Why we need to abandon the orthodox model of labour markets and develop an alternative

Professor Steve Fleetwood Centre for Employment Studies Research (CESR) University of the West of England, Bristol



Steve.Fleetwood@uwe.ac.uk

Many of us carrying out research in employment relations (and cognate disciplines) often find ourselves having to consider the role of labour markets – e.g. do trade unions cause wage increases and, thereby, unemployment? In such cases, we are faced with a decision vis-à-vis which model of labour markets we should use. Here Steve Fleetwood argues that this decision is made problematic by two factors: (i) there is, currently, no established alternative to the neoclassical, mainstream or orthodox model of labour markets; but (ii) this model is unrealistic and false. He goes on, therefore, to suggest an alternative model.

#### Introduction

Some employment relations theorists/researchers have no problem with the orthodox model of labour markets. It has been developed by some of the brightest minds of the 20<sup>th</sup>/21<sup>st</sup> Centuries; is rooted in a 'scientific' approach, using exclusively quantitative data and variables, mathematical and statistical techniques; is widely taught (in economics and cognate disciplines) in schools and universities; underpins advanced labour economic theories and empirical research; is used by think-tanks, employers' associations, and business and financial organisations all over the world; and it informs local, national, and supra-national economic policy, including the policies of government and treasury departments, central banks, the EU, OECD, IMF and WTO.

Other employment relations theorists/researchers, like me, do have a problem with it. Whilst they know, with varying degrees of insight, that the orthodox model is unrealistic and false (in non-trivial ways) *there is, currently, no established alternative, no non-orthodox model of labour markets.*<sup>1</sup> There are, of course, non-orthodox models of this or that aspect of labour markets (e.g. feminist economists' model of labour markets that are horizontally and vertically segmented along gender lines), but there is nothing comparable to the orthodox model in terms of its overall scope. Without an alternative, they are thrown back (reluctantly) on the orthodox model, having to borrow some of its concepts, and then `finesse´ these to make them compatible with their theory/research – e.g. concepts related to employer-employee bargaining.

Steve has been working on a critique of the orthodox model, and attempting to develop an alternative for several years. See the reference list for details of his work.











The time has come for a change, not least because, following the debacle of financial markets (driven in part by economic models), the discipline of economics has started to look vulnerable – at least to outsiders. Two things need to be done. First, non-economists such as employment relations theorists/researchers must cease to have any illusions in this model, on the grounds that it is unrealistic and false. It cannot be

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rescued and should be abandoned. Secondly, work needs to be done on establishing an alternative model. The objective of this short article, then, is to motivate such a change, by considering these two points in turn.

### 1. The orthodox model of labour markets: unrealistic and false

In orthodox labour economics, a labour market is:

the "place" where labour supply and labour demand come together, to determine the prices and quantities of labour services exchanged (Bosworth *et al.*, 1996: 3).

Whilst the (above) simple text-book model is devoid of *institutions*, orthodox economists know full-well that *institutions matter*. Indeed, Katz & Autor (1999: 1504) even coined the phrase *Supply-Demand-Institutions (SDI) Framework*. In more complex orthodox models, i.e. those including institutions, a labour market might be defined as:

the "place" where labour supply, labour demand, and *institutions* come together, to determine the prices and quantities of labour services exchanged.

The target of my criticism is not the simple textbook model, but a more complex one.<sup>2</sup>

The orthodox model is unrealistic and false because orthodox labour economists are committed to the exclusive use of quantitative data, mathematics and statistics which, in turn, commits them to the use of concepts and assumptions with no purpose other than making the mathematics work – i.e. mathematical tractability. Orthodox labour economists start by stepping away from reality, and into an entirely unrealistic, false or fictional dimension, populated by fictional agents with fictional (and unexplained) preferences, engaging in fictional activities, inhabiting fictional households, faced with fictionalised choices, seeking fictionalised jobs in fictionalised firms, and interacting with (a few) fictionalised 'institutions'.

