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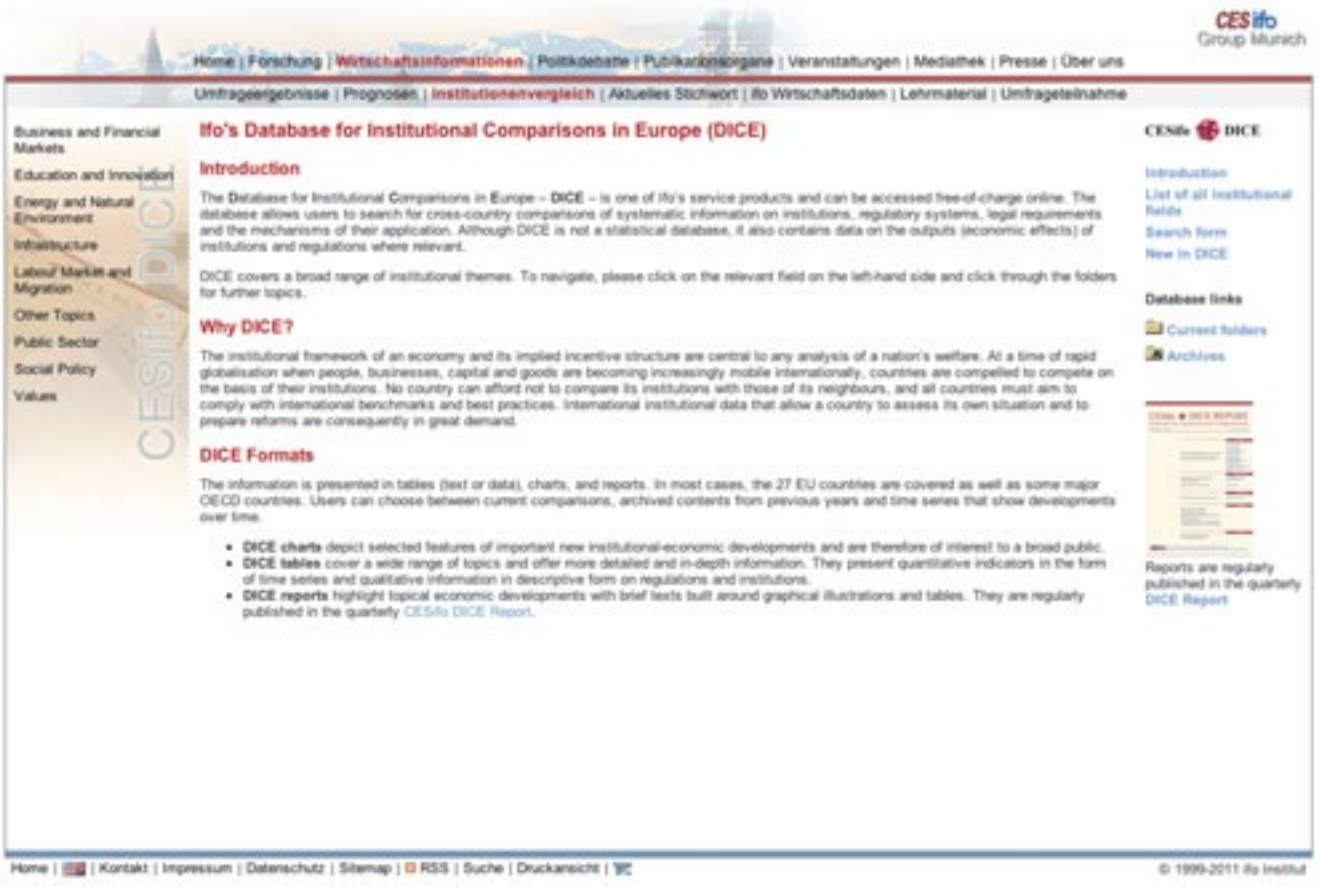


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## Forum

### Europe's Labour Markets and the Crisis



## Research Report



## Reform Model



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## News

# Europe's Labour Markets and the Crisis

## The *New* New Labour Market Reform in Spain: Objectives, Instruments, and Shortcomings

Samuel Bentolila*,
Juan J. Dolado** and
Juan F. Jimeno***

**Introduction: a dysfunctional labour market**

Spain's chronic labour market problems have become more evident during the Great Recession. After converging to the EU average during the long boom that started in the late 1990s and ended abruptly in 2007, the unemployment rate surged to almost 23 percent by the end of 2011. Moreover, it may reach 25 percent by the end of 2012, marking the third time since the arrival of democracy (1978) that such unbearable heights have been reached. Thus, the Spanish unemployment rate is not only very high, but also very volatile relative to other countries, as shown in Figure 1, where it is plotted alongside the rate in France, which is representative of the Euro Area average. The main culprits for such an unfortunate state of affairs are the dual nature of the Spanish labour market – on average, 33 percent of employees had a temporary job before the crisis, and currently 25 percent do, after massive job losses since 2007– and the rigid collective-bargaining system.

The combination of a dual Employment Protection Legislation (EPL) and both nominal and real wage rigidities leads to adjustment to negative shocks always taking place mostly through dismissals rather than through wage moderation – as in the UK – or via working time reduction and labour hoarding – as in Germany. This time, the increase of 3.1 million unemployed between 2008 and 2011 has been the result of a 2.6 million job loss (1.4, 0.6, and 0.6 million among temporary, permanent, and self-employed workers, respectively) plus a 0.5 million increase in the labour force (mainly due to large immigration inflows since 2000, which receded only in 2011 (Bentolila, Dolado and Jimeno 2008a).

Admittedly, a significant part of the job shedding has been due to the bursting of a big housing bubble that started around 2000 and has led to the destruction of 1.4 million jobs in the construction sector since mid-2007. Yet, according to Figure 2, this stark response is out of line with what has happened in other countries that have also been affected by a construction boom and a subsequent bust. Despite the fact that Spain's main natural resources – good weather and touristic resorts – call for a higher share of employment in the housing sector (it reached 13 percent in 2006, against 7.2 percent in 2011), the investment boom that took place in this industry, fuelled by the large drop in real interest rates as a result of joining the Euro in 1999, is also closely related to Spanish labour market regulations. Rigid labour contracts proved inadequate for specializing in more innovative industries, where higher labour flexibility is required to accommodate the higher degree of uncertainty typically associated with producing high value-added goods (Saint-Paul 1997). Hence, a more mature sector, compatible with the use of less skilled labour through temporary contracts was chosen. Moreover, the prevalence of industry-wide collective bargaining agreements resulted in a slowing down of job creation in high-productivity sectors, but increased job destruction very significantly when the crisis hit (Jimeno and Thomas 2011).

**The origins and the aftermath of ineffective labour market reforms**

The peculiar structure of the Spanish labour market can be explained in terms of the industrial relations inherited from the Francoist era. During that long period of forty years, wages and productivity were low and jobs were highly protected to maintain

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**Figure 1**

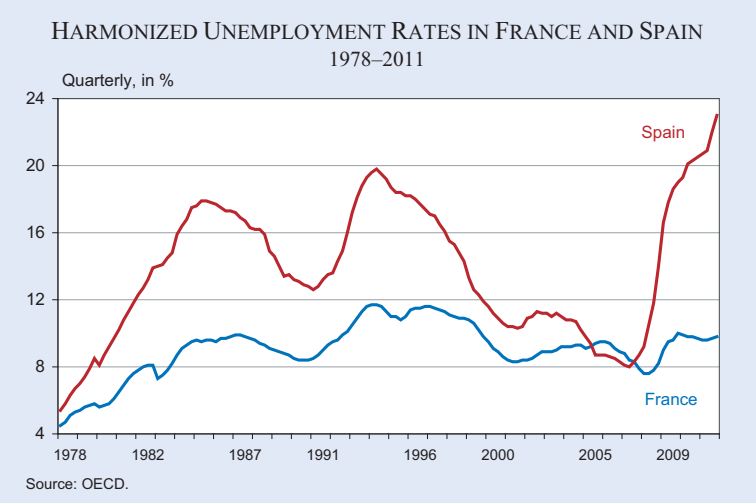
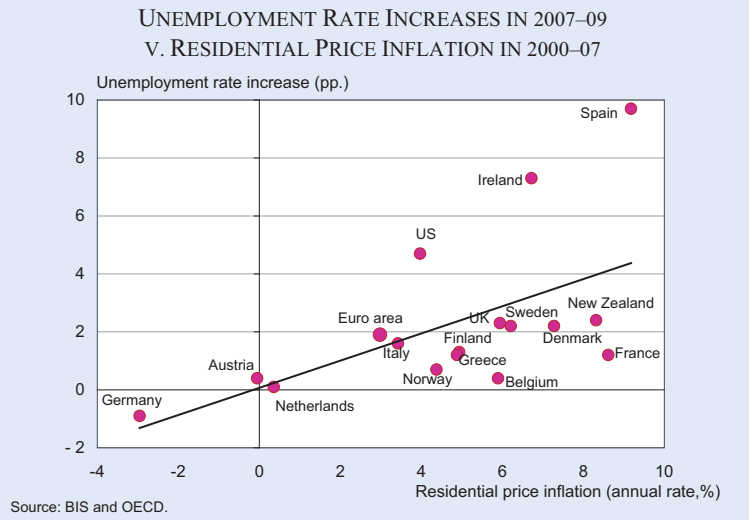



**Figure 2**




social peace. Trade unions were illegal and collective bargaining, mainly dominated by employers, was predominantly at the province/industry level. When the democratic transition took place in the late 1970s, the newly-legalized unions' support for the process was guaranteed by maintaining to a large extent the prevailing EPL and by awarding union delegates a high degree of power at all collective bargaining levels (state, province, and firm), setting a very low representativeness threshold – namely, 10 percent at the national level. The aim was to extend the coverage of collective bargaining to hitherto uncovered workers in the shortest possible time. Wage pressure ensued, precisely at the time of the second oil price shock. This event, together with the transition from agriculture to manufacturing and services, and the labour shedding from the oil-intensive industries (e.g., mining and shipbuilding) that had been favoured by the Francoist regime, led to the first big surge in unemployment. To avoid social unrest, a labour market reform was introduced in 1984 allowing the use of very flexible temporary contracts for all regular activities, while leaving the EPL of permanent contracts unchanged.

As explained in Dolado, García-Serrano and Jimeno (2002) and Bentolila, Dolado and Jimeno (2008b), this reform created a large EPL gap between permanent and temporary workers, thus leading to a quick rise in the temporary employment rate, from 12 to 33 percent, thereby creating a highly segmented labour market. An insider-outsider model of industrial relations has become well-entrenched since then. Several regulations have helped to maintain it. For example, by law workers in firms with less than six employees and temporary workers with less than one-month of tenure cannot vote in firm-level union elections. This rule excludes almost 30 percent of potential voters, who are likely to be against dual EPL. This suits the unions, which protect permanent workers (their median voters) and are thus able to press for larger wage rises. They do so because they anticipate that firms will respond by dismissing temporary workers with low firing costs rather than the highly protected permanent workers (Bentolila and Dolado 1994) – as has indeed been the case during the Great Recession. The main employers' association (CEOE), in which small and medium-sized (SMEs) enterprises are scarcely represented, has an incentive to go along, to some extent. The reasons is that large firms can afford higher wages due to their higher productivity levels and can therefore use collective bargaining as a tool to restrict competition.

Seven important labour market reforms (1984, 1994, 1997, 2002, 2006, 2010, and 2011) and 52 additional minor legal changes have tried to correct this

course of events. Their main objective has been to reduce the EPL gap, either by constraining the use of temporary contracts in sequence or by slightly cutting the severance pay for permanent contracts while simultaneously increasing the indemnities paid at the termination of temporary contracts. These reforms have mainly taken place when workers under permanent contracts felt the risk of losing their jobs (Saint-Paul 2002; Dolado, Felgueroso and Jansen 2010) or when there was a favourable impulse from an external source, like joining the European Community in 1986 or the Euro area in 1999.

The current scenario is different. Firstly, there is no external impulse, as international demand remains subdued. Secondly, devaluations, which were pursued in the early 1980s and 1990s, are not available anymore; and thirdly, the level of indebtedness – with public debt close to 70 percent of GDP, private debt at around 290 percent, and net external debt close to 100 percent – and the resulting difficulties for external financing prevent the use of further fiscal stimulus, which in any event proved fairly inefficient during 2008–2009. The need to restore fiscal sustainability also limits the scope for a fiscal devaluation (Farhi, Gopinath and Itskhoki 2011), whose medium and long-term effects would, in any case, be conditional on the response of wages and prices to such measure.

Trying to cope with this situation, the previous socialist government initially decided that a labour market reform was not needed. However, when the Euro crisis erupted and the external pressure from international institutions and financial markets intensified, it abruptly changed its views. As a result, an agreement with social partners was attempted twice, in 2010 and 2011, but failed on both occasions. Consequently, the government – which remained unconvinced – implemented a series of reforms that appeared to be quite comprehensive in scope, but were in fact quite shallow. The key changes affected the following areas (see Bentolila, Dolado and Jimeno 2011 for more details).

*Severance pay.* The causes justifying fair dismissals for economic reasons were defined explicitly. Advance notice was reduced from 30 to 15 days. A new permanent contract promoting employment was introduced, for which the so-called express dismissal procedure established in 2002 applied. This means paying severance of 33 days' wages per year of service (this clause, relating to days of severance pay, is understood hereafter) so as to avoid going to court, giving advance notice, and paying interim wages altogether (previously, the prevailing route was to obtain these advantages by disguising economic dismissals as disciplinary, but with severance pay of 45 days and a cap of 42 months). An existing fund fed by employer contributions was allowed to reimburse firms eight days' wages in all dismissals of permanent employees. Severance pay for temporary contracts was raised progressively from eight to 12 days (to be attained in 2015).

*Collective bargaining*. Firm-level agreements were given priority over the corresponding industry-wide agreement, unless explicitly overruled by the latter. Firms in distress were allowed to opt out of the industry collective-bargained wage level by reaching an agreement with their workers, though the corresponding level had to be attained again in no more than three years. Over the subsequent year, any expiring agreement without a consensus renewal being feasible would be subject to arbitration.

*Hours reductions*. These were subsidized, in line with the German Kurzarbeit program, by reducing social security contributions on firms and restoring workers' entitlements to unemployment insurance.

