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## 8 Labour market rigidities can be useful.

### A Schumpeterian view

*Alfred Kleinknecht, C.W.M. Naastepad,  
Servaas Storm and Robert Vergeer*

#### 1 Introduction

With the emergence of supply-side thinking in the 1970s, the claim that high (European) unemployment is caused by ‘rigidities’ in labour markets became dominant. The usual suspects making labour markets ‘rigid’ are high minimum wages, high social benefits, strong trade unions, the power of insiders and strong protection against firing. Removal of labour market rigidities tends to weaken the bargaining position of labour and thus can bring down wages. Ultimately, reduction of wages carries the promise of more jobs. Against this, we argue that (1) countries with more flexible labour markets have a low-productive and hence more labour-intensive GDP growth; it is highly doubtful, however, whether this indeed results in lower rates of unemployment; (2) that GDP growth does not differ between countries with ‘rigid’ versus ‘liberalized’ labour markets, and (3) labour market rigidities can be useful for the working of what is called the ‘routinized’ (‘Schumpeter II’) innovation model. Claims about the beneficial effects of removing labour market rigidities tended to be made under the (often implicit) assumption that this would *not* affect innovation and labour productivity. We give theoretical arguments and quote empirical evidence that it does.

The next section gives illustrations of some key macro-economic variables over the period 1960–2011 for a group of typical ‘Rhineland’ (‘Old Europe’) countries that are supposed having rigid labour markets compared to a group of Anglo-Saxon countries that have liberalized labour market regimes. Thereafter we summarize theoretical arguments of why flexibility in labour relations should influence innovation and labour productivity growth, and we discuss empirical evidence.

#### 2 Varieties of capitalism: comparing two groups of countries

The *varieties-of-capitalism* literature distinguishes two types of labour market regimes: (1) *Liberalized Market Economies* (LME) versus (2) *Coordinated Market Economies* (CME). LMEs are characterized by weak protection against dismissal, modest social benefits, weak trade unions, and decentralized wage bargaining systems favouring inequality of incomes. Against a modest protection of



labour stands a strong protection of investors. Typical LME countries are the US, Canada, Great Britain, Ireland, Australia and New Zealand. CMEs show rather the opposite: a stronger protection against dismissals, more generous social security systems, stronger trade unions and a tendency towards centralized wage bargaining (enhancing greater income equality). Against the stronger protection of labour, however, stands a weaker protection of investors. Typical CME systems of labour relations can be found in Continental Europe and in Japan (see Hall and Soskice 2001).

In the following figures we give four key economic variables for a group of (rigid) Old Europe countries versus five Anglo-Saxon countries. For ease of comparison, all data are set equal to 100 in 1960.

The figures show the following interesting patterns:

- There is a faster growth of real wages in Old Europe (Figure 8.1). This is not surprising as rigid labour markets in Old Europe leave more power to labour than do 'liberalized' Anglo-Saxon labour markets.
- As a consequence of lower wage growth, input of hours worked is growing substantially stronger under Anglo-Saxon labour market regimes, compared to 'Old Europe' (Figure 8.2).

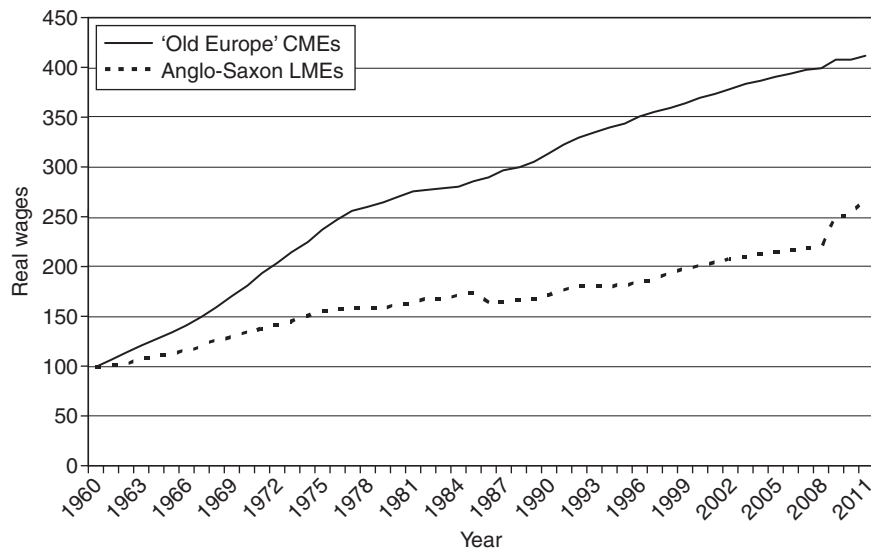


Figure 8.1 Development of real wages, 1960=100 (source: database of the Groningen Growth and Development Centre ([www.ggdcc.net](http://www.ggdcc.net)) & AMECO database).

