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From wage rigidity to labour market institution rigidity: A turning-point in explaining unemployment?

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ABSTRACT

In this paper we offer a critical discussion about the concept of labour market rigidity in the light of recent theoretical approaches that have aimed to provide sound micro-foundations to the presence of unemployment in market economies. We point out that the concept of labour market rigidity usually referred to in such theories has changed over time, involving in succession the rigidity of wages, contracts and labour market institutions. We also appraise the factors that lead labour market institutions rigidity, stressed by the search literature, to challenge the more widespread explanation of unemployment grounded on wage rigidity. Moreover, we analyse some theoretical and empirical issues that cast doubt on the ability to deal with unemployment, disentangling the role of institutional rigidities from that of wage stickiness.

> Labor-market flexibility is a much discussed but still vague concept.
> Pissarides (1997, p. 516)

> It seems clear that those who point to labour market rigidity as the source of high unemployment have something other than simple nominal or real wage rigidity in mind.
> Solow (1998, p. 90)

1. Introduction

The macroeconomic role of the labour market has always been at the very centre of discussions about unemployment. In such discussions, the concept of *labour market flexibility or rigidity* has often played a prominent role: according to a dominant perspective (too often accepted uncritically), stronger rigidities are associated with higher unemployment and vice versa. However, as argued by Pissarides (1997) and Solow (1998), in some theoretical frameworks "labour market rigidity/flexibility" is not defined very precisely or directly and, what is more, in the economic literature this concept has changed, sometimes even remarkably, over time.

In the traditional neoclassical explanation of unemployment, the real wage rate plays the most important role: (involuntary) unemployment occurs due to a real wage rate which is too high in relation to its market-clearing level. Thus, in such a theoretical context, the concept of labour market rigidity refers to real wage rates: the labour market is (significantly) rigid if there are forces that prevent the reduction of a real wage rate fixed above its market clearing level. However, in the neoclassical world, the conventional way to achieve a flexible real wage rate is through a flexible nominal wage rate; hence *nominal wage flexibility* is at least as important as *real wage flexibility*.[2] Moreover, from a theoretical viewpoint, in perfectly competitive (frictionless) labour markets, nominal wage flexibility should be ensured by the free operation of market adjustments, making full employment the normal state of affairs.

The subsequent literature, starting from Keynes's (1936) *General Theory*, has rejected the insights of the neoclassical apparatus or

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[2] A good example of this argument is given by the two theoretical contributions by Hahn and Solow (1986, 1995) in which the effects of nominal wage flexibility are examined in an OLG model with flexible real wage rates.

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extended some of its hypotheses, exploring several issues in greater depth. Indeed, whilst at the beginning of the *General Theory* Keynes assumed that the nominal wage rate was constant in order to facilitate the exposition of his argument, he also clarified that "the essential character of the argument is precisely the same whether or not money-wages [...] are liable to change" (Keynes, 1936, p. 27). More importantly, he argued that, starting from an insufficient aggregate demand and involuntary unemployment, a policy of greater nominal wage flexibility would be unlikely to generate forces powerful enough to lead the economy towards full employment. Furthermore, in the economics of Keynes, real wage rigidity does not play any major role. Labelling as a "fallacy of composition" the dominant (neoclassical) view according to which a nominal wage reduction also automatically leads to a decline in the real wage rate, Keynes emphasized that the latter is not directly fixed by economic agents through bargaining (e.g., Trevithick, 1992) and that only a rise in effective demand would bring about, via an increase in prices, a fall in the real wage rate (together with an increase in output and employment). In other words, in Keynes's (1936) framework, the real wage rate is rigid only if the level of effective demand is fixed and real wage rigidity does not represent either a prominent aspect in the functioning of the labour market or, still less, a crucial point in explaining unemployment. This also led Keynes to conclude that a policy of stable rather than flexible (nominal) wages was probably the best macroeconomic environment for sustained employment.

Although Keynes provided several arguments for the importance of negative effects produced on aggregate demand by (nominal) wage cuts,[3] during the late 1950s and 60s a consensus emerged, the so-called Neoclassical Synthesis (e.g., Hicks, 1937; Modigliani, 1944), which presented the *General Theory* as a special case of a more general (neo)classical theory, where downward money wage rigidity prevents the classical adjustment to full employment. Furthermore, wage (and price) rigidities also played a major role in an alternative (re)interpretation of Keynes's (1936) ideas, that is, the disequilibrium models (e.g., Clower, 1965; Malinvaud, 1977), in which, due to the presence of fixed wages and prices, classical unemployment takes place when buyers are rationed in goods markets, with workers rationed in the labour market, whilst Keynesian unemployment entails sellers being rationed in both goods and labour markets. In the Neoclassical Synthesis and disequilibrium models, however, *crucial* (wage and price) rigidities were assumed rather than explained. Thus the more recent literature has directed its efforts to elaborate more convincing explanations of the presence of labour market rigidities that contribute to explain the appearance of unemployment as well as its persistence over time.