*Active labour market policies*. The groups of workers eligible for subsidies on job creation were restricted and private placement agencies were authorized for the first time. Personalized back-to-work paths had to be implemented by the public employment service.

Thus, these two reforms closely followed the same ineffective strategies of the past. As to EPL, they mildly reduced dismissal costs and relaxed dismissal restrictions under the employment-promotion permanent contracts while doing the opposite for temporary contracts. As for the regulation of collective bargaining, they retained the principles favouring industry-level bargaining, while marginally lifting some restrictions on opt-out clauses.

**The *new* new reform**

The new right-wing Government elected in November 2011 quickly announced that the previous reforms were deemed insufficient, gave a short peri-

od of time for the employers' confederation (CEOE) and the main trade unions (CCOO and UGT) to agree on further proposals for reform, and then introduced a new reform in February 2012, which in most cases follows the same direction as the 2010–2011 reforms. The 2012 reform affected the following areas:

*Severance* pay. The causes for a fair dismissal for economic reasons – which entitles a worker to severance pay of 20 days' wages, with a cap of one year's pay – are further clarified to include three quarters in a row of declining revenue/sales. Employment-promotion permanent contracts are eliminated and the severance pay for unfair dismissals is unified at 33 days, with a cap of 24 months' pay. The reimbursement of eight days' wages in dismissals of permanent employees is now limited to fair dismissals in firms with less than 25 employees. The express dismissal procedure (see above) and the administrative approval of collective dismissals are both abolished. Lastly, a new permanent contract for entrepreneurs is created, whereby workers can be hired with a one-year probation period (i.e., with no severance pay) and substantial fiscal subsidies.

These changes reduce firing costs and re-establish the causal nature of dismissals. Dismissals for economic reasons were previously almost fully blocked by labour courts (so that they represented only eight percent of all labour contract expirations in 2010, i.e. including those of temporary contracts). The prevailing 45 days' pay was too high by international standards. The express dismissal (30 percent of expiring contracts) made economic sense (Blanchard and Tirole 2004), but was a legal aberration. Moreover, administrative approval of collective dismissals, which is very atypical in the European Union, was a way to raise severance pay in economic dismissals (on average, up to the level of unfair dismissals), so that they had also been strongly curtailed (amounting only to four percent of contract expirations). This induced an intense use of temporary contracts (accounting for 56 percent of all expirations).

There is a lasting risk that labour courts will not apply the new criteria justifying economic dismissals mechanically, leading to an increase in uncertainty about firing costs and in litigation by workers trying to obtain the 33 days severance pay, rather than the standard 20 days.

*Collective bargaining.* Priority of firm-level agreements over industry-wide agreements is not subject to overruling by the latter anymore. Employers are allowed, for reasons related to competitiveness or productivity, to unilaterally change working conditions, including wages, as long as these are above the industry collective-agreement level (the worker may then quit and get the severance pay for economic dismissals or else challenge the changes in court). The causes allowing firms in distress to opt out of the industry collective-bargain working conditions, including wage levels, are further clarified as firms having two quarters in a row of declining revenue/sales. Expired agreements that cannot be renewed by consensus will be subject to compulsory arbitration, and industry agreements can no longer rule out the latter. The maximum duration of working conditions after the expiration of a collective agreement is set at two years (previously unlimited). Administrative approval of collective contract suspensions and work-time reductions is abolished.

**The shortcomings of the latest reform**

The main measures of the 2012 reform basically amount to a substantial shift in bargaining power away from workers and towards employers. Thus, the reform could potentially achieve the wage adjustments that have not taken place since the start of the Great Recession, and which the Spanish economy badly needs to restore its competitiveness. However, in a context of high indebtedness, substantial productivity growth is also required, not only as a complementary way of restoring competitiveness but also to sustain internal demand and, hence, restart employment growth. On this second front, the recent reform falls short of what is needed.

One key issue not properly addressed in the latest reform is the suppression of dualism. Temporary contracts nowadays comprise one-quarter of all employees. The reform reduces the firing-cost gap between temporary and permanent contracts, which should encourage firms to use temporary contracts less. However, the incentive at the margin may prove insufficient, since the gap remains large between the 18 days' wages of severance pay of the temporary contracts for the maximum duration of these contracts, i.e. two years, vis-à-vis the 40 days (fair dismissal) or the 66 days (unfair dismissal) of permanent contracts, plus red tape costs.

For this reason, the frictional unemployment created by the volatility of temporary contracts may not subside; and nor probably will their other negative effects, such as the lack of incentives to invest in human capital on the part of both employers and workers, thereby negatively affecting productivity growth.

The second important shortcoming is the lack of changes in unemployment insurance and the very limited nature of the changes in active labour market policies (ALMP). The reform relies on job creation subsidies in both a new training contract and the contract for entrepreneurs, favouring youth, older workers, women, and the long-term unemployed. The share of ALMP going to those subsidies in Spain was already 32 percent in 2009, vis-à-vis 16 percent in the average OECD country (OECD Stats. Extracts), while the shares spent on training were 22 and 29 percent, respectively. Job subsidies have a negligible impact on job creation in Spain, due to their large deadweight losses and their displacement effects (García-Pérez and Rebollo 2009; Cebrián, Moreno and Toharia 2011). Increased expenditure on job creation subsidies will prove too costly against the backdrop of a planned reduction in the Government budget deficit from 8.9 percent of GDP in 2011 to three percent in 2013.

Moreover, while the reform announces future measures to promote the training of employees, it hardly alters training programs for the unemployed. It breaks up the monopoly that labour unions and employer associations had as beneficiaries of subsidies for training programs and it allows temporary job agencies to also operate as placement agencies, but there are no provisions for a rigorous evaluation of ALMP.

In sum, the reform has advanced towards flexicurity only in the flexi side (firing costs and internal flexibility), but does very little regarding passive and active labour market policies, and actually makes the latter harder to fund. It also lacks significant productivity-enhancing measures. Though the reform represents an improvement and –the second best theorem permitting – will steer the Spanish economy towards a lower structural unemployment rate, it remains unclear how large this reduction will be and whether it will contribute to higher economic growth.

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# The French Labour Market and the (not so) great Recession

Philippe Askenazy* and Christine Erhel**

**Introduction**

The global performance of the French labour market since the beginning of the great recession is in line with that of previous recent recessions. France's unemployment rate is still far from the historical spike recorded in the mid-1990s. The number of unemployed is comparable to that of the very flexible UK labour market, and is clearly lower when it comes to youth unemployment. Cyclical policies, typical French institutions and recent structural reforms explain this fairly steady trend. The outlook, however, is alarming with a real risk of high unemployment in the long-term.

The first two sub-sections attempt to disentangle the impacts of the great recession and the associated cyclical policies on the one hand and the (non-)consequences of Sarkozy's structural reforms on the other. The final section proposes alternative policy packages.

**Anti-cyclical policy and structural flexibility have limited the rise of unemployment**

As in previous recessions, French automatic stabilizers, especially social security schemes, lessened the impact of the crises on households. At the same time, the government sustained both firms and consumers until the eve of 2012. To cite a few examples: at the heart of the financial crisis, the French government offered special credits to car manufacturers; in 2009 and 2010 tax credit for innovative firms was paid in advance; and in 2009 the income tax was cut for about two million low-middle-income households. In addition to these measures, Sarkozy also kept political promises to some parts of his electoral clientele; one spectacular case was the drop of VAT on restaurant bills from 19.6 to only 5.5 percent.

The results of this policy are both a huge public deficit and a limited recession. The budget deficit reached 7.5 percent of GDP in 2009 compared to 6.4 percent on average in the Euro Zone. Sustained by consumption, GDP dropped by only 2.7 percent in 2009 compared to 4.4 percent in the UK, 5.1 percent in Germany and 5.5 percent in Italy. In 2011, the growth rate 1.7 percent was still larger than the UK's level of 0.5 percent and the Italian rate of 0.4 percent.

Trends in employment and unemployment partially mirrored these sound growth performances. Including overseas, the quarterly ILO unemployment rate remained below 2-digits at 9.8 percent in the autumn of 2011, up from 7.5 percent early 2008. However, there is a strong heterogeneity according to industries, regions, gender and age groups.

Unlike in Spain or Ireland, there was no housing bubble crash in France, so employment in construction did not see any major downturn. However, as in most countries, the manufacturing sector was particularly hurt by the recession. Net job destructions were dramatic with no significant signs of recovery. From the third quarter of 2008 to the third quarter of 2011, the number of paid workers dropped by 8 percent overall, and by up to 12 percent in the sectors producing basic and fabricated metals or the pulp, paper, printing and publishing sector, and by 17 percent in the textiles and leather goods sector.

Due to their relative industry specializations, northern and north-eastern regions saw greater weakening in their labour markets. Since manufacturing is male intensive, men were also initially the main victims. The gender unemployment gap was virtually null by autumn 2009 for the first time in four decades as a result. With the stabilization of manufacturing activity and the stagnation of market services, it has since returned to close to its pre-recession level.

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Compared to the previous major recession in 1993, the collective firings of workers for economic reasons were moderate, representing "only" one percent of the workforce in private firms with ten or more workers in 2009, and returning to pre-recession levels in 2010 and 2011. Most firms were able to retain their core workforce. Human resource management, working time arrangements and flexible remuneration schemes have played a major role.

Firstly, despite the minimum wage, wages showed significant downward flexibility. Nominal wages per head in the private sector (excluding temps) increased by only 0.7 percent in 2009. In addition, specific collective bonuses and benefits linked to the performance of the medium and large firms (intéressement, participation) plunged, leading to a drop of around 0.5 percent of the total labour bill. Wage inflation was still only significant in growing sectors with tensions for specific skills e.g. health. In numerous manufacturing industries wages even declined in nominal terms, with a 1.8 percent decrease in the metallic goods sector and a 1.0 percent drop in the transport sector.

Secondly, contrary to an erroneous view, the 35-hour arrangements also gave firms greater flexibility. A common arrangement is the "time saving account". This account helps firms to adapt days worked on a several-year basis. When the activity level is high, the firm can oblige employees to work more and save vacation days in a specific account. During downturns, workers are asked to use up these vacations, as was the case in 2009, especially in manufacturing.

Thirdly, during the recession, employers also used short-time work, essentially in the manufacturing sector. Around 1.5 percent of the private workforce was involved in this state-financed program by autumn 2009. However, as an example of the inconsistency of French labour policy, a given firm can accumulate this aid, creating incentives for increasing overtime hours (see next section)!

Fourthly, temporary workers were an immediate "variable" of adjustment. The number of temps[1] dropped from 590,000 in Q3 2008 to 440,000 in Q1 2009 and progressively recovered to 590,000 by Q3 2011. Most of this U-shape evolution was concentrated in manufacturing.

A last parameter is the uncertainty in the macro or sectoral environment faced by firms and workers. The dismissals rate plunged and is still below six percent annually. The lack of a clear human resources strategy is manifest in large companies, despite the replacement of most of their human resource directors. In view of forecasts of a slow recovery, firms have been conservative in terms of recruitment over the past 3 years. Another illustration of caution on the part of employers is the record level of very short term contracts. In 2010 and 2011[2], 18 million contracts were for a week or less! This suggests that the recession has created a hyper-precarious (young) workforce.

Although currently positive for permanent workers, including older employees, the caution exercised by private firms is hard on young workers. Youth unemployment rose by five points to reach 23.2 percent by late 2011; with women particularly affected. The specific benefits for the young unemployed were only transitory: the stock of "supported" youth[3] was 180,000 in 2008, and rose to 230,000 in 2010, before falling to just 150,000 in 2011.

At the same time, youths were impacted by the drastic diminution of state civil servants. In order to limit public spending, the government has replaced only half of retirees, including teachers. Consequently, the permanent job opportunities for a given generation declined by about five percent, and by up to ten percent for educated young women. This policy should also explain why the rate of young school leavers with A-levels who decide to pursue a university education remains particularly low (less than 70 percent, compared to 85 percent in 1993) despite the depressed labour market for youths.

While the recession and short-term policies explain some key trends in the French labour market, other new trends, including a boom in self-employment and the convergence of the employment rate of aged workers with the European mean, are mainly caused by structural reforms.

**A labour market under reform**

French labour market rules and policy have been intensively reformed over the last 20 years. This reform process did not stop with the crisis, but even accelerated following Sarkozy's election in 2007. As

[1] Direction de l'animation de la recherche, des études et des statistiques (DARES), http://www.travail-emploi-sante.gouv.fr/rubrique_technique,281/bas-de-page,2030/travail,2032/etudes-recherche-statistiques-de,76/.

[2] L'Agence centrale des organismes de Sécurité sociale (ACCOSS), http://www.accoss.com/.

[3] DARES.

shown by Table 1, an impressive series of laws and reforms were passed between 2007 and 2011.

Three main trends can be identified.

Firstly, the degree of labour market flexibility has been increased as a result of the 2008 law "Modernisation of the labour market", which authorized breaking indefinite contracts through mutual agreement ("rupture conventionnelle"). The number of these mutual agreements has increased every year since 2008, reaching 310,000 in 2011.[4] Self-employment has also been encouraged since 2009 through the development of a specific social contribution (and fiscal) regime ("auto-entrepreneurs"). This status has proven a great success, with 360,000 "self-managed" individual enterprises created in 2010 and 290,000 in 2011 (representing over half of total enterprise start-ups).[5] The status can be combined with a salaried job. At this stage, empirical data on these new firms are scarce, but for a number of people, this might have been an alternative to unemployment, thus mitigating the impact of the crisis on unemployment trends. According to the labour force survey, while self-employment (main occupation) plummeted in Europe, it reached 2.8 million Q4 2011 from 2.5 million Q3 2008.

As a result of these reforms, the French labour market displays a far higher degree of flexibility than is usually believed, not only for atypical employment (short-term contracts, temporary agency workers, self-employment etc.), but also for indefinite contracts. The unemployment insurance reform in 2009 that extended access to UI to the unemployed with limited contribution periods (four months instead of six) mirrors this trend of increased external flexibility.

A second characteristic of recent labour market policies is their supply-side orientation, beyond the counter-cyclical reactions that have been shown in

[4] DARES.
[5] Institut national de la statistique et des études économiques (INSEE), http://www.insee.fr/.