Notes

Anglo-Saxon countries: Australia, Canada, New Zealand, United Kingdom and United States.

Continental European countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain, and Sweden.

Definition: Real wages = Labour Productivity per hour (GGDC; EKS) \* Wage Share at factor costs (Eurostat).

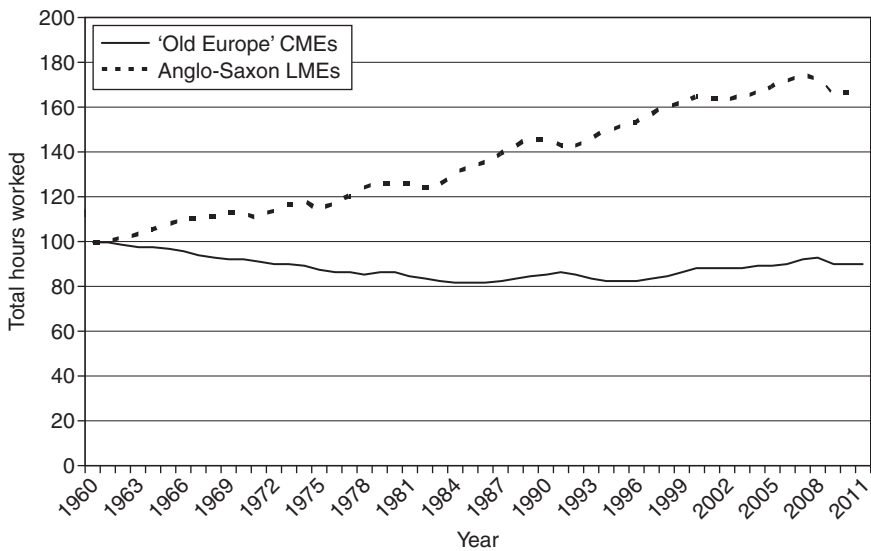


Figure 8.2 Development of total hours worked (1960=100 (source: database of the Groningen Growth and Development Centre ([www.ggdc.net](http://www.ggdc.net))).

Notes

Anglo-Saxon countries: Australia, Canada, New Zealand, United Kingdom and United States.  
 Continental European countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain and Sweden.

- A surprising result emerges from Figure 8.3: GDP growth in both regimes hardly differs (Figure 8.3).
- Figure 8.4 shows the logical consequences from Figures 8.2 and 8.3: If GDP growth is essentially the same, but labour input grows faster in the Anglo-Saxon countries, this means that the Anglo-Saxon countries have substantially lower labour productivity growth, i.e. a slower growth of GDP per hour worked. Choosing a positive frame one can argue that the Anglo-Saxon labour market regime produces more demand for labour; in a negative frame, one can say that Anglo-Saxons have to work more hours for the same GDP growth.

### 3 Do LMEs have lower unemployment?

A more labour-intensive GDP growth through lower growth of labour productivity may carry the positive message of lower unemployment. There are, however, doubts about whether in 'liberalized' Anglo-Saxon LMEs, unemployment rates are indeed lower. Several studies suggest that the claim that deregulation brings down unemployment rates, lacks robustness (Baker *et al.*, 2005; Baccaro and Rei, 2007; Howell *et al.*, 2007). Vergeer and Kleinknecht (2012a) have submitted the influential model by Nickell *et al.* (2005) to a series of robustness checks. Leaving the data unchanged



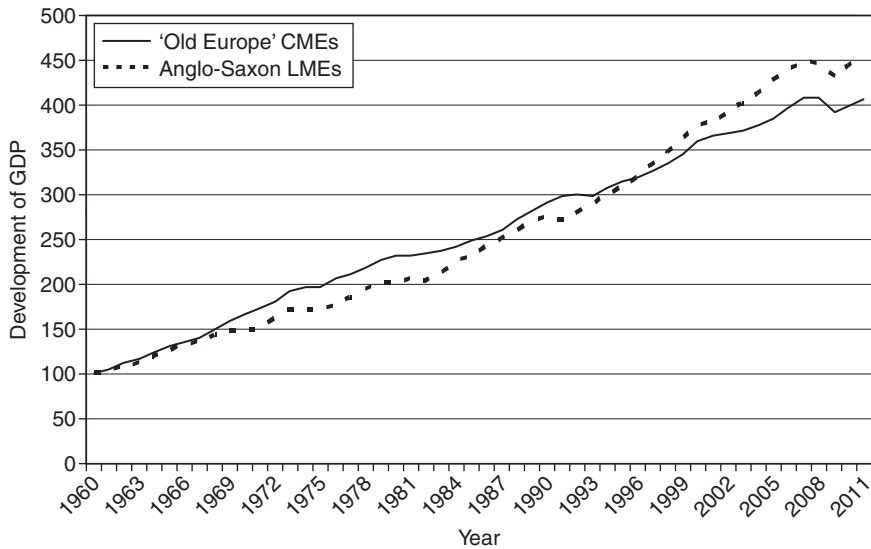


Figure 8.3 Development of GDP (1960=100) (source: database of the Groningen Growth and Development Centre ([www.ggdcc.net](http://www.ggdcc.net))).