<sup>&</sup>lt;sup>2</sup> Searching and matching models are now in vogue. One influential matching model 'replaces the conventional demand and supply diagram for labour with a new diagram' (Pissarides, 2000: 19). The *job creation curve* replaces the demand curve, and the *wage curve* replaces the supply curve. I am, however, unaware of anyone arguing that supply and demand models should be replaced in their entirety with search and matching models. The critique I make here is equally applicable to the latter models, but I will not pursue this.

The return steps back to reality are never taken, and indeed never can be taken - although this is often held out as a *soi distant* promise. Theoretical claims made in terms of an unrealistic and false model, cannot be translated into claims about reality, making the exercise pointless.

Now, because many readers of *CESR Review* may not be familiar with the technicalities of economics, I present the following orthodox model of a 'unionised labour market'. It is an example of precisely the kind of model we need to abandon.<sup>3</sup> Space does not allow me to

deconstruct the following passage, pointing out all the unrealistic and false parts, so I suggest the following strategy. Skim-read the passage, ignore the mathematics, focus on the parts referring to some activity you have knowledge of, then ask: is this realistic and true or unrealistic and false? For example, is it true that 'once the wage rate is defined, firms choose the

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amount of labour that maximises their profits?' Or do firms choose the amount of labour based upon considerations such as: the physical capital in place for this labour set in motion, and/or the potential for de-skilling, and so on.

The unionised sector is populated by decentralised trade unions, so that each intermediate goods-producing firm negotiates with a single union  $i \in (0, 1)$ , which is too small to influence the outcome of the market....Once the wage rate is defined, firms choose the amount of labour that maximises their profits...[L]abour is indivisible and workers participate in employment lotteries...[B]efore the lottery draw, the expected intratemporal utility function of workers, who happen to belong to the unionised sector is

 $N^{u_{t}}[C^{u_{0,t}}\upsilon(0)]^{1-\sigma} + (1 - N^{u_{t}})[C^{u_{1,t}}\upsilon(1)]^{1-\sigma}$ 

(2)

where  $C^{u}_{0,t}$  is the consumption level of employed individuals,  $N^{u}_{t}$  is the probability of being employed for agents belonging to the unionised sector...Since they face a positive probability of being unemployed, risk averse workers will try to obtain insurance against the risk of being unemployed; access to complete asset markets will allow individuals to achieve perfect risk sharing.

Since each household supplies its labour to only one firm, which can be clearly identified, workers try to extract some producer surplus by organising themselves into a firm-specific trade union.

<sup>&</sup>lt;sup>3</sup> I have removed some sections and references to make it easier for the non-specialist to read.

Once unions are introduced in the analysis, two important issues arise: what is the objective function of the union and what are the variables of the bargaining process...[T]he debate has revolved over the relative importance of economic considerations (basically how employers respond to wage bargaining) and political considerations in the determination of union wage policy. For political considerations we intend how the preferences of workers, the preferences of union leaders and market constraints interact in determining a union's objective...[They] assume that unions maximise a modified Stone-Geary utility function of the form <sup>4</sup>

$$V\left(\frac{W_t^u}{P_t}, N_t^u\right) = \left(\frac{W_t^u(i)}{P_t} - \frac{W_t^r}{P_t}\right)^{\gamma} N_t^u(i)^{\varsigma}$$
(16)

The relative value of  $\gamma$  and  $\zeta$  is an indicator of the relative importance of wages and employment in the union's objective function. The reservation wage ( $W_t^r(i)$  has many possible interpretations. One possible interpretation is that it is the opportunity wage of the workers since it is unlikely that a union can survive if it negotiates a wage below such level. Another possible interpretation is that  $W_t^r$  is an `aspiration wage', i.e. a wage that workers have come to regard as 'fair'. Union's reservation wage is generally unobservable and therefore hard to model. We assume that

$$\frac{W_t^r(i)}{P_t} = \varpi e^{\varepsilon \frac{\varpi}{t}}$$
(17)

where  $\varpi > 0$  is a positive constant (which can be normalized to1) and where

$$\varepsilon_t^w = \rho_w \varepsilon_{t-1}^w + \hat{\varepsilon}_t^w \tag{18}$$

Moreover, the fact that the reservation wage is subject to persistent shocks is meant to capture the exogenous wage shocks, often associated with political and social factors that have often characterised industrialised economies, especially in Europe.