**Table 1**

**Labour market reforms and new employment programs since 2007**

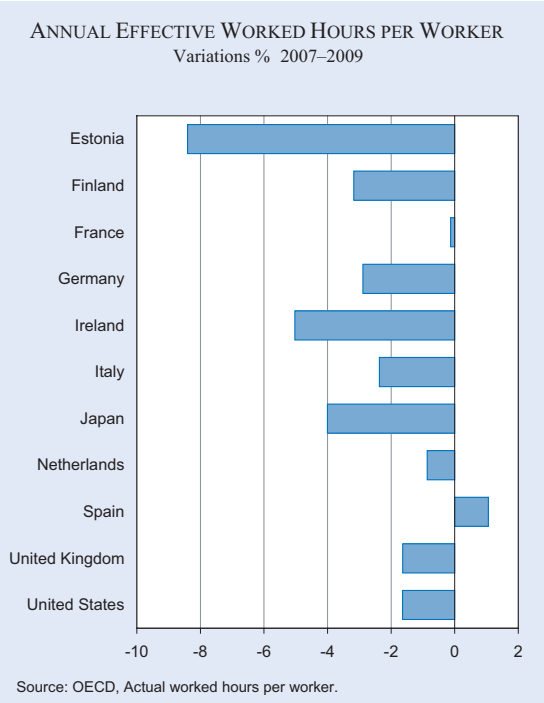
| | | |
|---|---|---|
| 2007 | TEPA law<br>(law on work, employment and purchasing power) | Incentives to overtime hours for both employers and employees |
| 2008 | Labour market modernisation agreement | "Flexibility": new forms of labour contracts and quits; "security": lifelong learning, transferability of rights. |
| 2008 (Dec.) –<br>2010 (June)<br>2012 | "Zero charges"<br><br>"Zero charges" targeted on youth | Total labour contribution exemptions for very small firms |
| 2009 (Jan.) | Reform of short-time work schemes | Increase in generosity |
| 2009 | Unemployment Insurance Reform | Larger eligibility (4 months contributions in the last 28 months) but tighter links between contributions and UI duration (maximum duration: 24 months) |
| 2009 | One stop job centre: Pôle Emploi | Merging ASSEDIC (UI financing and payment) and job search assistance (ANPE) |
| 2009 | Minimum income activation<br>Revenu de Solidarité Active | Financial incentives to work for non-employed and low wage workers |
| 2009<br><br>2011 | Contrat de Transition Professionnelle<br>(extended in 2009)<br>Contrat de Sécurisation Professionnelle | Extension and development of individualised transition schemes for redundant workers in restructuring industries |
| 2009 | Auto-entrepreneur | Self-employment scheme with specific fiscal and social conditions. Simple administrative requirements via Internet. |
| 2010 | Contrat Unique d'Insertion: targeted active labour market programmes (job creation, public and non-market sector CUI-CAE and private sector, CUI-CIE) | Merging two types of labour market schemes |
| 2010 | Pensions reform | Increase in retirement age (62) and contributions requirements |
| 2011 | Apprenticeship reform | Extension to 15 years old; incentives for firms to develop apprenticeship |

Source: Own compilations.

the first section. In 2007, a law provided incentives for overtime hours, which were exempted of social contributions and of taxes. The result was a huge rise in these overtime hours at the end of 2007 and in 2008, which stabilized at a high level between 2009 and 2011. These overtime hours raise two main problems: firstly, they might correspond to a change in the declaration processes rather than to a real increase in hours worked; and secondly, they might hinder internal working time flexibility during the crisis and result in limited hiring in an upturn. As shown by Figure 1, the annual number of hours worked did not change in France between 2007 and 2009, while it decreased in several other OECD countries (Germany, Finland, Ireland, UK, US).

More generally, French labour market policy since 1993 has been characterized by the massive use of social contribution cuts as labour cost reduction devices, which are supposed to favour job creation. An important part of these measures concern low wage jobs (between the minimum wage and 1.6 times the minimum wage). This policy leverage was maintained and even extended during the crisis: new schemes for very small firms were created, exempting them from most social contributions. These incentives should have contributed to a polarization of job creation: empirical trends in French employment during the crisis (2008–10) support the idea that employment dynamics have involved increases in both lower paid jobs (first wage quintile) and higher paid jobs, while the number of jobs in the medium quintiles decreased (Hurley, Storrie and Jungblut 2011).

**Figure 1**




On the workers' side work incentives have been reinforced through welfare reforms for some specific groups. Controls and potential sanctions for the unemployed refusing "acceptable job offers" have been reinforced since 2008. In 2009, the Revenu Minimum d'Insertion (minimum integration income) became the Revenu de Solidarité Active (active solidarity income), including a basic income for the inactive and unemployed, and an income supplement for the working poor. Initial evaluations show a low take-up rate (the rate of potential beneficiaries not claiming their RSA amounts to 35 percent for minimum income component) and limited impacts on employment probabilities (Comité National d'Evaluation du RSA 2011).

In order to increase the senior labour supply, the 2010 pensions' reform increased the retirement age and the contributions requirement. Even if causality cannot be proven, the situation of seniors on French labour market has changed quite dramatically in recent years: despite the crisis, the employment rate for 55–64 year olds continued to rise after 2007 (reaching 42.6 percent in Q4 2011, versus 38.2 percent in 2007, and 30.7 percent in 2001).[6]

As far as targeted labour market policies are concerned, major reforms have been institutional, with the merging of unemployment insurance structures and job search assistance services in a single one stop centre, called "Pôle Emploi" (in 2009). The implementation of the reform in a context of rising unemployment, and with very limited recruitment for Pôle Emploi (less than 2,000 employees hired in 2009), has been chaotic and resulted in a deteriorated quality of job search support. Contrary to the initial goals of the reform, the number of unemployed per counsellor did not decrease, and remains very low by international comparison (70 full time equivalents per 10,000 unemployed for guidance and counselling in France, versus 110 in the UK and 150 in Germany - IGF 2010).

In terms of policy priorities, the use of active labour market policies has fluctuated between prioritising private sector programmes (CUI-CIE and "zéro

[6] INSEE.

charges") (between 2008 and 2010) and public or non-market sector programmes (in 2011 and 2012).

As far as youth are concerned, apprenticeship has been considered a priority, and the minimum age of apprentices was lowered to 15 years old in 2011. However, the results are mixed both in terms of global quantitative trends (after a small rise in 2008, there was a decline in 2009), and of targeting. Indeed, apprenticeship has been extending to higher skill levels (ISCED 4 and 5, +11.8 percent in 2008–2009) whereas the number of low-skilled youth in apprenticeship has decreased (ISCED 1 and 2, -9.5 percent in 2008–2009).[7]

Deregulation and supply side labour market policies thus appear to be key components of Sarkozy's labour market policy, despite some adaptations facing the crisis. Their efficiency in terms of job creations is not straightforward, while they induce a risk of decreasing job quality as well as lowering labour market security.

**Alternative flexibility and supply stimuli**

Despite the stabilizing function of economic policy and internal flexibility during the crisis, French labour market policy suffers from many inconsistencies (related to working time policy, for example), and concentrates an important share of public spending on the lower wage sector (through social contribution cuts, but also in work subsidies for low wage earners). In addition, without reforms, France is expected to face atone growth for at least two years that should worsen unemployment. Two main directions for reform might be suggested.

Firstly, flexibility in policy management should be increased in France. Contrary to widespread belief, the degree of flexibility in the French labour market is already quite high, and even employers' organizations (MEDEF)[8] have rather limited claims in terms of labour law issues, advocating shorter delays and simplified procedures for economic firings, without claiming for a single labour contract. However, the degree of flexibility in policy implementation remains far more limited, although labour market policy has been partly decentralised: the Regions have been responsible for vocational training and apprenticeship since 2004, while the Departments have been in charge of integration policies for minimum income recipients since 2003. In addition some local institutions have been developed by municipalities, like for instance Missions Locales, which provide assistance for youth. However, the majority of labour market policy programmes remains controlled by national orientations (job search assistance through Pôle Emploi, targeted labour market programmes etc.). Local agencies have limited decision-making power over the design or use of programmes, and must comply with national guidelines. Besides, given the fragmentation of responsibilities between the different territorial levels, the implementation structure appears very complex, with the limited participation of social partners. It seems that local institutions (especially employment agencies) should be given more importance and autonomy, enabling them to participate in the orientation of the unemployed towards labour market and training programmes, but also to play a preventive role for workers through training and career guidance (in collaboration with regions that are in charge of vocational training). According to some recent OECD studies, labour market management flexibility (in terms of budgets, policy design, clients' eligibility, policy networks etc.) is favourable to policy efficiency and, more widely, to the development of local job creation strategies (Giguère and Froy 2009).

A second potential direction is to modify the supply side policy. Again, since the early 1990s both conservative and socialist governments have concentrated labour policy on social contribution cuts in order to stimulate job creation. Firms are incited simultaneously to hire low paid workers, long-term unemployed, workers in high-unemployment zones etc. Seminal cuts prove some efficiency leading to the creation of low-skilled jobs. However, additional cuts at the end of the 1990s and the 2000s cannibalise themselves. The last general massive social contribution exemptions had little impact on total employment (Bunel, Gilles and L'Horty 2010). That is also the case with the zoning policy (Briant, Lafourcade and Schmutz 2012). The current yearly costs of global "stimulating" policy are above EUR 30 billion, including at least EUR 15 billion with no apparent effects.

In addition, this policy may have contributed to France's specialization in low-skilled activities. Unlike most countries, France experienced a declin-

[7] Direction de l'évaluation, de la prospective et de la performance (DEPP), Ministry of Education, http://www.education.gouv.fr/cid1180/direction-evaluation-prospective-performance.html.
[8] Propositions for the Presidential elections, http://besoindaire.com.

ing trend in R&D effort. From a leadership position in 1993 (2.37 percent of GDP devoted to R&D compared to 2.28 percent in Germany or 2.14 percent in Finland), French R&D spending represented only 2.08 percent of GDP in 2007 (2.53 percent in Germany or 3.47 percent in Finland). The recession even accentuated the gap between France and new leading countries; here again, billions were wasted on an inefficient, but costly tax scheme for stimulating research (the new Crédit Impôt Recherche). Investments in human capital are also stagnating and the share of tertiary educated youth has not increased over the past decade. According to Eurostat, continuous training in the past 3 months concerned only 6.8 percent of workers aged 25-64 years in France in 2007 (versus 7.9 percent in Germany and 26.7 percent in Finland). Here again the recession deepened the gap (in 2010, 5.4 percent for France, 7.6 percent for Germany, 26.3 percent for Finland). In addition, training is skilled-biased: Less than 6 percent of blue-collar workers received training in the past three months, compared to 15 percent of managers.

These caveats suggest that an alternative policy needs to be adopted if France is to become a knowledge economy. Billions of inefficient labour and fiscal policies should be redirected to improve R&D through direct public investments, and to incite firms to provide training to all employees. This potentially represents a way of building a new basis for competitiveness, job creation and ultimately growth, despite strong budget constraints.

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# From a Bulwark of Eurosclerosis to a Flexibility Champion?

## Why did the German Economy and the Labour Market do so well during and after the Great Recession?

Joachim Möller*

**Introduction**

It is only a decade or so that Germany was described as the sick man of Europe in the international media. For almost a decade starting in the mid-1990s the German economy was characterized by low GDP growth rates and stubbornly high unemployment. However, the roots of the problems pre-dated this period. At the heart of Germany's labour market problems was the steady deterioration in labour market performance since the early seventies. Since then, the unemployment rate at cyclical peaks showed a monotonous upward trend. Indicating a growing mismatch, the Beveridge curve markedly shifted outwards. Problems were aggravated by ill-designed economic strategies following German re-unification and the fiscal consequences of the re-structuring of the East German economy and mod-ernization of its infrastructure. It is remarkable that a social-democratic chancellor, Gerhard Schröder, and not a conservative, initiated what Michael Burda has dubbed the "teutonic turnaround". The Schröder reforms undoubtedly marked a historical departure for Germany.

However, looking at macroeconomic data reveals that some deep structural changes started as early as the mid-nineties. Economic key variable such as wages or skill premia clearly indicated structural changes compared to previous trends. Based on social security data for West Germany, Figure 1 shows an index of the average real earnings of 40 year-old male workers by skill group. For the low and intermediate skill group roughly three phases can be distinguished: (i) a wage increase from the mid-1980s to the early 1990s, (ii) wage stagnation or slight decline from the time of re-unification to 2002/2003 and (iii) a significant fall since then. It is remarkable that, at the end of the observation peri-od, the real wages of a 40 year-old low-skilled full-time worker have returned to the level that they were at 25 years ago. At the lower deciles of the wage distribution the situation is even worse. Sizeable groups experienced a deterioration in their real earnings over this period. By contrast, other groups like university type graduates were among the win-ners. Whereas the real earnings of this group devel-oped more or less in parallel with the two other skill groups until the mid-1990s, it has shown a significant deviation since then. By the end of the observation period the highly-skilled realized almost 25 percent gains in real earnings compared to the mid-1980s.

At least two important conclusions can be drawn from Figure 1. Firstly, there has been a sharp increase in skill premia. Secondly, as the low and intermediate skill groups represent the vast majori-ty of German workers, there is a clear indication of remarkable overall wage moderation since the early and mid-1990s. The disadvantages were borne not only by the low skilled, but also by the intermediate skill group. This is particularly noteworthy since unionization is especially high for the intermediate skill group (trained workers).