Notes

Anglo-Saxon countries: Australia, Canada, New Zealand, United Kingdom and United States.

Continental European countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain and Sweden.

and applying three small modifications to their model, it turned out that numerous key coefficients changed significance or even sign. They conclude that the claim from NAIRU theory that labour market rigidities cause (high) unemployment is rather shaky. Table 8.1 gives descriptive data on unemployment rates in a number of LME and CME countries. These figures illustrate that, in the long run (1970–2010), it is by no means obvious that either of the two labour market regimes performs remarkably better than the other.

How then to explain that, in spite of a more labour-intensive GDP growth (Figure 8.2), it is doubtful whether LME countries have lower unemployment rates? Possible explanations are an increase of labour supply thanks to generous immigration policies and due to longer working weeks in Anglo-Saxon countries (see Table 8.2). For employers it is cheaper if their personnel work more hours, rather than hiring new people. Labour market institutions in Anglo-Saxon countries give more power to employers; the latter may have used their power forcing employees to work longer. These two arguments may explain why in LME countries we observe an increase in hours worked, but not necessarily lower unemployment rates.

Rather than achieving lower unemployment rates, deregulation seems to have achieved a more unequal income distribution. For example in the US, the share in National Income of the top-10 per cent income earners increased from 33 per

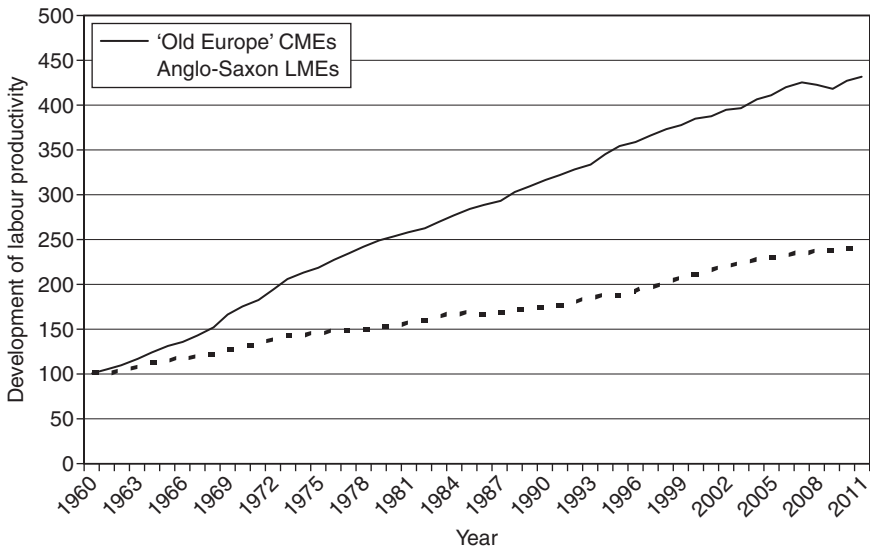


Figure 8.4 Development of labour productivity (1960=100) (source: database of the Groningen Growth and Development Centre ([www.ggdc.net](http://www.ggdc.net))).

Notes

Anglo-Saxon countries: Australia, Canada, New Zealand, United Kingdom and United States.

Continental European countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain and Sweden.

Table 8.1 Average unemployment during 1970–2010 (as a percentage of the working population)

'Flexible' Anglo-Saxon LMEs		'Rigid' Old-Europe CMEs	
Canada	7.7	France	7.5
UK	7.2	Italy	7.0
Australia	6.3	Germany	6.2
USA	6.3	Netherlands	6.1
		Sweden	4.7
<b>Average:</b>	<b>6.9</b>	<b>Average:</b>	<b>6.3</b>

Source: werkloosheidscijfers zijn gebaseerd op de Amerikaanse definitie van werkloosheid en daarom vergelijkbaar. [www.bls.gov/fls/flscomparelf/unemployment.htm](http://www.bls.gov/fls/flscomparelf/unemployment.htm)

Notes

All unemployment figures follow the US definition and are therefore internationally comparable.

cent in 1976 to 50 per cent in 2007 and the share of the top-1 per cent increased from 8.9 per cent in 1976 to 23.5 per cent in 2007 (Atkinson *et al.*, 2011). Inequality of incomes increased much less in Europe. The real difference between LMEs and CMEs lies first of all in a higher income inequality and not in rates of unemployment.



