keynes had developed in his *General Theory*. They aimed at contrasting the ‘classical’ and the ‘Keynesian’ with the former featuring full employment and the latter involuntary unemployment. However, they diverged as far as emphasis is concerned with Hicks zeroing on preference for liquidity, Modigliani on labor supply and Klein on the inexistence of a positive rate of interest at which saving and investment would be equal. Thereby they take up Keynes’s aim of producing a result of sub-optimal state of rest of the economy that can be overtaken only by government-triggered demand activation. Our stand-in textbook for the ‘old Keynesian’ era is R.G.D. Allen’s *Macroeconomic Analysis. A Mathematical treatment*, 1967 because it has the advantage of spanning all three interpretations.

The new Keynesian era evolved in a different context. It arose after Phelps and Friedman had launched their attack on the stable Phillips Curve and its unemployment/inflation trade off implication. New Keynesians also aimed at retorting to the new classical offensive against Keynesian macroeconomics. A series of new models were proposed aiming at giving a new breath of life to the Keynesian ideas of involuntary unemployment and money non-neutrality. It is not our purpose to examine these contributions. Rather we are interested on what happened in those textbooks whose authors claimed to maintain the Keynesian tradition, i.e. to all intents and

The question we want to answer is whether theirs is still the IS-LM that prevailed in the 1970s and 1970s. The answer is no. We will bring out three differences. First, these textbooks no longer confront two variant of the IS-LM model, the classical and the Keynesian. Second, they account for the joint working of the labor and the goods markets in terms of the WS/PS framework put forward by Layard and Nickel, and also Rowthorne. The third and most striking feature is that in these textbooks the IS-LM model has become more Friedmanian than Keynesian: (a) their analysis takes the realization equilibrium as their starting point; (b) any departure of the economy from full employment is due to workers making wrong expectations about the goods price (that is money supply may well be non-neutral yet this is due to workers 's mistakes); (c) these departures are self-correcting to the effect that demand activation is not to the proper action to be taken.

We also point out the communalities between the old and the new Keynesian model: the use of state of rest notion of equilibrium and the associated Samuelsonian dynamics and the blurring of the distinction between unemployment and underemployment. But then all these features are also present in Friedman. Our conclusion is then that what is presented as Keynesian textbook should more properly be seen as an offspring of Friedman.
Keynesians and the Friedman critique in the 1970s

Aurélien Goutsmedt (Université Paris 1) and Goulven Rubin (Université de Lille)

«What is important for policy purposes is that even the [natural rate of unemployment hypothesis – NRH] is not inconsistent with the existence of a short-run trade-off between unemployment and inflation and hence with the view that an active stabilization policy can contribute to speeding the return of the economy towards equilibrium when it is subject to a variety of demand and supply shocks." (Modigliani and Papademos, 1978)

The Keynesian economists of the late 1960s reacted in different ways to Milton Friedman's critique of the Phillips curve. Whereas Robert Solow launched a crusade against the accelerationist approach and the conception of the natural rate of unemployment, Franco Modigliani or Robert Gordon seem to have rapidly incorporated part of Friedman's analysis. This appears clearly in Modigliani and Papedemos's (1978) paper on “Optimal demand policies against stagflation” or Robert Gordon textbook Macroeconomics (1978). These economists accepted the idea of an economy adjusting automatically to the natural rate of unemployment in the long run but argued that stabilization policies were still necessary to speed up the process. The process leading to the incorporation of Friedmanite ingredients in the Keynesian apparatus will be the subject of our inquiry. How did Gordon, Modigliani, James Tobin or Stanley Fisher consider Friedman’s conception of the adjustment towards a natural rate of unemployment? To what extent did they accept the idea? Did they already share part of this approach before 1968? Don Patinkin for instance assumed a self-adjusting economy as soon as 1956. And Samuelson and Solow (1960) mentioned the existence of a structural rate of unemployment in their seminal paper on the Phillips curve. We will follow the debates surrounding Friedman’s contribution until 1978 with a focus on the Keynesians that accepted at least part of Friedman's reasoning. In so doing, we hope to shade new light on the history of macroeconomics during the revolutionary 1970s. The standard history presents the collapse of Keynesianism in the 1970s in the following sequence of events: Milton Friedman criticized the Keynesian understanding of the Phillips curve, this critique was rationalized by the New Classical economists and it led to the birth of a new form of Keynesianism in the 1980's, “New Keynesianism”, adopting
the methodological standard put forth by Robert Lucas. In this story, New Keynesianism was mainly a reaction to the New Classical claims about the ineffectiveness of monetary policy. As shown by Stanley Fisher and John Taylor, rational expectations were compatible with policy effectiveness if long term contracts hence price rigidities were taken into account. The problem with this story, according to us, is that it is totally silent about Keynesianism in the 1970s, that is between 1968 and the first “New Keynesian” contributions. In particular, the potted history does not allow to understand why in many textbooks still in use today and written by Keynesian economists, in particular the one by Olivier Blanchard, the natural rate hypothesis has become the core of the aggregate supply-aggregate demand model. We conjecture that New Keynesianism in the 1980s or the views of Keynesians trained at the MIT was as much the result of the process of absorption of the Friedman critique as a reaction to the policy effectiveness claims of the New Classical around Robert Lucas. In the work of Robert Gordon, for instance, adaptive expectations are put forward as an alternative to the rational expectation approach of New Classicals (see Gordon, 2011). In a way, Friedman is used to counter the New Classicals.

**Friedman (1968) versus Phelps (1968) about policy-making issues**
Sylvie Rivot (BETA-University of Mulhouse)

When Friedman’s (1968) and Phelps’s (1968) respective contributions regarding structural rate of unemployment are compared, it is usually the similarities of their analyses that are put to the forefront. Both analyses focus on the labour market dynamics, both insist on the fundamental role played by inflationary expectations. Both establish the idea of an equilibrium rate of structural unemployment that implies the non-existence of a long-term tradeoff between unemployment and inflation. And both rely on adaptive expectations to support gradualism instead of cold turkey as policy devices. Both contributions formulate the idea that, in spite of being myopic, workers and employers develop inflationary expectations and adopt the same kind of strategic behaviours that prevent a discretionary policy to have its expanding effects on output and employment.
Beyond these similar concerns for stabilisation policy, the paper argues that at the policy level there remain strong and significant divergences between these two papers. On the one hand the existence of a natural rate of unemployment implies for Friedman that there is simply no room for discretionary policy. Hence the claim for monetary policy rule, i.e. public authorities placed on an ‘automaticpilote’. On the other hand, Phelps builds the case of an intertemporaltradeoff, implying that public authorities should adopt dynamic optimisation processes and seek accordingly for the optimal inflation-unemployment dynamic path.

How to explain these divergences at the policy-making level? In our view, the explanation is twofold. The first answer is to be found at the analytical level: as Friedman (1972) shows, Friedman’ vertical Phillips curve should be seen in his case as an aggregate supply function; in contrast Phelps' relation establishes a price adjustment mechanism in a situation of disequilibrium. So the dynamics at work in a decentralised economy is clearly not the same in these two contributions. At the political level Friedman and Phelps show very different degree of confidence in the public authorities’ capacity to get knowledge on both the structure and the current state of the economy, as well as their capacity to reduce imbalances accordingly.