What happened to fundamentally alter the balance of forces between the social partners? A plausible potential explanation is that, after the fall of the iron curtain, low-wage competitor countries emerged as direct neighbors for Germany. The threat of produc-tion site (and workplace) relocation had a massive influence on union bargaining power. At the same time, there was increasingly sharp wage competition within the country as the unions' strategy of imme-

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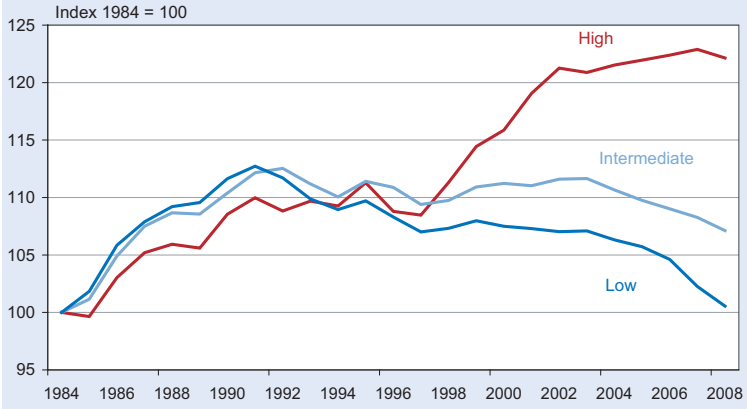
**Figure 1**

REAL WAGES OF FULL-TIME 40 YEAR-OLD MALE WORKERS IN WEST GERMANY BY SKILL GROUP, 1984–2008




Source: Own calculations with IAB data (SIAB).

diate wage adjustment between Western and Eastern Germany did not work out successfully.

Despite the wage moderation, however, there were no signs of a sustainable improvement in Germany's economic performance in general; and the labour market in particular. At least the systemic rise in unemployment was not interrupted. It seemed that wage moderation was a necessary, but not sufficient condition for resurgence of the German labour market. At least its unsatisfactory development can partly be attributed to the creation of the Eurozone. Although Germany as an export-oriented country was expected to profit from a common currency, in the initial phase at least this was not the case. The introduction of the common currency in 1999 first caused the German economy to suffer due to higher interest rates and diversion of massive capital flows to the southern European countries (Sinn 2010). This phase, with relative gains in the European periphery countries and relative losses for the core, lasted until the mid 2000s at least.

For Germany things changed fundamentally after the courageous Schröder reforms. The labour market reform package, the so-called Hartz legislation, did indeed alter the foundations of Germany's post-war institutional system. In his famous government declaration of March 2003 Chancellor Schröder argued that if the country refrained from modernizing its labour market institutions, then it would be modernized by the brute forces of the global markets, barely leaving room for a social protection net. The key concept of addressing workers in the Hartz reforms was "supporting and demanding". These reforms were implemented in different steps between 2003 and 2005. Concrete elements of the reforms included lower job protection, reduction of the maximum period for unemployment insurance benefits, tightening of the job acceptance regulations for the unemployed and the deregulation of temporary work agencies. Merging unemployment assistance for the long-term unemployed and social assistance had far-reaching consequences. From then on unemployed person were obliged to accept any reasonable job, and unemployment benefits became means-tested for the long-term unemployed. Hence, the social office could access the recipients' savings or other private assets. According to business surveys, this threat of losing social status led to important changes in individual behavior. Among others, the willingness to accept less attractive working conditions, low pay or higher commuting time increased (Kettner and Rebien 2009).

Although some parts of the Hartz reforms can be criticized for various reasons, the package as a whole undoubtedly had an overall positive impact on the functioning of the labour market. Unemployment fell from its peak level of over five million in 2005 to roughly three million in less than four years. It was the first time since almost four decades that a cyclical upswing let to a significant melting of systemic joblessness. The harmful hysteresis mechanism that increased structural unemployment from business cycle to business cycle was interrupted and turned into a favorable development. Matching efficiency – as indicated by an inward shift of the Beveridge curve – improved after the labour market reforms and the marked decrease in long-term unemployment added to the overall positive perspective.

### Favorable economic structure and gains in competitiveness

Through wage moderation the competitiveness of the German economy relative to its trading partners, especially in the Eurozone, improved markedly. Whereas the average yearly change of wage costs in the Eurozone was 2.7 percent in the last decade, it was no higher than 1.8 percent in Germany.[1]

[1] Own calculations on the basis of Destatis (2010) data.

A further crucial factor is closely related to the structure of the German economy. Compared to other OECD countries, the German economy still has a strong specialization in manufacturing industries. This has transformed from a bane to a boon. Previously, it was argued that a relatively high share of manufacturing industries could mean that the country would lag behind in structural change. As an example one can take Barry Eichengreen's warning that what happened to Italy when "China moved up the technology ladder into the production of more sophisticated consumer goods will happen to Germany as China moves into the production of more sophisticated producer goods" (Eichengreen 2007, 2). In his view, it is highly advisable to specialize in the design of new products and to support a knowledge-based service economy. From today's point of view it seems somewhat ironic that Eichengreen proposes to take the UK as a role model because "it got out of manufacturing and into financial and other services at the right time" (Eichengreen 2007, 3). The financial crisis casts some doubts on the sustainability of a mainly service-driven growth in advanced countries. With its seemingly outdated industry structure, Germany performed surprisingly well, whereas countries with a weak industrial basis are suffering. It has to be stressed that Germany's capital goods like advanced machinery or infrastructure equipment, as well as high-quality chemicals and durable consumer goods like cars, are in high demand and not only in advanced countries. There are strong indications that exports to emerging countries are steadily increasing. This is due to a hunger for machinery and equipment, as well as for high-quality durable consumption goods like automobiles.

Of course, the process of structural change is continuing at a swift pace. Some types of production are less likely to survive in high-wage countries. Modernization of production lines, the design of new products and the maintenance of technological leadership in some strategic areas play a key role. As for today, however, there are no signs that Germany is losing ground in the areas where it was traditionally strong.

Additionally, and somewhat paradoxically, not all aspects of the Euro crisis were harmful for the German economy. In contrast to events when the Euro was introduced, Germany recently seems to have profited from the redirection of capital streams (coming back to a secure harbor) and historically low interest rates (reducing the burden of public debt). Moreover, in contrast to non-Euro countries like Switzerland, German firms exporting to the US, China or Eastern Europe benefit from the relatively weak Euro.

However, a dominating influence over Germany's overall economic performance has been the increase in its relative competitiveness within the Eurozone. This also contributed to the extraordinary high surpluses in Germany's current account in recent years. Figure 2 shows the inverse of a harmonized effective real exchange rate on the basis of unit wage cost for Germany and the Eurozone. Both series increased in parallel from the mid-1990s to mid-2001. Then, after a temporary fall in 2003 to 2005, German competitiveness continued to increase, whereas the Euro-zone fell markedly behind. Using the two time series we constructed an indicator of relative competitiveness of Germany[2] compared to its partner countries. This indicator exhibits an astonishingly close relationship to Germany's current account surplus measured as a percentage of GDP. This is shown in Figure 3. The correlation coefficient is 0.93. Hence the German net export surplus is closely related to the indicator of competitiveness vis à vis its trading partners in the Eurozone. As already noted above, this development is basically driven by unit wage costs.[3]

**The German labour market during and after the crisis**

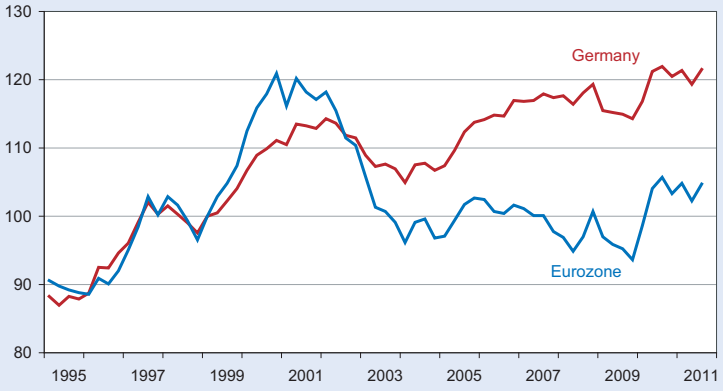
It is remarkable that in the Great Recession triggered by the US sub-prime crisis the change in the German unemployment rate was the lowest of all in OECD countries – although the country had to cope with a heavy shock to real GDP that led not only to the sharpest recession after World War II in Germany, but also exceeded the shocks that hit other countries. This flexible response might have come as a surprise to those who were used to blaming Germany as the bulwark of Eurosclerosis. In cushioning the enormous shock of minus 5.1 percent to GDP and about 6.5 percent relative to the trend, the German labour market evidently behaved in an

[2] Let x (X) be the inverse effective real exchange rate for Germany (the EU, respectively) based on unit wage costs as calculated by the ECB. Then our relative measure of German competitiveness is given by $100(x/X-1)$.

[3] Not surprisingly Germany's current account surplus is mirrored by a deficit on the part of other countries, especially in the Eurozone. However, one should note that the Eurozone as a whole does not exhibit a current account surplus. Therefore, an elimination of Germany's surpluses would more or less inevitably lead to a substantial current account deficit for the Eurozone overall.

**Figure 2**

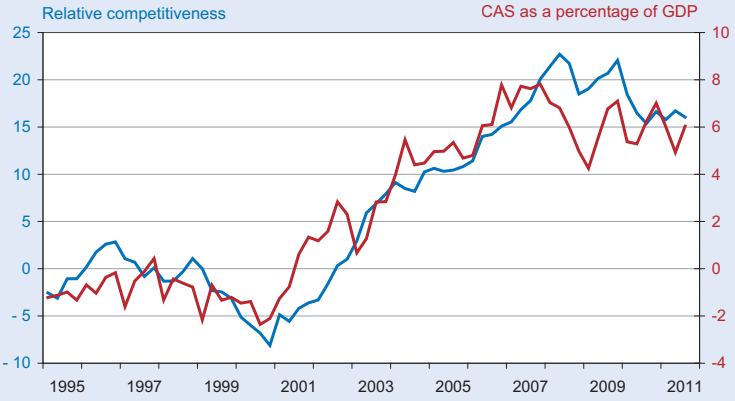
INDICATOR OF COMPETITIVENESS, GERMANY AND EUROZONE
Inverse harmonized effective real exchange rate on the basis of unit wage cost




Source: Own calculations with original data from the ECB.

**Figure 3**

RELATIVE COMPETITIVENESS OF GERMANY VS EUROZONE AND THE GERMAN CURRENT ACCOUNT SURPLUS (CAS)




Source: Own calculations based on data from the ECB.

The basic facts can be briefly described as follows. The recession directly hit the export sectors of the economy. These are concentrated in the southern and north-western regions. The export-oriented regions like Bavaria or Baden-Wuerttemberg are among Germany's economic top performers. It is a well-established fact that export-oriented firms typically perform above average with respect to productivity, innovative capacity and profitability. Hence the economically strong firms in the leading regions were the first to be affected. These firms were quite confident about their profitability and world-wide competitiveness in the medium-run. The recession was not seen as a long-lasting structural crisis, but only as a temporary demand-driven decline. Moreover, firms still had in mind the recruitment problems of the previous boom period; and lastly, there are clear indications of over-utilization of the workforce in the period before the crisis. Keeping the workforce was a perfectly rational strategy under these circumstances.

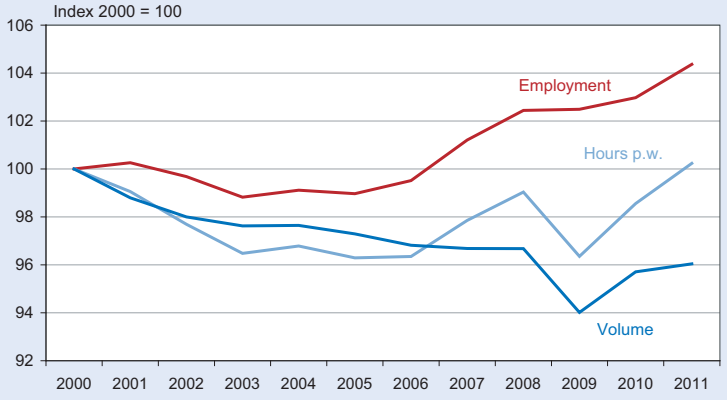
exemplary manner. There were no mass lay-offs and firms and their employees, as well as consumers, acted with composure.

Employment protection regulations cannot be used to explain why firms typically did refrain from lay-offs, even given the high under-utilization of the work force during the crisis. If anything, employment protection has been weakened over time, and massive layouts were observed in former recessions, despite these regulations. Rather than assuming that firms were not able to downsize due to legal sanctions, it is therefore much more likely that a typical firm voluntarily decided to follow a strategy of labour hoarding. Hence the adjustment to the shock was mainly based on unprecedented flexibility within firms (Möller 2010a).

An important additional factor is that labour market instruments and institutions strongly supported the labour hoarding behavior. Although in this context the short-time working allowance (Kurzarbeitergeld) plays a key role, it was not the only institutional factor that has to be mentioned. Working-time accounts have become quite common, especially in exporting industries. Together with the fall in overtime hours, the reduction of surpluses in working-time accounts led to a cushioning effect of a similar magnitude to the short-time working allowance. Furthermore, the crisis showed the smooth functioning of the social partnership in Germany. The so-called alliances for jobs have to be mentioned in this respect. These initiatives that typically combine wage restraint with job guarantees were formed at the establishment level.

**Figure 4**

EMPLOYMENT, HOURS PER WORKER AND TOTAL VOLUME OF WORKING HOURS




Source: IAB Working Time Account.

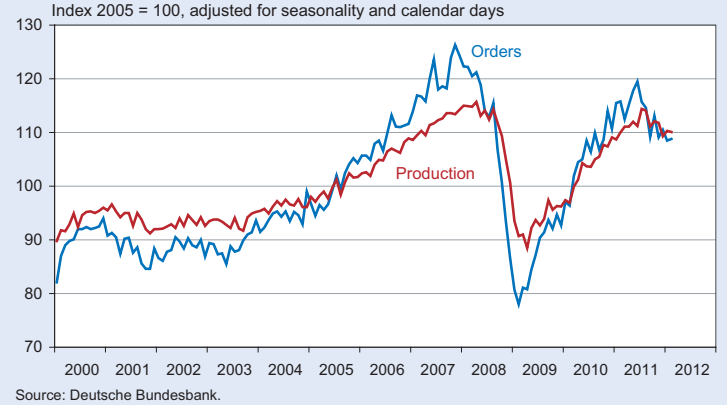
**Figure 5**

ORDER-CAPACITY


Note: The quarterly data based on monthly wages (three month average).
Source: Deutsche Bundesbank; for the method see Knetsch and Reimers (2006).

**Figure 6**

ORDERS AND PRODUCTION IN MANUFACTURING INDUSTRIES
2000:01 TO 2012:12
in constant prices




Source: Deutsche Bundesbank.

To analyze the need for adjustment it is helpful to use a decomposition method.