Table 8.2 Working hours per year, 1990–2010

'Flexible' Anglo-Saxon LMEs		'Flexible' Anglo-Saxon LMEs	
Australia	1,767	Italy	1,840
Canada	1,761	Sweden	1,613
USA	1,720	France	1,509
UK	1,707	Germany	1,478
		Netherlands	1,432
<b>Average</b>	<b>1,739</b>	<b>Average:</b>	<b>1,574</b>
		(Average without Italy)	1,508

Source: The Conference Board: Total economy database, January 2012: [www.conference-board.org/data/economydatabase/](http://www.conference-board.org/data/economydatabase/).

#### 4 Why should LMEs have lower growth of labour productivity?

This section summarizes arguments of why deregulation and downward wage flexibility may lead to lower labour productivity growth. We first clarify what is being understood by 'flexibility'. The literature distinguishes three categories (e.g. Beatson, 1995):

- 1 'Numerical' (or external) flexibility that allows firms to adjust the size of their labour force through flexible hiring and firing;
- 2 'Wage flexibility' which concerns the responsiveness of wages to economic shocks; and
- 3 'Functional' (or internal) flexibility that allows firms to reorganize their workforce in internal labour markets through training and HRM policies.

Emphasis on the first two modes of flexibility is characteristic for Anglo-Saxon 'Liberal Market Economies', whereas 'Coordinated Market Economies' (or 'Rhineland' systems) rely more on functional flexibility (see Hall and Soskice, 2001). There is evidence from firm-level data that high *functional* flexibility on internal labour markets may be favourable to innovation and productivity growth (Appelbaum *et al.*, 2000; Bassanini and Ernst, 2002; Michie and Sheehan, 2001, 2003; Kleinknecht *et al.* 2006, Zhou *et al.*, 2011). The policy agenda towards removing labour market rigidities, however, is mainly interested in wage-cost saving *numerical* flexibility and in (downwardly) flexible wages.

Institutional reforms that achieve (downwardly) flexible wages and those allowing for easier firing both work in the same direction: they allow savings on a firm's wage bill. In principle, one might expect that workers accepting a flexible job should earn a positive risk premium that compensates for higher firing risks. Empirical evidence, however, suggests that rather the opposite appears to be the case (Sánchez and Toharia, 2000; Booth *et al.*, 2002; McGinnity and Mertens, 2004; Addison and Surfield, 2005; Picchio, 2006). Such evidence from person-level wage equations is consistent with estimates of firm-level wage





1 equations (Kleinknecht *et al.*, 2006). In other words, flexible workers, on  
2 average, earn *less* than regular workers (controlling for other personal character-  
3 istics). A possible explanation is the abundant supply of labour in certain seg-  
4 ments of the labour market. In the context of this chapter, it does not matter  
5 whether lower wage growth is achieved through institutional changes in the  
6 wage setting mechanism or through easier firing or through removing other  
7 rigidities (e.g. minimum wages or social benefits).

8 In the following, we discuss three major channels of transmission from  
9 removing labour market rigidities to lower innovation and labour productivity  
10 growth:

- 11 1 Effects on innovative activity;
- 12 2 Effects on training;
- 13 3 Trust and productivity growth.

14 The work of Hall and Soskice (2001) suggests that the three channels are  
15 complementary.

### 16 **1 Effects on firms' innovative activity**

17 Three arguments substantiate a causal link from higher wages to higher labour  
18 productivity growth. First, one can argue that a price increase of labour (relative  
19 to capital) will stimulate the adoption of labour-saving innovations, as proposed  
20 by Sylos Labini (1984, 1993 and 1999).<sup>1</sup> Second, in a Schumpeterian perspec-  
21 tive, it can be argued that, due to their monopoly rents from innovation, innova-  
22 tors are better able than technological laggards to live with wage increases (or  
23 with high adjustment costs due to stricter regulation). Therefore, high real wage  
24 growth and labour market rigidities may enhance the Schumpeterian process of  
25 *creative destruction* in which innovators compete away technological laggards  
26 (Kleinknecht 1998). Or vice versa, de-centralized wage bargaining and (down-  
27 ward) wage flexibility increases the chances of survival for technological lag-  
28 gards. While their survival is favourable for employment (at least in the short  
29 run), it is likely to result in a long run decline of the average quality of entrepre-  
30 neurship and a loss of innovative dynamism. Third, using vintage models, it is  
31 easy to demonstrate that more aggressive wage policies by trade unions will lead  
32 to the quicker replacement of older (more labour-intensive) vintages of capital  
33 by new and more productive ones. A policy of modest wage claims will allow  
34 firms to exploit old vintages of capital for longer. This can result in a growing  
35 age of capital stock (shown to be one of the reasons behind the productivity  
36 crisis in the Netherlands after 1985; see Naastepad and Kleinknecht, 2004).