The Stone-Geary utility function not only is appealing, both for its ability to approximate the actual behaviour of unions and for its flexibility and tractability, but also for its generality. The parameters  $\gamma$  and  $\zeta$  correspond to the elasticities of the union's objective V(.) to the excess wage  $\left(\frac{W_t^u}{P_t}(i) - \frac{W_t^r}{P_t}(i)\right)$  and to the employment level  $N_t^u(i)$  respectively. The larger the difference  $\zeta - \gamma$  the more the union approaches the extreme

<sup>&</sup>lt;sup>4</sup> A footnote states: `[A]ssuming that the union leader has this type of objective function is a very simple and *realistic* way to obtain endogenous real wage rigidities' (emphasis added). The Stone-Geary utility function might be appealing for its mathematical tractability, but the claim that it `approximates the actual behaviour of unions' would be funny if it was not so serious. The same goes for the claim that this function is, in any way, `*realistic*' vis-à-vis wage setting.

of a 'democratic' (or `populist') union. When  $\zeta = \gamma$  and  $\zeta$  these two parties have an identical discretionary power in formulating policies. If unions are 'wage oriented' then  $\gamma > \zeta$ ; on the other hand if they are 'employment oriented'  $\gamma < \zeta$  (Mattesini and Rossi, 2009: 1471-4).

Whilst I suspect many *non-economists* will draw the conclusion that this is an exercise in mathematical modelling for its own sake, orthodox labour economists do not see it like this. McCloskey puts her finger on the tension:

It is not difficult to explain to outsiders what is so dramatically, insanely, sinfully wrong with...methods in high-level economics...It is very difficult to explain it to insiders, because the insiders cannot believe that methods in which they have been elaborately trained and which are used by the people they admire most are simply unscientific nonsense....So they simply can't grasp arguments that are plain to people not socialised in economics (McCloskey, 2005).

The orthodox response, found in labour economics text-books, can be summarised as follows:

Because labour markets are complex phenomena, all models must simplify and idealise, meaning that models of labour markets will always, strictly speaking, be unrealistic and false.

Critics, like me, are not impressed by this response, considering it to be an 'evasive justification' (Mäki, 2009). It justifies the continued use of unrealistic and false models, whilst evading criticism by foreclosing any discussion. No-one doubts that models must simplify, but the real issue is with what goes on in the name of 'idealisation'.

## 2. An alternative model of labour markets

My starting point is to accept, along with orthodox labour economists, that institutions matter, but then push the issue further than they are able to go. For many labour orthodox economists, institutions are anything that prevents the operation of the (labour) market mechanism. For more sophisticated orthodox

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economists (e.g. Aoki, 2007), institutions are sets of rules. But why stop with rules? What about other 'institution-like' phenomena such as agreements, codes, conventions, customs, directives, duties, guidelines, laws, mores, norms, obligations, precedents, procedures, regulations, responsibilities, rights, rituals, rules (formal and informal), routines, scripts, standards and templates.

Their commitment to methodological and ontological individualism, demands that orthodox economists conceive of institutions and 'institution-like' phenomena not as *causes*, but as *effects*, of agents' actions (Hodgson, 2007; Davis, 2003, 2010). This is a serious handicap because institutions and 'institution-like' phenomena *causally govern the action of labour market agents* – e.g. attending a job interview cannot be done without the causal influence of the rules of grammar and the norms of holding a conversation.

Now, there is no need to get distracted by this slew of 'institution-like' phenomena because they can be encapsulated in the generic term '*social and cultural structures*' or '*S*-*C structures*'.<sup>5</sup> This allows me to move on, and explain how S-C structures causally govern agents' actions, via Archer's (1995, 1998) *morphostatic-morphogenetic (M-M) approach*.