Figure 4 shows an index of employment, average hours per worker and the volume of total working hours in the economy. We see a slightly declining trend for average hours per worker. This is not due to the average working hours of full-time workers – which were roughly stable over this period – but to the rising share of part-time workers.[4] Total employment stagnated until the middle of the decade and started to grow after the implementation of the labour market reforms. The volume of working hours from 2005 to 2008 developed in parallel. In the crisis year of 2009, hours per worker declined relative to the trend by about 2.5 percentage points. Whereas the impact of the crisis on employment was barely more than a slowdown of its upward movement, the volume of total working hours also shrunk by 2.5 percent. This marked reduction substantially contributed to cushioning the cyclical shock.

At the same time productivity per working hour fell in 2009 by 2.5 to 3.0 percent relative to the trend. Hence the reduction in working hours and the slowdown in productivity growth were of the same order of magnitude. Both variables clearly indicate

[4] The share of part-time workers increased from 27.2 percent in 2000 to 34.5 percent in 2011. Although the share of male workers in part-time employment is also rising, female workers represent the lion's share in part-time work.
[5] A time series graph shows that productivity per working hour was well above its log linear trend in 2006 to 2008. Hence it is plausible to argue that the work force was over-utilized in that time period. The development after 2008 can also be seen partly as a process towards normalization (see Burda and Hunt (2011) and Möller (2010b) in this context).

labour hoarding.[5] After 2009 the volume of working hours quickly recovered and returned to its pre-crisis level as early as 2010. By the end of the observation period the volume of working hours slightly exceeds its 2000 level, whereas the average hours are roughly four percent below the initial level and employment is four percent above this figure.

The recovery after the Great Recession was prompt and strong. The order-capacity index as calculated by the Bundesbank is show in Figure 5. Again, this shows the strong boom after 2005 until the eve of the downturn and the V-shaped recession. This corroborates the view that the recession was mostly demand-driven. Since the competitiveness of German industries was high, the recovery of the world economy after the 2009 slump quickly transformed into higher orders for German firms. Moreover, because part of their experienced work force was idle, it was possible for German companies to respond to these demand impulses immediately.

This can be seen from Figure 6, where production after the trough in orders (78 percent of the 2005 average!) in February 2008 recovered promptly.

## Conclusions

Since the mid-1990s many German workers have suffered from real wage losses and poor overall employment performance. However, after a decade of blood, sweat and tears the labour market reforms brought the turnaround. The German industry gained massively in competitiveness. The functioning of the labour market including the active labour market instruments is becoming more efficient. Systemic unemployment has fallen for the first time since the 1960s. The boom in the years 2006–2008 initiated something like a chimney effect for more employment. During these years the workforce in many firms was over-utilized. Over-time was widely used and employees accumulated surpluses on their working hour accounts. In the Great Recession the German labour market superbly withstood this extreme stress test. The system of internal flexibility worked well. The shock was almost completely cushioned by labour hoarding on the part of firms, accompanied by different forms of social partnership and support through the Federal Employment Agency, especially through the instrument of short-time work subsidies. The strategy worked well because for Germany the crisis had the character of a severe, but only temporary demand shock. Fortunately, there are no fundamental problems like an inadequate product mix or a cost structure. Hence the situation is in sharp contrast to countries like Spain with its massive problems stemming from the bursting of the real estate bubble, an oversized construction sector and low international cost competitiveness in manufacturing and tradable services.

The downside of the German success story is the rise in inequality accompanied by signs of increasing labour market segmentation, with precarious low-paid jobs for the low skilled on the one hand; and secure well-paid good jobs with long tenure for the well-qualified on the other. For large parts of the workforce the real wage development of the last two decades was not satisfactory. Against this background it is understandable that signs of markedly higher wage demands in the years to come are now getting stronger. All in all, the German economy is in fundamentally good shape and can cope with these challenges if a sense of proportion is safeguarded.

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# The Dutch Labour Market: Great Recession – Small Impact

Jan C. van Ours

## Introduction

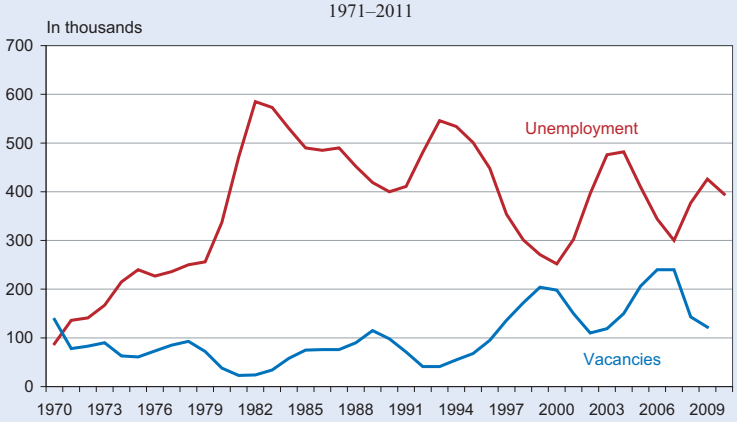
The Netherlands have been an economic role model for various reasons. In the 1970s the Netherlands were famous for the "Dutch disease", a term that was used to describe a situation in which the exploitation of natural resources (natural gas in the Dutch case) through a process of currency depreciation leads to a decline in the manufacturing sector. In the 1990s there was a "Dutch employment miracle", a term used to indicate the spectacular growth in employment and decline in unemployment. The Great Recession hit the Dutch economy hard. In 2009 GDP decreased by 3.5 percent. This drop in production was unprecedented. Even in the early 1980s when the Netherlands experienced a big increase in unemployment the drop in production was only 1 to 1.5 percent. Yet, at the start of the Great Recession unemployment rates did not go up substantially. An important explanation for this is labour market tightness shortly before the Great Recession kicked-in. Figure 1 shows the evolution of unemployment and vacancies in the Netherlands over the period 1971–2011.

Clearly, the number of vacancies in 2008 was close to the number of unemployed, which is rare. Except for at the turn of the century this had not occurred since the early 1970s. Rather than reducing their workforce as a response to the negative production shock, firms started hoarding labour. See for details De Jong (2011), who also shows that the use of temporary shorter working hours only had a mild effect on the unemployment rate of about 0.1 to 0.2 percent.

Figure 2 puts labour market developments over the past decade in the Netherlands into an international perspective by comparing the evolution of unemployment rates (unemployment as a percentage of the labour force) and employment rates (employment as a percentage of the population) of prime age workers (age 25 to 54) with those of 10 OECD countries (Belgium, Denmark, France, Germany, Ireland, Italy, Spain, Sweden, UK, US). As shown in Figure 2a, with the exception of Germany, the unemployment rate of prime age men was higher in 2010 than in 2001, although in the Netherlands the unemployment rate was lowest in both years. The same holds for the unemployment rate of prime age women (Figure 2b). Figure 2c shows that in 2001 and 2011 the employment rate of prime age men was higher in the Netherlands than in the other countries considered. The employment rate of prime age women increased in the past decade, with the relative position of the Netherlands improving (Figure 2d). In 2001 employment rates of prime age females in Denmark, Sweden, UK and US were higher than in the Netherlands, while in 2011 only Denmark and Sweden boasted a higher employment rate than the

**Figure 1**

Number of Unemployed and Vacancies in the Netherlands
1971–2011




Source: CPB Netherlands Bureau for Economic Policy Analysis.

* Tilburg University, University of Melbourne, CEPR, CESifo, IZA.

**Figure 2**


Netherlands. At the beginning of the second decade of the 21st century it seems as if the Great Recession has only had a small impact on the labour market performance of the Netherlands. To understand the country's relatively favourable labour market performance it is helpful to go back to the origins of the Dutch employment miracle and consider developments over the past decades in greater detail.

## Origins of the Dutch employment miracle

In the mid-1990s unemployment in the Netherlands dropped dramatically. According to Nickell and Van Ours (2000) this was due to a significant reduction in the equilibrium unemployment rate since the early 1980s. Wage moderation, the popularity of part-time work and in particular the re-enforcement of financial incentives for work for unemployed workers collecting benefits were responsible for this decrease.

When the Dutch economy was hit by the second oil crisis at the end of the 1970s, it was confronted with declining employment and rising unemployment. In the course of the 1980s the reform of the welfare state began, initially with changes in benefit levels and later on with institutional reforms that also included the public sector. As a result, public sector wages and social benefits no longer increased as much as private sector wages. Furthermore, replacement rates in Unemployment Insurance (UI) benefits were reduced from 80 percent to 70 percent of gross wages and the minimum wage, to which the minimum social benefits are linked, was frozen in nominal terms, which reduced the minimum wage from 61 percent of the median wage in 1980 to 47 percent in 2000 (Van Ours 2006a).

In the 1990s, institutional reforms continued: eligibility criteria for social benefits were tightened, the legal definition of the appropriate job was widened in the disability scheme, the government reduced the discretion of decentralized administrations by issuing specific criteria for determining disability and residual earning power, and a program of reassessment of disability claims started in 1994 (Van Ours 2006b). In 1996 a new law on benefit sanctions was introduced in the Netherlands. Under this law people who receive UI benefits saw their benefits reduced if they didn't follow the rules related to benefits (see Abbring, Van den Berg and Van Ours (2005) for a study on the effectiveness of the new law). Furthermore, sickness insurance was privatized and competition in disability insurance was introduced to achieve efficiency gains in the implementation and administration of the insurance. In the early

years of the 21st century institutional reforms continued in the systems of unemployment insurance and disability insurance. Responsibilities for unemployment assistance benefits were decentralized and early retirement schemes were transformed into actuarial fairer schemes.

Over the past decade further changes in the UI benefits were introduced. The maximum duration of unemployment benefits was reduced from 60 to 38 months. The maximum period only applies to people with an employment record of 38 years. Furthermore, the benefit level was raised from 70 percent to 75 percent of the last wage during the first two months of unemployment. After this initial period, benefits are reduced to 70 percent of the previous wage. More stringent entitlement conditions were also introduced. Unemployment Assistance (UA) benefits are part of the system of welfare benefits that are means-tested. For a couple, welfare benefits are 100 percentof the minimum wage; a single parent gets 70 percent of the minimum wage and single persons – from 21 years onwards – are entitled to 50 percent of the minimum wage. For a long time the municipalities could claim a large part of their expenditures on UA benefits from the central government. The new Welfare Act introduced in 2004 changed this. It made municipalities financially responsible for UA benefits and reintegration policies. UA benefit recipients were also subject to a system of monitoring and benefit sanctions (see Van der Klaauw, Van den Berg and Van Ours (2004) for a study on the effectiveness of this system).

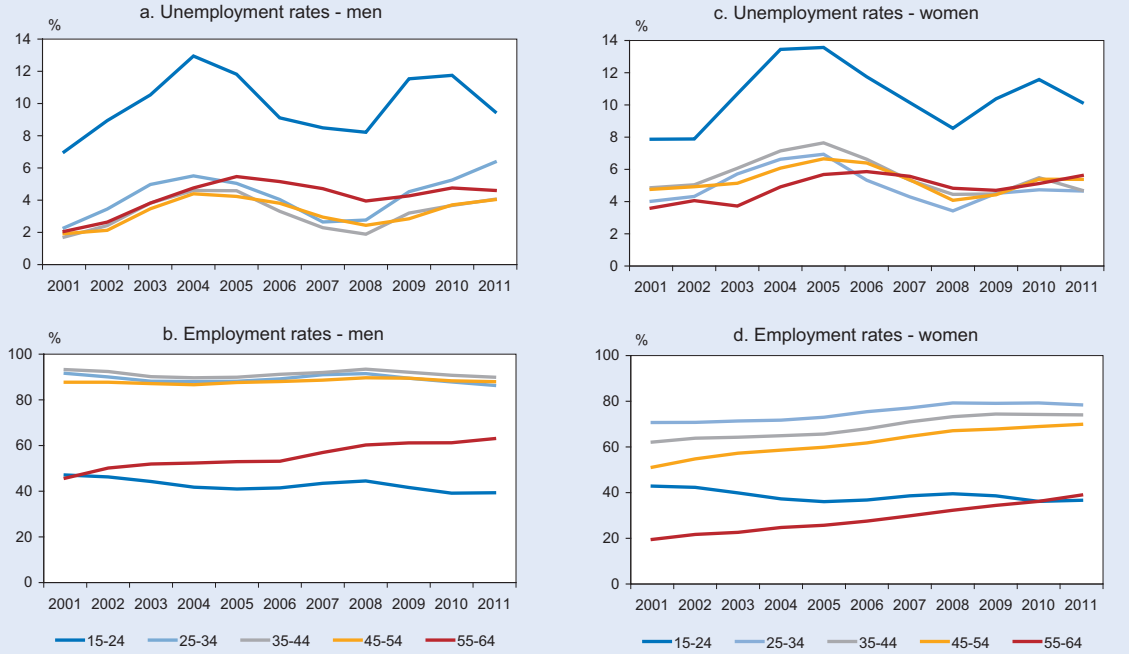
Disability Insurance for employees (WAO) was introduced in 1967. Under the terms of this law workers were insured against wage loss due to long-term disability. From then on if a worker became ill, he was allowed to claim a benefit under the illness scheme for a maximum period of one year. After that period he could claim a disability benefit. Workers were entitled to disability benefits after a so-called disability examination, which consisted not only of a medical examination, but also of an investigation of the labour market position of the worker. A worker could be considered disabled if there was no suitable job for him at his own educational level in his previous occupation. Furthermore, unemployment was "internalized", which means that those workers who were considered to be partially (more than 15 percent) disabled, could collect full disability benefits because it was assumed that partially disabled were doomed to remain unemployed. The benefit had a maximum of 80 percent of the wage in the last job. Disability benefits could be collected until age 65. Since the introduction of this law the number of workers collecting DI benefits has increased massively. This huge increase in the numbers on disability benefits induced the government to adjust the system several times. In 1985 the maximum replacement rate was reduced from 80 percent to 70 percent. In 1987 there was a major restructuring of the DI benefit system, primarily with the objective to reduce the inflow into disability. The most important change was the abolition of the "internalization of unemployment" rules. Partially disabled workers were considered as such and were expected to find a job or claim unemployment benefits for their remaining work capacity. In the 1990s and the first decade of the 21st century further changes were introduced that aimed to reduce inflow into disability and increase outflow from disability (see De Jong, Lindeboom and Van der Klaauw (2011) for an empirical analysis). In 2006, the government replaced the disability scheme with the Law on Work and Income According to Labour Capacity – WIA. Under this new law entitlement rules are stricter. For example, workers can only apply for WIA after a period of two years of sick leave, which is covered by employers. Workers themselves and their employers are obliged to explore possibilities for reintegration to avoid entering the disability program. Under the new disability law the inflow into disability decreased substantially.