37 Against such arguments, there are three counter-arguments. First, labour  
38 market rigidity could have negative effects on innovation and productivity by  
39 slowing down the reallocation process of labour from old and declining sectors  
40 to new and dynamic ones (for a review of the effects of labour market institu-  
41 tions on economic performance, see Nickell and Layard, 1999). Second, the  
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difficult or expensive firing of redundant personnel can frustrate labour-saving innovations at the firm level (Bassanini and Ernst, 2002; Scarpetta and Tressel, 2004). Third, well-protected and powerful personnel could appropriate rents from innovation through higher wage claims, thus reducing incentives for taking innovative risks (Malcomson, 1997). The latter argument might be quite relevant in Anglo-Saxon de-centralized bargaining systems. It appears to be less relevant to rigid ‘Rhineland’ labour markets that tend to rely on centralized (often industry-level) wage bargaining.

The argument that the difficult firing of personnel will hamper labour-saving innovations might be less relevant for three reasons. First, if firing is difficult, firms have incentives to invest in functional flexibility by means of training, which will allow shifting labour from old to new activities in internal labour markets. In other words, lack of *numerical* flexibility will enhance *functional* flexibility.<sup>2</sup> Second, in many countries, redundant personnel need not be a problem for labour-saving innovations as high percentages leave their firms voluntarily.<sup>3</sup> Third, protection against dismissal may actually enhance productivity performance, as secure workers will be more willing to cooperate with management in developing labour-saving processes and in disclosing their (tacit) knowledge to the firm (see Lorenz, 1999). Workers that are easy to fire have incentives to hide information about how their work might be done more efficiently.

## 2 Effects on manpower training

Easier firing will lead to shorter average job durations, making the payback period of investment in manpower training shorter. In addition, workers will first of all be interested in acquiring general skills that increase their employability on the external job market, but may be reluctant to acquire firm-specific skills if there is no long-term commitment to their employers (Belot *et al.*, 2002). A similar conclusion emerges from the hypothesis that highly flexible labour reduces the compression of the wage structure (both within and between firms); note that Acemoglu and Pischke (1999) and Agell (1999) argue that wage compression is a reason for the provision of training by firms. Empirical evidence of a correlation between fixed-term employment and a lower probability of work-related training has been provided for the UK by Booth *et al.* (2002).

## 3 Trust and productivity growth

Work by Huselid (1995), Buchele and Christiansen (1999), Lorenz (1999), Michie and Sheehan (2001, 2003) and Naastepad and Storm (2006) shows favourable productivity effects of ‘high trust’ or ‘high road’ human resource management practices. Long-lasting working relations and strong protection against dismissal can be interpreted as an investment in trust (see also Svensson, 2011), loyalty and commitment which favours productivity growth in four ways.

First, it reduces costs of monitoring and control. For example, Naastepad and Storm demonstrate that firms in low-trust ‘Anglo-Saxon’ countries typically

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1 have much thicker management bureaucracies for monitoring and control, compared to ‘Rhineland’ countries (2006: 170–191).

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3 Second, it reduces positive externalities, i.e. the leakage of crucial knowledge to competitors which, in principle, discourages investment in knowledge. Third, it favours long-run historical accumulation of (tacit) knowledge in a ‘routinized’ (Schumpeter II) innovation model (Breschi *et al.*, 2000). The argument about the ‘routinized’ (versus the ‘entrepreneurial’) innovation regimes is summarized in Table 8.3 which is inspired by the work of Breschi *et al.* (2000). Fourth, it will favour critical feedback for bosses from the shop floor. Powerful managers have a tendency to select conformists around themselves who hardly contradict them. If this is enhanced by a change of power relations due to easier firing, it can breed problematic management practices.

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13 Table 8.3 makes it clear that continuous accumulation of ‘tacit knowledge’ (i.e. ill-documented knowledge from experience) in a routinized innovation regime is favoured by *continuity* in labour relations. In other words, a routinized innovation regime gives incentives to reallocation of work within internal labour markets through *functional* flexibility rather than via external labour markets through *numerical* flexibility. The historically *cumulative* nature of knowledge produces path dependencies which give incentives to firms employing protected insiders with long job tenures.