The aim of this paper is twofold. Firstly, starting from the so-called New Keynesian Economics, we give a synopsis of the recent sequence of theoretical approaches that have sought to explain the presence of unemployment in market economies. Specifically, as we will observe, the concept of labour market rigidity, to which such theories refer, has changed over time, involving the rigidity of wages, contracts and labour market institutions. We then provide a critical discussion of the factors that lead labour market institution rigidities, stressed by the search literature (e.g., Pissarides, 2000), to challenge the more widespread explanation of unemployment grounded on real wage stickiness.

In the search or matching framework, which has rapidly become the mainstream theoretical setting to study labour market functioning,[4] unemployment is not due to wage inflexibility, but involves the presence of all the market imperfections that might lead to an equilibrium where the simultaneous presence of job vacancies and unemployment tends to persist over time. Such market imperfections have usually been traced back to "frictions" such as missing information, educational and skill mismatches and slow mobility of labour and capital. In other words, frictions can be broadly defined as all the factors that might somehow defer labour market clearing or the matching between unemployed workers and firms with job vacancies. However, market imperfections have also been increasingly linked to the presence of *institutions rigidity* springing from a variety of sources such as unemployment benefits, job security legislation, labour taxes, employment protection legislation, welfare state entitlements and others. Indeed, in recent years, a growing body of literature has made extensive use of the search framework as the baseline model to investigate the effects of major institutional arrangements on labour market outcomes (e.g., Saint-Paul, 1993; Coe and Snower, 1997; Pissarides, 2001).

Within this body of theoretical and empirical research, it is quite common to assume that wages are determined through *continuous* Nash bargaining over the economic rents generated by the employment relationship. From a speculative point of view, this conventional surplus-sharing rule implies wage flexibility, that is, wages that move quite closely with labour market productivity. Yet recent contributions have pointed out that, in order to fully understand and deal with unemployment, it can be misguided not to allow for the way in which institutional rigidities, on the one hand, and (real) wage stickiness, on the other, interact. In this regard, we will provide a critical discussion of two topical issues, namely the so-called "Shimer's puzzle" (Shimer, 2004, 2005) and the debate about the labour market reforms that should be implemented to increase flexibility and reduce unemployment.

The remaining part of the paper is organized as follows. Section 2 introduces New Keynesian theories of real wage stickiness, which have also served as an institutional background for the so-called "wage-gap hypothesis" for high unemployment all over Europe during the 1980s and 90s. Furthermore, it is also discussed how, in such a theoretical framework, some scholars have advanced the idea that *contract rigidity*, even before wage rigidities, represents the main concept for explaining equilibrium unemployment and adverse business fluctuations. Section 3 describes empirical reasons and theoretical developments that lead prominent economic thinkers to switch from wage rigidities to labour market institution rigidities in dealing with unemployment. Section 4 reviews the canonical search or matching model of equilibrium unemployment. In Section 5, a possible role of complementarities between labour market (wage and institutional) rigidities is analysed and discussed with regard to the explanation of observed unemployment dynamics and the debate on policy interventions to increase labour market flexibility. Finally, Section 6 concludes with some further considerations about the possible implications and social desirability of "more flexible" labour markets.

2. Real wage (and contract) rigidity in New Keynesian models of the labour market

Although New Keynesian Economics (NKE) includes models based on both nominal and real wage (and price) stickiness, those that deal more directly with involuntary unemployment refer to real rigidities (e.g., Snowdon et al., 1994, Chapter 7). Before entering into the details, it is important to stress from the outset that such theories tackle a somewhat different question than the traditional Keynesian (macroeconomic) issue concerning insufficient

[3] See, in particular, Chapter 19 of the *General Theory*.

[4] This has been recently affirmed by the 2010 Nobel Prize in Economic Sciences awarded to Peter A. Diamond, Dale T. Mortensen and Christopher A. Pissarides, who laid the foundations of the search approach, popularized and applied to the study of labour markets.