**The Dutch labour market of the first decade 21st century**

After decades of reforming social security the Dutch labour market was in pretty good shape at the start of the 21st century. Employment rates were high, unemployment rates low. Nevertheless, in the first decade of the 21st century there were clear cyclical fluctuations. Figure 3 shows the evolution of unemployment rates and employment rates in the Netherlands for men and women distinguished by age. From Figure 3a it is clear that there are two peaks in the unemployment rate for men in the first decade of the 21st century, in 2004–05 and towards the end of the decade. At the start of the decade and in 2007-08 the unemployment rates of men were relatively low. The main age distinction is at age 25. Whereas the unemployment rate of men older than 25 fluctuates between two and six percent of the labour force, for young individuals the fluctuation is

**Figure 3**

EMPLOYMENT RATES AND UNEMPLOYMENT RATES IN THE NETHERLANDS BY AGE GROUP, 2001–2011




Source: Statistics Netherlands.

between seven and 13 percent. Figure 3c shows that the evolution of the unemployment rates of women are very much the same.

Figure 3b shows the evolution of the employment rates for men distinguished by age category. For prime age men the employment rate is around 90 percent. Employment rates are only substantially lower for younger and older men. For young men there is a clear decline in the employment rate, while for old men there is a strong increase. The increase in the employment rate for older workers is related to the abolition of early retirement programs. Figure 3d shows that for women employment rates increased, except for young women. There are also clear differences in employment levels, with the employment rate for women aged 25 to 34 being the highest. The lower employment rate for women above 34 is more due to a cohort effect than to an age effect. For young individuals the employment rate is below 50 percent, which remains substantially above average. At a young age many individuals are still in education and have not yet entered the labour market. As a percentage of the population, unemployment among young individuals is not much different from that among older workers.

Table 1 provides more detailed information on labour market developments by comparing the situation in 2001 and 2011. The unemployment rates of men increased from 2.5 to 5.2 percent, while for women the increase was from 4.9 to 5.6 percent. The employment rates for men went down slightly from 76.4 to 74.2 percent, while the employment rate for women increased substantially from 51.7 to 60.2 percent. The evolution of unemployment rates and employment rates by age are presented above in Figure 1. As shown in Table 1 there are also significant differences in unemployment levels and trends according to the level of education achieved. Unemployment rates decline with the level of education and the absolute difference in unemployment rates between lower educated and higher educated workers increased in the first decade of the 21st century. The employment rates of higher educated workers are substantially higher than those of less educated workers, and the differential is even bigger for women. One in two men and three out of four women with a basic education do not have a job. The employment rates of men have gone down at every level of educational attainment, while they have increased at every level of educational attainment for women. Finally, Table 1 presents differences in

**Table 1**

**Unemployment rates and employment rates; men and women – 2001–2011**

| | Unemployment rates (percentage of labour force) | | | | Employment rates (percentage of population age 15-64) | | | |
|---|---|---|---|---|---|---|---|---|
| | Men | | Women | | Men | | Women | |
| | 2001 | 2011 | 2001 | 2011 | 2001 | 2011 | 2001 | 2011 |
| Total | 2.5 | 5.2 | 4.9 | 5.6 | 76.4 | 74.2 | 51.7 | 60.2 |
| By age | | | | | | | | |
| 15-24 | 7.0 | 9.5 | 7.9 | 10.1 | 47.1 | 39.3 | 42.8 | 36.6 |
| 25-34 | 2.3 | 6.4 | 4.0 | 4.7 | 91.6 | 86.3 | 70.7 | 78.4 |
| 35-44 | 1.7 | 4.1 | 4.9 | 4.7 | 93.2 | 89.9 | 62.1 | 74.0 |
| 45-54 | 1.9 | 4.0 | 4.8 | 5.4 | 87.7 | 88.0 | 51.1 | 69.9 |
| 55-64 | 2.1 | 4.6 | 3.6 | 5.6 | 45.7 | 63.1 | 19.5 | 38.9 |
| By education | | | | | | | | |
| Basic | 5.1 | 9.7 | 8.9 | 10.4 | 51.0 | 50.0 | 24.2 | 28.6 |
| Lower | 3.1 | 6.3 | 6.6 | 8.6 | 70.8 | 62.8 | 37.8 | 41.0 |
| Secondary | 2.0 | 5.0 | 4.2 | 5.4 | 80.7 | 77.1 | 60.2 | 64.9 |
| Higher vocational | 2.2 | 3.9 | 3.8 | 3.4 | 87.2 | 85.0 | 72.4 | 78.9 |
| University | 2.0 | 3.9 | 4.4 | 4.1 | 88.7 | 88.4 | 81.5 | 82.1 |
| By immigrant status | | | | | | | | |
| Natives | 1.8 | 3.9 | 4.4 | 4.5 | 79.0 | 76.5 | 52.9 | 62.5 |
| Western immigrants | 3.5 | 6.7 | 6.3 | 7.6 | 73.6 | 71.4 | 50.2 | 58.8 |
| Non-western immigrants | 8.1 | 13.5 | 9.3 | 12.5 | 61.6 | 60.9 | 42.4 | 46.3 |
| of which: Turks | 6.6 | 10.5 | 10.1 | 12.3 | 64.1 | 65.2 | 33.2 | 43.0 |
| Moroccans | 6.9 | 13.4 | 13.0 | 12.3 | 58.9 | 61.9 | 32.2 | 38.3 |
| Surinamese | 7.2 | 11.9 | 6.9 | 8.8 | 66.6 | 63.7 | 56.7 | 59.9 |
| Antilleans (incl. Arubans) | 11.2 | 20.6 | 7.2 | 13.7 | 59.6 | 53.5 | 52.5 | 50.2 |

Source: Statistics Netherlands.

labour market development according to immigrant status. Unemployment rates among native workers are substantially lower than those among immigrant workers. Especially unemployment rates among Antillean men and non-western women are high. The mirror image holds for employment rates in terms of levels. In terms of trends, however, there are differences. Whereas the employment rates of native men went down from 79 percent in 2001 to 76.5 percent in 2011, the employment rates of Turkish and Moroccan men went up.

Table 2 gives an overview of developments in various social insurance benefits from 2001 to 2011. As a point of reference, between these years average employment rate went up from 64.2 to 67.2 percent, while the average unemployment rate went up from 3.5 to 5.4 percent. As shown, the number of UI benefits went up from 1.6 percent to 2.4 percent of the working age population, while the number of UA benefits hardly changed. As discussed previously in 2004 there was a major change in the system of UA benefits, which made it more difficult to qualify for entitlement and made eligibility stricter. The system of UI benefits was also adjusted at around the same time, but this referred mostly to the maximum benefit duration. Table 2 also provides information on trends in the various types of disability benefits. The reforms of the past decades have caused a big drop in the percentage of the working age population receiving old-style disability benefits (WAO), from 7.3 in 2001 to 4.0 in 2011. This big drop is partly due to the fact that since 2006 new entrants are entitled to the more strict disability benefits under the Work and Income Act. In 2011 1.3 percent of the working age population received this new type of disability benefits. Over the period 2001-2011 there was a small drop in the number of self-employed collecting disability benefits, while there was a big increase in the number of individuals collecting benefits under the Young Disabled Persons Act. About 100,000 individuals are working under the Sheltered

**Table 2**

**Unemployment benefits, disability benefits and sheltered employment (percent of population 15 to 64)**

| | 2001 | 2011 |
|---|---|---|
| Unemployment benefits | | |
| Unemployment insurance benefits | 1.6 | 2.4 |
| Unemployment assistance benefits | 3.0 | 2.9 |
| Total unemployment benefits | 4.6 | 5.3 |
| Disability | | |
| Invalidity Insurance Act (WAO) | 7.3 | 4.0 |
| Work and Income Act (WIA) | | 1.3 |
| Disability Insurance Self-employed (WAZ) | 0.5 | 0.2 |
| Young Disabled Persons Act (Wajong) | 1.2 | 2.0 |
| Total disability benefits | 9.0 | 7.5 |
| Sheltered Employed (WSW) | 0.9 | 0.9 |
| Note: For new entrants WIA replaced WAO in 2006. | | |

Sources: Statistics Netherlands, UWV (Netherlands Social Security Benefits Administration) and Ministry of Social Affairs and Employment.

Employment Act because they have a physical or mental handicap, but are still able to work in a sheltered environment. This could be in a subsidized firm offering only sheltered employment or in a regular firm where the job is subsidized and adjusted to the capacities of the worker. As shown, 0.9 percent of the working age population had a sheltered job.

**Small impact so far – but what's next?**

The Great Recession clearly had an impact on the Netherlands, but from an international perspective the impact on the Dutch labour market is small. Average unemployment rates are still low; employment rates are high with a small decline for men, but an on-going increase for women. Unemployment rates among young workers, low-educated workers and non-western immigrants are high, but even for these groups of workers unemployment rates are not much different from average unemployment rates in neighbouring countries. Nevertheless, the current prospects for economic growth in the Netherlands are poor. The drop in unemployment in 2011 is expected to be temporary; and unemployment is expected to rise again in 2012. The government deficit is predicted to be 4.5 percent of GDP in 2013, above the magical 3 percent that is acceptable from an EU perspective. Further labour market reforms will be implemented. In the on-going debate about labour market institutions various policy changes are discussed, some of which are close to being implemented, while other proposals may take more time before.

One of the near-future institutional changes refers to disability benefits and welfare benefits. A new Law "Work according to Ability" will be introduced in 2013. This new law will be implemented by municipalities and will replace the old Unemployment Assistance Law, the Young Disabled Persons Act and the Sheltered Employment Act. The new law intends to increase incentives for long-term and partially disabled workers to seek and accept jobs, for employers to hire these workers and for municipalities to speed up the matching process. Under the entitlement of the old laws, the level and duration of benefits were different, whereas under the new law there are uniform rules. The new law is also stricter than the old laws. For example, partially disabled young workers who under the old law received non-means-tested benefits without any obligation to attend labour market programs will receive means-tested benefits and will be obliged to attend labour market programs under the new law. To stimulate workers, individual-specific wage subsidies will be available. In a more distant future other reforms are likely to occur as well. From an international perspective, Dutch labour market institutions especially stand out in terms of the maximum duration of UI benefits (38 months), which are longer; and in terms of employment protection legislation for regular jobs, which is stricter than in other countries. It is highly probable that the maximum duration of unemployment benefits will be reduced substantially; perhaps to 12 months. The Dutch labour market is flexible through its high share of temporary jobs and flexible contracts. However, there is a great deal of

inflexibility when it comes to regular jobs. Therefore, reforms of employment protection are expected to make the labour market for regular jobs more flexible in the longer term. Now – at the time of writing at the end of March 2012 – the parties in the Dutch coalition government are negotiating how to reduce the government deficit. The outcome of these negotiations is unclear, as is the future of the coalition government.[1]

[1] Indeed, the political parties who were supporting the coalition government could not come to an agreement and the government resigned. September 2012 there will be elections and after that negotiations between political parties to form a new government. The outcome of these negotiations will determine which types of labour market reforms will be implemented in the near future. At the moment it is not clear whether the new law "Work according to ability" will indeed be implemented in 2013.

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# The Irish Labour Market and the Great Recession

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Séamus McGuinness*

**Introduction**

Since the middle of the 1990s, the Irish economy has undergone periods of extraordinary growth and extraordinary contraction. As shown in Figure 1, growth rates in real GDP averaged nine percent between 1996 and 2000. While the rate of growth moderated between 2001 and 2007, it averaged five percent, a rate of growth that was remarkably high when compared to the norm across the OECD over this period. This rate of growth in real GDP was mirrored in the labour market, where the number employed rose from approximately 1.4 million at the beginning of 1998 to just over two million by the end of 2007, an increase of almost 50 percent.

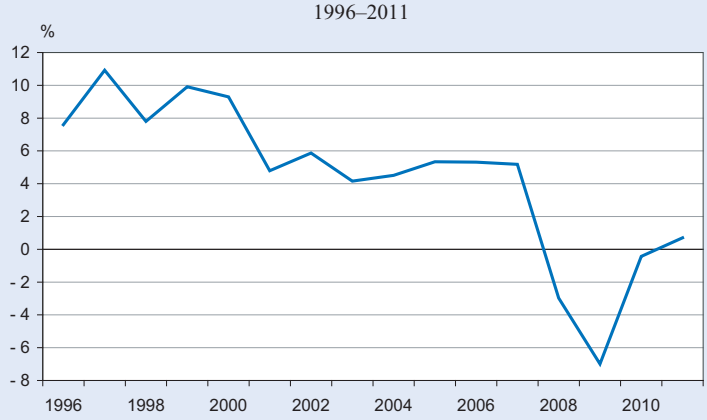
In 2007, the first signs of a change in economic fortunes began to emerge as GDP began to contract on a quarter-on-quarter basis. The reasons for the downturn have been explored elsewhere (for example, Whelan 2010) so we will provide just a brief overview here. In the latter years of Ireland's economic boom, the economic growth was increasingly characterised by rapidly rising property prices, a surge in credit and high levels of house-building. As the global credit crunch took hold in 2007/08, the Irish economy was highly exposed. House prices began to level off in 2007 and then to decline, and this led to a swift fall in house-building and subsequently in other building activity. The fall in house prices also led to a more generalised fall in property values.

As a result of their highly concentrated lending activities during the boom, the banks in Ireland were faced with huge losses and an inability to borrow on international markets in the wake of the property market collapse. This, in turn, led to the government guaranteeing the liabilities of the Irish banks in September 2008. As the full scale of the banking losses emerged over the course of 2009, the full extent of the government's exposure became apparent. When combined with the large fiscal deficit that arose from the abrupt slowing of the economy, the government's financial position weakened to such a degree that a rescue package from the IMF, the EU and the ECB was sought in late 2010.