## 23 5 Previous empirical findings and hypotheses

24 Most empirical analyses of the relationship between flexible labour and productivity growth tend to use country or sector data (Buchele and Christiansen, 1999; Nickell and Layard, 1999; Bassanini and Ernst, 2002; Scarpetta and Tressel, 2004; Auer *et al.*, 2005; Naastepad and Storm, 2006). These studies search for relationships between measures of labour market rigidity and productivity. Most

30 *Table 8.3* Stylized comparison of two Schumpeterian innovation models

32 <i>Schumpeter I model: ‘garage business innovation’</i>	33 <i>Schumpeter II model: ‘routinized innovation’</i>
34 Starters in high tech; niche players	Established firms with professionalized R&D labs
35 SMEs and young firms	Monopolistic competitors; oligopolists
36 High entry and exit rates	Stable hierarchy of (dominant) innovators
37 Properties of the knowledge base:	
38 Generally available knowledge → low entry barriers	Dependence on historically accumulated and often firm-specific (tacit) knowledge → high entry barriers
39 Labour market institutions:	
40 Recruitment through external labour markets	Internal labour markets through dependence on accumulated (firm-specific, tacit) knowledge → well-protected ‘insiders’





of these studies observe a positive effect of employment protection (e.g. measured by the OECD's *Employment Protection Legislation Index*) on labour productivity growth or innovation indicators. The econometric analysis of Bassanini *et al.* (2009), however, suggests that the net effect of labour market regulation on aggregate labour productivity growth is *negative*. The study by Bassanini *et al.* informed the OECD (2007) *Employment Outlook* in concluding that the net effect of labour market regulation on productivity growth is negative, but relatively small. Two other OECD economists, Scarpetta and Tresselt (2004), find a large negative impact of employment protection on productivity growth in a subset of OECD countries (those countries featuring sectoral wage bargaining without national co-ordination); however, for all OECD countries taken together, these authors find no impact of employment protection on productivity growth. But this conclusion is not strong because their empirical approach suffers from important limitations and the impact of regulation on aggregate productivity growth is basically imputed or even conjectured – not estimated.<sup>4</sup>

Auer *et al.* (2005) find a positive (though decreasing) relation between job stability, measured as average tenure, and labour productivity. Rather than using measures of EPL strictness, Vergeer and Kleinknecht (2012b) explain labour productivity growth in 20 OECD countries (1960–2004) through changes in wages and in the share of labour in National Income. They find that a 1 per cent extra wage increase (decrease) will result in an increase (decrease) of labour productivity growth by 0.35–0.46 per cent, depending on the specification. Moreover, a 1 per cent rise in the share of capital income in National Income leads to an 0.2 per cent reduction in labour productivity growth. This holds after controls for other factors such as the share of services in the total economy; Verdoorn effects; catching up effects, or past labour productivity growth (path dependency).

A different approach is by Acharya *et al.* (2010) who study patents and patent citations as a proxy for innovation. They argue that stringent labour laws provide firms a 'commitment device' to not punish short-run failures and this would encourage employees pursuing risky and value-enhancing innovative activities. Exploiting time-series variation in changes of dismissal laws, they find that

innovation and growth are fostered by stringent laws governing dismissal of employees, especially in the more innovation-intensive sectors. Firm-level tests within the United States that exploit a discontinuity generated by the passage of the federal *Worker Adjustment and Retraining Notification Act* confirm the cross-country evidence.

(2010: 1)

Also using patents, Pieroni and Pompei (2008) found a negative effect of labour turnover (as a proxy for external flexibility) on patenting activity at regional level in Italy.

Some studies report firm-level evidence. For example, Michie and Sheehan (2001, 2003) find a positive correlation between 'high road' human resource management practices and innovation in British firms.





1 Kleinknecht *et al.* (2006) found negative effects of external flexibility and  
2 positive effects of functional flexibility on labour productivity growth in a  
3 sample of Dutch manufacturing firms.

4 Arvanitis (2005) found a positive relationship between functional flexibility  
5 and labour productivity for a sample of Swiss companies, but an insignificant  
6 effect of external flexibility. Autor *et al.* (2007) found a positive effect of  
7 employment protection on capital investment, skills and labour productivity, but  
8 a negative effect on total factor productivity. Lucidi and Kleinknecht (2010)  
9 report estimates from 3,000 Italian firms. They show that high shares of flexible  
10 workers, a high labour turnover and lower costs of labour (relative to capital) are  
11 each related to significantly lower rates of labour productivity growth. Boeri and  
12 Garibaldi (2007) found a negative effect of the share of fixed-term contracts on  
13 labour productivity growth in a sample of Italian manufacturing firms during the  
14 period 1995–2000.