Agents are born into a social world that pre-dates them, a world replete with S-C structures. In order to engage in even the simplest kinds of social activity, agents must draw upon S-C structures - consciously and/or unconsciously. For social (as opposed to individual) actions, they do this collectively - e.g. workplace norms are drawn upon by all (or most) workers in a workplace. By drawing upon them, they subsequently *reproduce* them (hence *morphostasis*), or *transform* them (hence *morphogenesis*), whilst simultaneously reproducing or transforming themselves as (some type) of agents. These reproduced or transformed S-C structures are emergent from the actions of agents, but because they then take on an independent existence, they are *irreducible to* agents' actions. S-C structures, then, are emergent from, but irreducible to, the collective actions of agents that they causally govern.

This is easily translated into a labour market context. Labour market agents are born into a socio-economic world replete with specific (*labour market*) S-C structures.<sup>6</sup> They reproduce or transform these S-C structures, collectively, whilst simultaneously reproducing or transforming themselves as labour market agents – e.g. skilled workers or job seekers. Labour market S-C structures are emergent from, but irreducible to, labour market agents' actions. Labour market S-C structures then, are emergent from, but irreducible to, the collective actions of the labour market agents that they causally govern.

Labour markets are emergent from, but irreducible to, and constituted by....labour market S-C structures I am now in a position to offer an alternative definition and model of labour markets. It is *not* the case that there are labour markets, *and* S-C structures - or labour markets *and* institutions. Rather, *labour markets are made from, or constituted by, labour market* S-C

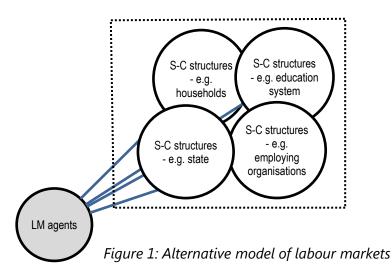
structures - hence the following definition:

<sup>&</sup>lt;sup>5</sup> I am not entirely happy with generic terms like this one and have toyed with others. I have not yet found a better one.

<sup>&</sup>lt;sup>6</sup> S-C structures are *labour market* S-C structures if they causally govern agents' employment-orientated actions.

Labour markets are emergent from, but irreducible to, and constituted by, the specific labour market S-C structures that are collectively reproduced or transformed by labour market agents as they execute their specifically employment orientated actions.

Figure 1 presents this alternative model in diagrammatic form. The four circles represent the S-C structures that constitute either a single labour market (e.g. for midwives), or labour markets as a whole socio-economic arrangement. The dotted square represents the boundary of labour markets. The boundary should not be conceived of as rigid. It is established by the set of S-C structures involved, and will shift as they shift.<sup>7</sup> Labour market agents are *not* part of labour markets, rather they draw, **collectively**, upon the S-C structures that constitute labour markets.



# Some final comments

Whilst this is a highly abstract model, it is no more abstract than the orthodox model<sup>8</sup> it

replaces, and against which its abstractness should be judged. Moreover, it is abstract *but realistic* and *not-false*. There is no reason for a non-mathematical model to contain knowingly false concepts and assumptions because ensuring mathematical tractability is unnecessary.

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Notice that the alternative model breaks with the idea of a model based upon labour supply and demand curves - even with 'institutions' added. Whilst I have argued elsewhere that the evidence for the existence of labour supply and demand curves is weak (Fleetwood, 2014a), this does not mean that the forces generated by changes in supply and demand have no influence. But it does mean that there is no reason to privilege them over S-C structures and they should be theorised alongside other S-C structures.

<sup>&</sup>lt;sup>7</sup> Despite differences in appearance, this model is consistent with the model in Fleetwood (2010: 735, fig 5).

<sup>&</sup>lt;sup>8</sup> Or for that matter, some kind of searching and matching model if this is preferred to the supply and demand model.

To understand why labour markets are the way they are and not some other way; how they work when they do; how they fail when they do; how they might be improved in future; and how they might be superseded, we need to understand the S-C structures that constitute labour markets. Employment relations theorists/researchers are well placed to carry out this kind of analysis.

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