The economic downturn between 2008 and 2010 was dramatic. Real GDP fell in each of these three years, with a cumulative fall of over 10 percent. Although growth returned to the economy in 2011, with real GDP increasing by 0.7 percent, a somewhat different picture is portrayed when the economic performance is viewed in terms of gross national product (GNP). GNP differs from GDP because it accounts for the repatriation of the profits made by foreign multinationals. For most countries, GDP and GNP are similar but for Ireland, the difference is large with GDP being some 25 percent larger. Based on GNP, the Irish economy continued to contract in 2011, by 2.5 percent.

**Figure 1**

Growth rate of Ireland's Real GDP
1996–2011




Source: Central Statistics Office.

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In the remainder of this paper, we explore the labour market dimensions of the economic downturn. In the next section, we show how the downturn has impacted in terms of trends in employment, unemployment and participation. Then we take a closer look at two specific issues, namely, migration and earnings. Both of these provide possible avenues of adjustment to the dramatic economic shock of 2008/10 and, as will be seen, while outward migration has re-emerged as a feature of Ireland's labour market adjustment, earnings do not seem to have declined in the private sector. Thereafter, we discuss one policy initiative that has been taken by the government. Given that the government is operating a severe austerity programme, policy initiatives relying on increased spending are generally not possible. The government has, however, attempted to improve its strategy with regard to activation measures for the unemployed. Finally, we offer some conclusions.

**Broad labour market trends**

In the Introduction, we set out the scale of Ireland's economic collapse between 2008 and 2010. In Table 1, we show how this collapse was manifest in the labour market through falls in the numbers employed, falls in participation and increases in unemployment.

Looking firstly at the numbers employed, this peaked in 2007 at a level of 2.114 million. By Q2 2011, the number employed had fallen to 1.821 million, a fall of almost 14 percent. Such a huge and rapid fall in employment inevitably had to lead to an increase in unemployment and this is seen in the last line of Table 1. The rate of unemployment had been relatively constant at around 4 to 4.5 percent between 2000 and 2007, but the jump between 2007 and 2009, from 4.6 percent to 12 percent was another striking feature of the downturn. The rate continued to increase beyond 2009 and now stands at over 14 percent. Although the trend in the participation rate tends to attract less attention, the figures in Table 1 are noteworthy. From a peak of 64 percent in 2007, the participation rate fell to 60.7 percent in 2011. This fall in the participation rate contributed to a decline in the labour force of 5 percent between 2008 and 2011.

The increase in unemployment shown in Table 1 tells a story, but additional insights emerge from a look behind the 2011 unemployment rate of 14.3 percent. In Table 2 we show the breakdown by age and gender. As can be seen, the rates of unemployment decline across the different age groups and are higher for men. The rates of unemployment among the younger groups could be described as worryingly high. With almost a half of male labour force participants aged 15-19 unemployed, and a third of those aged 20-24 in this situation, concerns now exist about the longer-term outlook for this group if the labour market is to remain depressed and this group fails to get a foothold in the labour market at this crucial stage of their lives.

**Table 1**

**Ireland's labour market trends, 2005 to 2011**

| | Q2 2005 | Q2 2006 | Q2 2007 | Q2 2008 | Q2 2009 | Q2 2010 | Q2 2011 |
|---|---|---|---|---|---|---|---|
| Labour force (thousand) | 2,040 | 2,133 | 2,217 | 2,240 | 2,203 | 2,153 | 2,126 |
| Participation rates (%) | 62.1 | 63.2 | 64.0 | 63.7 | 62.5 | 61.3 | 60.7 |
| In employment (thousand) | 1,945 | 2,035 | 2,114 | 2,113 | 1,939 | 1,859 | 1,821 |
| Unemployment rates | 4.7 | 4.6 | 4.6 | 5.7 | 12.0 | 13.6 | 14.3 |

Source: Central Statistics Office.

**Table 2**

**Unemployment rates by age and gender, Q2 2011**

| Age | 15-19 | 20-24 | 25-34 | 35-44 | 45-54 | 55-59 | 60-64 | Total |
|---|---|---|---|---|---|---|---|---|
| Males | 46.1 | 33.7 | 21.5 | 14.8 | 13.3 | 11.8 | 11.0 | 17.5 |
| Females | 33.7 | 21.8 | 11.0 | 9.1 | 7.0 | 5.7 | 5.1 | 10.4 |
| All persons | 40.1 | 27.7 | 16.5 | 12.4 | 10.6 | 9.2 | 8.7 | 14.3 |

Source: Central Statistics Office.

**Table 3**

**Total and long-term unemployment rates, 2005 to 2011**

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|
| Long-term unemployment rate | 1.4 | 1.4 | 1.3 | 1.5 | 2.6 | 5.9 | 7.7 |
| Total unemployment rate | 4.7 | 4.6 | 4.6 | 5.7 | 12.0 | 13.6 | 14.3 |
| Ratio | 0.30 | 0.30 | 0.28 | 0.26 | 0.22 | 0.43 | 0.54 |

Source: Central Statistics Office.

In Table 3, we show the rates of total unemployment (already shown in Table 1) and also the rate of long-term unemployment, where this is defined as a period of unemployment exceeding one year. In the last row of Table 3, we show the ratio of these two rates, which reveals another worrying aspect of the economic collapse. In 2005, the long-term unemployed represented 30 percent of the total unemployed. As the recession took hold in 2007 and 2008, the share of long-term unemployed people in the total pool of unemployed people fell. This is likely to have resulted from the large-scale job losses that were occurring, resulting in a large rise in the number of new entrants to this labour force category. Between 2009 and 2010, the proportion of the unemployed who were long-term unemployed doubled, from 22 to 43 percent. This upward trend continued into 2011 and over half of the unemployed have now been out of work for more than one year. Given the wide range of studies that have shown the damaging impacts of long-term unemployment and the difficulties of returning to work after increasingly long absences, the possible impacts of the trend shown in Table 3 are well understood.

**Paths of possible adjustment: migration and wages**

*Migration*

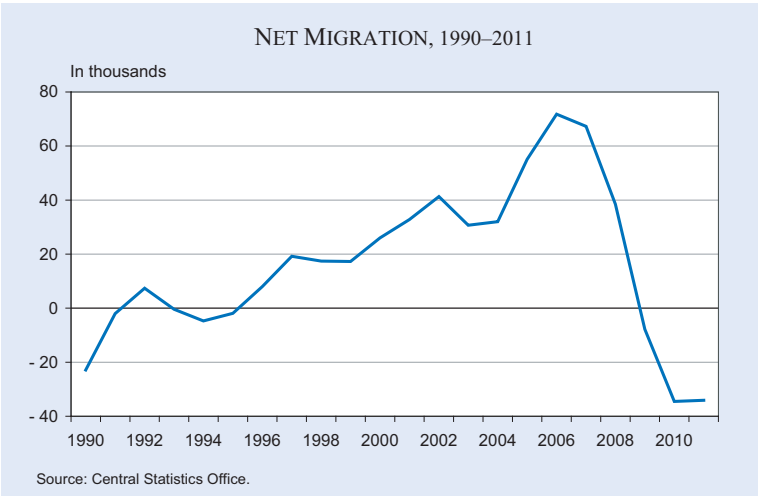
In Figure 2, we show the pattern of net migration to and from Ireland for the period from 1990 to 2011. Based on a rough comparison with Figure 1, it is readily apparent that population movements to and from Ireland reflect the state of the economy to a certain degree, but there is not a perfect correlation and this requires an explanation.

Although Ireland experienced its strongest rates of growth between 1996 and 2000, the surge in inward migration occurred after this. One reason for this is the following. In May 2004, when the EU expanded with the entry of eight new member states, Ireland was one of only three countries that allowed full access to its labour market for the citizens of the new member states.[1] Given the strength of economic growth in Ireland at that time and the limited number of countries that took a liberal approach to the labour market dimension of EU enlargement, it is perhaps unsurprising that a large number of citizens from the new member states migrated to Ireland. The impact on Ireland's population and labour force was large. Between the third quarter of 2004 and the third quarter of 2007, the number of non-nationals (aged 15 and over) grew by 85 percent. This meant that the proportion of the population aged 15 and over that was non-national increased from 7.7 to 13.1 percent over the same three-year period, with the bulk of this increase being due to immigration from the EU's new member states.

By the second quarter of 2007, about 15 percent of those employed in Ireland were non-Irish nationals (316,300 out of a total employed of 2.1 million). Of the 316,300 non-nationals, 152,800 were from the

[1] Sweden and the UK were the other two countries.

**Figure 2**



EU's new member states – this was almost 50 percent of the total non-national group. As the vast majority of these people were relatively recent arrivals into Ireland's labour market, it was likely that they were in relatively vulnerable employment situations as the recession hit in 2007/08. High rates of employment loss among them was to be expected and the data show that this was indeed the case.

Using data from a number of waves of the Quarterly National Household Survey (QNHS)[2] Barrett and Kelly (2012) looked firstly at unadjusted figures on employment losses for Irish national and non-nationals and striking differences were found. In the year ending Q3 2009, the rate of job losses among Irish nationals was seven percent. While this was a remarkable pace of loss, the corresponding figure for non-nationals was almost 20 percent. These different rates of job loss translated into a divergence in the paths of unemployment between the two groups. As shown by Barrett and Kelly (2012), the gap between national and non-national unemployment rates had fluctuated between one and three percentage points in the quarters between 2004 and 2008. In the first quarter of 2009, however, the gap jumped by five percentage points.

As Barrett and Kelly point out, it was possible that the higher rate of job losses among non-nationals around 2009 was partly related to their age as opposed to their migrant status. The recession has impacted heavily upon younger workers and as migrants are generally younger, it was necessary to undertake multivariate analysis to isolate the "immigrant" effect. By combining data from the QNHSs of Q2 2008 and Q2 2009, Barrett and Kelly were able to establish if the probability of being employed declined for non-nationals relative to nationals between 2008 and 2009 when the recession was at its most severe. The results showed that non-national employment probabilities had declined over the course of the recession relative to natives. However, when looked at by immigrant groups, it emerged that this effect was only present for immigrants from the new member states of the European Union. There was no relative decline for immigrants from the EU, the rest of the "old" EU or from the rest of the world.

Given the substantial job losses among immigrants, it was likely that a net outflow of this group would emerge and this again is shown by Barrett and Kelly. They estimated, based on the QNHS data, that the number of non-nationals employed in Ireland fell by almost 90,000 between Q1 2008 and Q4 2009.[3] They also estimated that the population of this group fell by 60,000 and that the numbers unemployed only rose by just over 20,000. As there was only a small increase in the numbers of non-nationals who declared themselves as being "inactive" (under 3,000), it seems that job losses did lead to outflows.[4]

Referring back to Figure 2, the outflows for the years 2010 and 2011 have been estimated at around 35,000 per annum. Both Irish national and non-nationals are now represented among this outflow and so emigration, so long a feature of Ireland's demography, has returned in the wake of this recession.

*Earnings*

As the full-scale of the recession began to manifest itself in Ireland, economists increasingly spoke of the need to achieve an "internal devaluation". As Ireland was part of the Euro zone, a boost to competitiveness through a currency devaluation was not possible. However, it was argued that wage reductions within Ireland could have a similar effect. While wages in the public sector represented a policy tool that the government could manipulate, this was not the case in the private sector. As discussed below, this contributed to somewhat differing outcomes with regard to wages across the public and private sectors.

Following the emergence of the fiscal deficit, the Irish government embarked on a series of initiatives aimed at curtailing the earnings of public sector workers whom, it was estimated, earned a premium in excess of 20 percent relative to their private sector equivalents (Kelly, McGuinness and O'Connell 2009). On the grounds that most public servants had access to non-contributory pensions, from March 2009, the Irish government imposed a pension levy on gross earnings which ranged from between five and 10.5 percent on earnings over EUR 15,000. From January 2010, public sector pay levels were cut by between five and 10.5 also on a progressive scale. Finally, in March 2010, the Irish government and public sector trade-unions also negotiated a three year pay freeze in return as part of a package of pub-

[2] This is Ireland's labour force survey and the official source of unemployment and other labour market statistics.

[3] This amounted to a decrease of 25 percent.

[4] Barrett and Kelly do caution about drawing too strong a conclusion based on a cross-section as opposed to panel data. Nevertheless, the figures are persuasive.

**Table 4**

**Average gross hourly and weekly earnings and hours worked for both public & private sector workers, 2008 and 2011**

| | Average hourly pay | Percentage change | Average weekly pay | Percentage change | Hours worked |
|---|---|---|---|---|---|
| | Public sector | | | | |
| 2008 | 29.2 | | 930.5 | | 31.9 |
| 2009 | 29.9 | 2.4 | 947.9 | 1.9 | 31.7 |
| 2010 | 28.6 | -4.3 | 903.1 | -4.7 | 31.6 |
| 2011 | 28.6 | 0.0 | 895.7 | -0.8 | 31.3 |
| | Private sector | | | | |
| 2008 | 19.3 | | 636.9 | | 33.0 |
| 2008 | 19.3 | | 636.9 | | 33.0 |
| 2009 | 19.5 | 1.0 | 622.7 | -2.2 | 32.0 |
| 2010 | 19.5 | 0.0 | 616.6 | -1.0 | 31.7 |
| 2011 | 19.4 | -0.5 | 611.5 | -0.8 | 31.6 |

Source: Constructed from Earnings, Hours and Employment Costs Surveys (EHECS), 2008–2011, CSO.

lic sector reform.[5] However, despite all of this, those public sector workers who had not reached the top of their pay scales continued to receive annual salary increments over the period; therefore, the overall direction of public sector pay remained somewhat uncertain.

Data from the Earnings, Hours and Employment Costs Survey (EHECS), which is enterprise-level data collected by the Irish Central Statistics Office (CSO), shows that despite a sharp decline following the 2010 pay cuts, as a whole, nominal hourly pay fell by just over two percent between 2008 and 2011. However, due to a decline in the average hours worked, mean weekly pay in the public sector fell by almost four percent over the same period, presumably as a consequence of restrictions in overtime that were introduced after 2008. Nevertheless, despite the existence of a very substantial public sector pay premium and a large fiscal deficit, hourly rates of public sector remuneration appear to have fallen only marginally since the onset of the crises.