15 Many of the above arguments (implicitly) assume that easier firing will result  
16 in a higher labour turnover. One may object that easy firing being allowed by  
17 law does not need to prevent firms from keeping their people for longer. Against  
18 this, one can argue that the mere possibility of easy firing may increase mobility.  
19 In a firm that is not doing well, employees may search jobs, as soon as they fear  
20 lay-offs. Once massive lay-offs take place, competition for jobs in the local  
21 labour market may increase dramatically. It is therefore of vital importance for  
22 individual workers to start their search process in a very early stage, before  
23 others getting aware of the threat of lay-offs. People may therefore leave while  
24 their firm might not even have considered firing them.

## 25 26 27 **6 Concluding discussions**

28 What can we conclude about effects of removing rigidities in labour markets?  
29 First, long-run GDP growth in *Liberalized Market Economies* (LMEs) does  
30 not seem to be systematically higher than GDP growth in *Coordinated Market*  
31 *Economies* (CMEs). It has sometimes been claimed that deregulation of factor  
32 markets (and, in particular of labour markets) leads to higher economic  
33 growth, pointing to higher growth rates in the US from the 1990s up to 2007.  
34 Taking several LMEs together, however, we see little of a superior growth  
35 performance (Figure 8.3). It is meanwhile obvious that much of the high pre-  
36 2007 growth in the US must have been due to an impressive build-up of debt  
37 against the background of a housing bubble (i.e. a kind of ‘mortgage Key-  
38 nesianism’; see Maki and Palumbo, 2001; Palley, 2009; Irvin, 2011). If the  
39 Americans take ‘deleveraging’ serious, we would expect lower growth in the  
40 years to come.

41 Second, compared to CMEs in ‘Old Europe’, Anglo-Saxon LMEs tend  
42 towards a modest wage growth, as their deregulated labour market institutions  
43 (including weak trade unions) give weak protection for workers and strong pro-  
44 tection for investors. This is related to a strong shift towards higher income  
45 inequality in the US compared to Europe.





Third, as can be expected from traditional micro-economics, a more modest wage growth leads to a more labour-intensive GDP growth which is at the cost of a lower growth of GDP per labour hour. Ironically, such a labour-intensive and low-productive GDP growth somehow reminds us of Eastern Europe before 1989. In view of an ageing population and a shrinking working population in most European countries, it is questionable whether a pre-1989 Eastern European style job creation regime is desirable for Europe.

Fourth, while unemployment rates might have looked favourable in the US, notably during the period of credit build-up before 2007, it looks as if, in the long run, unemployment rates in LMEs are not lower than in CMEs (Table 8.1). Several authors have argued that there is no convincing econometric evidence that removal of labour market rigidities, in spite of leading to a more labour-intensive GDP growth, would bring down unemployment rates (Baker *et al.*, 2005; Baccaro and Rei, 2007; Howell *et al.*, 2007). Even a highly cited study by Nickell *et al.* (2005) turns out being based on a non-robust econometric model (Vergeer and Kleinknecht, 2012a). Of course, contributors to the *labour-market-rigidities-cause-unemployment* literature were aware of the limitations of their work and made numerous caveats about the quality (and availability) of data and limitations of their econometrics. Such qualifications, however, did not prevent sweeping conclusions by policy practitioners.

Fifth, above we gave a list of theoretical arguments why deregulated labour market regimes may damage innovation and labour productivity growth. These arguments are most relevant in a ‘routinized’ innovation regime that relies on path dependent accumulation of (often tacit) and firm-specific knowledge. The US may be strong in IT which is based on an ‘entrepreneurial’ garage business regime that was not dependent on firm-specific and path dependent historical accumulation of (‘tacit’) knowledge (at least not in the past). In industries that rely on a ‘routinized’ innovation regime, however, deregulated US labour markets make such knowledge accumulation harder to do. This may be one of the explanations of why US manufacturers compete so poorly against Japanese and German suppliers.

Finally, we should address a competing hypothesis for our above arguments: the *growth-in-low-productive-jobs* hypothesis as expressed by the OECD (2003). They interpret the finding that ‘a weak trade-off may exist between gains in employment and productivity’ as arising from newly created jobs at the bottom of the labour market:

For example, decentralization of wage bargaining and trimming back of high minimum wages may tend to lower wages, at least in the lower ranges of the earnings distribution. Similarly, relaxing employment protection legislation (...) may encourage expansion of low-productivity/low-pay jobs in services.

(Box 1.4, p. 42.)





1 These low-productive jobs – the OECD’s reasoning continues – are created in  
2 flexible countries, but *not* in countries with rigid labour markets. In this view,  
3 the loss in labour productivity growth through deregulation is mainly a negative  
4 by-product of extra jobs created in the low wage segment.

5 There are two arguments against this interpretation. First, one can argue  
6 that, under the *ceteris paribus* assumption, the (extra) hiring of low productive  
7 workers should have increased GDP growth in flexible economies, compared  
8 to inflexible economies in which these people do not work. Looking at long-  
9 run growth, however, there are hardly indications that such extra growth took  
10 place (Figure 8.3 above). Second, in a model explaining inter-country differ-  
11 ences in labour productivity growth among 20 OECD countries (1960–2004)  
12 Vergeer and Kleinknecht (2012b; see also Vergeer, 2010) tested this hypothe-  
13 sis by including, as a right hand variable, the growth of jobs. In other words,  
14 they tested whether (above-average) growth of jobs, thanks to admitting low-  
15 productive workers into the labour market, would reduce labour productivity  
16 growth. Growth of jobs had the expected negative sign but turned out insignifi-  
17 cant. This suggests that the slow growth of labour productivity can hardly be  
18 explained by low productive workers entering the labour market thanks to  
19 deregulation. The productivity growth slowdown takes place primarily in *exist-*  
20 *ing* jobs.

21 Obvious candidates that explain the latter have been discussed above.  
22 Among these are labour-capital substitution, vintage effects, induced techno-  
23 logical change or the malfunctioning of Schumpeterian ‘creative destruction’  
24 as moderate wages protect weaker entrepreneurial talents against being com-  
25 peted away by stronger firms. Moreover, easier hiring and firing will make job  
26 durations shorter, thus discouraging training, notably in firm-specific and  
27 ‘tacit’ knowledge. Shorter job durations will also increase various forms of  
28 disloyal behaviour such as knowledge leakage or theft and this will force firms  
29 to invest into thicker management layers for monitoring and control – which in  
30 turn is frustrating for creative people. A major disadvantage of greater person-  
31 nel turnover is the weak functioning of the ‘routinized’ innovation model that  
32 heavily relies on incremental learning and on path dependent accumulation of  
33 (often ‘tacit’ and firm-specific) knowledge. We conclude that deregulation of  
34 labour markets is definitely no free lunch and labour market rigidities have  
35 their merits.

36 Let us end with a note on the crisis in the Eurozone. Mainstream economists  
37 propose that Mediterranean countries should make firing of workers easier and  
38 cut down social benefits as part of ‘structural reforms’ that make their economies  
39 competitive. Our above results suggest what will happen if this is realized: defi-  
40 nitely more labour input, but also a weaker capacity of Mediterranean economies  
41 to realize innovation and productivity growth. This is likely to favour creation of  
42 low-productive and precarious jobs, rather than enhancing competitiveness  
43 through highly productive and qualified jobs.

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**Notes**

- 1 Note that the dynamic substitution between capital and labour, in this context, differs from the static substitution, with constant technology, implied by neoclassical theory as a response to the relative variation in factor prices. The former, in fact, involves technological change incorporated in new capital goods (Sylos Labini, 1993).
- 2 See also the discussion by Acemoglou and Pischke (1999) who emphasize that wage compression in rigid German labour markets enhances training for highly educated and for low-educated workers, while in the liberalized US system, mainly highly educated workers receive training.
- 3 Kleinknecht *et al.* (2006) report that, on average, 9–12 per cent of a firm’s personnel in the Netherlands leave voluntarily each year, the exact percentage depending on the state of the business cycle. Nickell and Layard report that this figure amounts to over 10 per cent (1999: 363).
- 4 The basic but untested idea of Bassanini *et al.* (2009) is that employment protection legislation (EPL) affects industries with high layoffs more strongly than industries where layoff rates are low. Using data for 17 industries in 18 OECD economies (1982–2003), they classify industries into ‘binding’ and ‘non-binding’ industries – the second group of industries is the control group. A first problem is that the classification in two groups is by itself far from clear, as it presupposes the existence of unconstrained ‘natural’ layoff rates prevailing in the absence of employment protection. Second, it is rather unrealistically assumed that the classification into binding/non-binding industries (i) holds true for all years of the period 1982–2003, and (ii) does not vary across countries; all countries are assumed to resemble the US, which they treat as a ‘natural benchmark’ in this regard (thus neglecting country-specific institutional factors affecting ‘natural’ layoff rates). A third problem is that country-specific EPL indicators do not change much over time, so that most of the variation in EPL is due to differences *between countries*; this means that within-country variation in EPL cannot ‘explain’ much of the country-specific productivity-differences across the various industries. Finally, the focus of the analysis is the *difference* in productivity growth rates between EPL binding and non-binding industries, and to calculate the impact of EPL on aggregate labour productivity growth, the authors assume away potential general equilibrium effects of EPL (e.g. the impact of EPL on (a) productivity growth in the non-binding industries, (b) the relative importance, in terms of value added, of binding and non-binding industries, and (c) incentives in physical and human capital formation). All in all, the finding that job protection depresses aggregate labour productivity growth appears not very convincing.

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