The situation with respect to private sector workers indicates that nominal rates of hourly pay also remained largely unchanged between 2008 and 2011, with the evidence suggesting that employers have opted to curtail the number of hours worked as opposed to rates of remuneration (Table 4). However, the use of such aggregate data when examining private sector earnings is potentially misleading as it will hide any compositional movements in the data. For instance, if unemployment has been heavily concentrated among low earning employees, average earnings could appear static, despite a decline in the average pay of surviving workers. Detailed studies of both the EHECS data from 2009 to 2011 (Walsh 2012) and the National Employment Surveys (NES)[6] from 2006 to 2009 (Bergin, Kelly and McGuiness 2012) have both concluded that the impact of compositional change on earnings has been relatively minor and, therefore, that private sector earnings have also remained relatively stable since the onset of the crises (Bergin et al. 2012; Walsh 2012).

Further evidence of the incidence of private sector wage cutting is available from the employer component of the 2009 NES. In the 2009 NES questionnaire, firms were asked to indicate if they had implemented changes to a number of employment conditions in that year.[7] In particular, they were asked if they had implemented cuts in i) staff numbers, ii) rates of pay/salary, iii) hours worked, iv) paid leave, v) bonuses, vi) allowances/premiums or vii) overtime. Overall, almost 62 percent of firms indicated that they had introduced some type of cut in employment conditions in 2009. However, the incidence of cuts for each is quite low, especially given that the economy was in the depths of the recession at that time point.

[5] In return for commitments on pay and productivity the Irish Government agreed not to seek involuntary redundancies within the public sector.

[6] The NES is a nationally representative linked employee / employer survey.

[7] Specifically between October 2008 and October 2009.

**Table 5**

**Changes in employment conditions among private sector firms in 2009**

| | Percent |
|---|---|
| Overall | 61.8 |
| Type of cut: | |
| Staff numbers | 34.0 |
| Hours worked | 29.0 |
| Bonuses | 26.1 |
| Pay | 23.2 |
| Overtime | 21.6 |
| Allowances/Premiums | 15.7 |
| Paid leave | 2.3 |

Source: National Employment Survey (2009).

Reducing staff numbers and hours worked were the main methods implemented by firms to cut costs (Table 5). Less than a quarter of firms targeted pay rates, a pattern consistent with the movements in employee earnings observed in table 4.

**The labour market activation challenge**

The scale of the unemployment problem in Ireland is daunting to say the least and the situation is made all the more difficult as fiscal constraints dictate that any initiatives taken to tackle unemployment must be cost neutral. Against this background, Ireland's response to the unemployment crises must, by definition, be focused around its range of labour market activation measures. Unfortunately, the evidence suggests that, prior to the recession, Ireland's labour market activation policies fell well short of international best practice and efforts to date have been concentrated around attempts to reform the system.

Ireland was one of a small number of OECD countries where the placement function of the Public Employment Service (PES) was separate from the benefit function (Grubb, Singh and Tergeist 2009). It later transpired that communication failures between the PES and benefits organisations led to large numbers of qualifying claimants falling through the activation net (McGuinness, O'Connell, Kelly and Walsh 2011a). Notwithstanding this, individuals were only activated after three months on the live register (the Irish register for unemployment assistance/benefit); however, somewhat counter intuitively, claimants who had been interviewed during a previous unemployment spell were automatically excluded from the activation system during subsequent claims. For those that did qualify for assistance, attendance at the initial activation interview was the benefit recipient's only quasi-compulsory contact with employment services (Grubb et al. 2009). Any subsequent activation measures were purely voluntary in nature. Consequently, the Irish system lacked what are widely accepted as the two essential pillars of an effective labour market activation strategy i.e. regular monitoring of job-search activities and the imposition of sanctions for non-compliance.

Perhaps not surprisingly, an evaluation of labour market activation in Ireland found that the system was highly ineffective in influencing exits from the live register. Specifically, relative to a control group, and after accounting for both selection and dynamic bias, activated individuals were found to have a lower probability of exit to employment (McGuinness et al. 2011a). The authors of the evaluation attribute the negative intervention effect to claimants reducing their job-search activities upon discovery of the "light touch" nature of the activation process.

The situation with respect to training programmes for the unemployed was somewhat more positive. Around 40 percent of spending on training programmes for the unemployed is allocated to community employment programmes with the remaining 60 percent distributed across a range of specific skills programmes. McGuinness et al. (2011a) found that specific skills training raised the probability of a sustained exit from the live register by nine percent. However, a more detailed analysis of the data revealed that the impact of training was not evenly distributed with the pay-offs highest for job search training (17.9 percent) and specific high skills training (22.4 percent) (McGuinness, O'Connell and Kelly 2011b). Based on a sample of training participants, it was estimated that the majority of the training effort was concentrated in the provision of less effective low level and general skills (Table 6). Furthermore, consistent with research findings in other countries, community employment schemes in Ireland have been found to have little impact in reducing the incidence of unemployment. Thus, despite some positive aspects, the evidence suggests that a great deal of restructuring was also required with respect to the composition of training opportunities available to the unemployed.

The Irish government responded to these challenges with the launch of its "Pathways to Work" initiative in February 2012. Despite many positive aspects

such as the provision of an additional 21,000 training places and partial reform of community employment programmes, the central flaws in the activation system have yet to be addressed. The three month time lag from the point of claim to activation persists. Furthermore, neither new nor existing claimants are subject to regularised contact with employment services and the proposed sanction regime appears weak. Community employment schemes continue to account for the largest single component of the training budget and there is little evidence of any sustained effort aimed at re-orientating training away from relatively ineffective low and general skills initiatives.

## Conclusions

Although much of the world suffered the consequences of the Great Recession of 2008/09, Ireland suffered more than most. In terms of the labour market, employment fell steeply (14 percent decline between 2007 and 2011), the rate of unemployment soared (an increase of 10 percentage points between 2007 and 2011) and net outward migration resumed. These developments now present Ireland with a number of challenges. If the economy remains depressed for a significant period of time, the increase in long-term unemployment, which is already evident, could escalate further. Similarly, population outflows could continue.

As some degree of fiscal austerity is likely to remain in place for the medium-term, the scope for stimulus-type policies is severely limited. The most promising route for Ireland to emerge from its labour market challenges is for export demand to boost aggregate demand and for economic growth to lift labour demand. Even then, difficulties may arise if the growing number of long-term unemployed people become part of a structural unemployment problem. Hence, the use of effective activation measures seems critical. However, this also presents real challenges given the ongoing need for structural reform within Ireland's activation system.

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**Table 6**

**Distribution of government-sponsored training programmes for the unemployed by training weeks and estimated impact on exits from unemployment**

| | % Distribution of training | Impact of exits from unemployment |
|---|---|---|
| Job search training | 5 | 17.9*** |
| General training | 38 | 9.0** |
| Specific skills training - low | 31 | 2.0 |
| Specific skills training - medium | 17 | 10.2* |
| Specific skills training - high | 9 | 22.4*** |
| Total | 100 | |

Note: p<0.01*, p<0.05**, p<0.1***.
Source: McGuinness et al. (2011b).

# Labour Market in Estonia: Responding to the Global Finance Crisis

Raul Eamets*

**Introduction**

Estonia had one of the highest GDP growth rates in the world in 2004-2007, with average GDP growth of over eight percent. A high inflow of relatively cheap and unlimited financial resources form Nordic banks caused a boom in many sectors (real estate, construction, whole and retail sales etc). Baltic countries are textbook examples of overheating economies. Global financial crises caused a very sharp GDP drop (-15 percent in 2009), increasing unemployment and the budget deficit.

In Estonia, a liberal market economy, a relatively small public sector, and a relatively low tax burden resulted in scarce resources for policy options. Attempts to achieve an annually balanced state budget have a pro-cyclical nature, which means that they worked well during the economic boom exaggerating growth through growing public expenditure. However, the opposite occurred during recession when government tried to cut expenditure in order to keep the budget deficit under control. As taxes were relatively low, the government also lacked sufficient automatic stabilisers. In general, we can say that the government had limited fiscal tools to smooth cyclical fluctuations.

Additionally, the currency board system sets restrictions for money supply as well as for restraining inflation. Currency board means that the base money (M0) of the Estonian national currency (EEK) was fully (100 percent) guaranteed by the Central Bank's foreign reserves. At the beginning (1992) the Estonian kroon was pegged to the Deutsch mark and from 1999–2010 EEK was pegged to the Euro (1 EUR = 15,6466 EEK) as Germany joined the Eurozone. Central reserves in their turn depend on the inflow of foreign money. The continuously high rate of foreign investment and foreign loans increased the foreign reserves and the resulting rise in money supply put pressure on the price level. The Estonian Central Bank did not have any appropriate means to reduce the money supply which resulted in higher inflation. The only tool for steering the money supply was the reserve requirement rate for commercial banking, but as most banks were subsidiaries of Scandinavian banks, they were not subject to any restrictions on borrowing cheap money from Scandinavia. Hence, their financial possibilities of increasing the money supply did not depend on their reserves.

In such a situation only a flexible labour market can act as an economic "buffer" for macroeconomic adjustment. Until 2009 Estonia's labour market was quite successful in this role. Employment reached 70 percent and unemployment was four percent. Compared to other EU member states, the Estonian labour market is considered very flexible. Although employment protection legislation (EPL) shows that Estonia has relatively rigid labour markets, changes in labour market outcomes reveals the opposite. Empirical data show the high flexibility of the labour market. Within a year unemployment has escalated, average nominal wages have declined and the number of working hours has dropped.

The Estonian government reacted to the crises very differently from the EU15 governments. In older EU member states public sector expenditure was increased, taxes in most cases were reduced and the financial burden was shifted by increasing the public debt of future generations. In Estonia (as in other Baltic countries) the budget deficit was covered by reducing public sector expenditure and raising the tax burden. In other words, Estonia shifted the whole burden of the crises to today's generation through lower wages, less income and less consumption. Today we can say that such behaviour was socially and politically acceptable, as there was no social unrest in Estonia, and the political parties who implemented heavy cuts in the public sector in 2009

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got more votes in the 2010 Parliament elections than in previous ones. All together this means that Estonia will hopefully move to a new growth stage of the economic cycle with a much more competitive economy and a low debt burden.

**Employment and unemployment**

Estonia, like the other two Baltic countries, is characterized by large fluctuations in the level of employment: the quick fall in the level of employment during the crisis and the fast increase during the boom. During the boom the employment rate reached 73 percent, while at the lowest point of the crises the employment rate plunged to 60.4 percent as can be seen in Figure 1. These changes took place within six quarters, which is also an indication of high labour market flexibility.

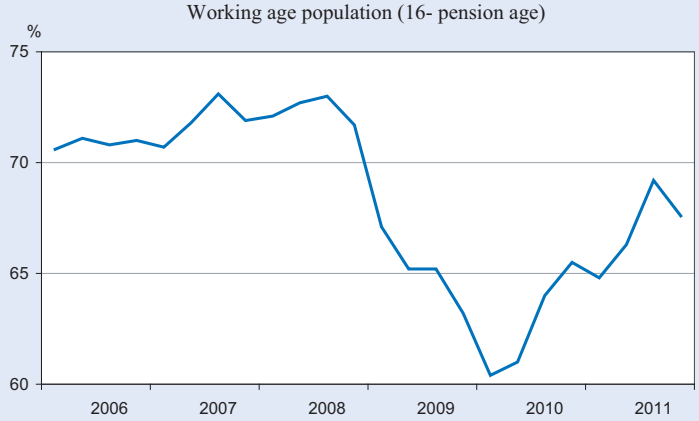
A similar picture emerges for unemployment. Here we can observe a certain time lag between the recession and an increase in unemployment as shown in Figure 2. Although the economic growth turned into a recession during the second quarter of 2008, the unemployment rate did not peak until the first quarter of 2010 (20.7 percent).

Will the unemployment rate drop down to a level equal to the pre-crisis situation and if so, when will this happen? If we compare our situation to the economic crisis in Finland during the early 1990s (Figure 3), we can assume that high unemployment levels may persist in Estonia for a further six to seven years.[1] It is also quite possible that the unemployment rate will not reach the pre-crisis level at all.

A persistently high unemployment rate can be caused by structural changes in the economy. In Estonia, there are several labour intensive sectors with low labour costs, which became unprofitable for entrepreneurs as labour became more expensive. As a result, these businesses have no future in Estonia in their old form. The sectors of the economy that have become unprofitable include the textile industry, clothing, the plastics industry, etc. Other industries that have suffered also include construction, the construction materials industry and the transportation sector (Varblane, Eamets et al. 2008). In certain fields, the increase in exports or the recovery of domestic demand may result in an increase in the number of jobs, but there are also industries where jobs have been reallocated to countries with cheaper labour.

**Figure 1**

EMPLOYMENT RATE IN ESTONIA, 2006–2011
Working age population (16- pension age)




Source: ELFS.

**Figure 2**

UNEMPLOYMENT RATE IN ESTONIA, 2006–2011
Working age population (16- pension age)

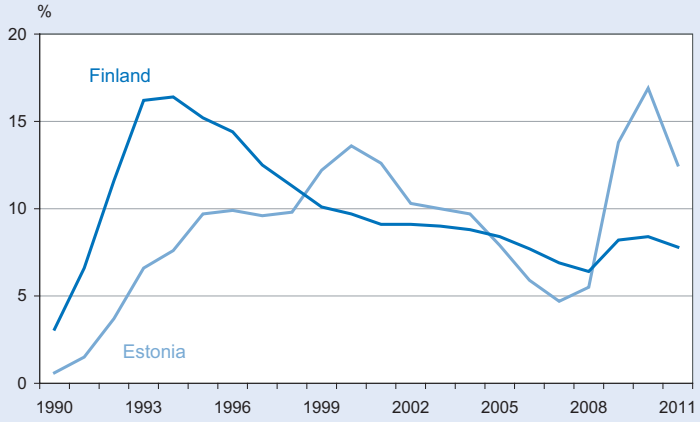

Source: ELFS.

[1] The Finish depression of 1991-1993 had a deep effect on its economy (especially on employment) for the entire 1990s. During the crises the gross national product decreased by 13 percent and the unemployment rose to 18.9 percent from 3.5 percent. Before crises Finland had massive inflow of foreign loans, which caused a real estate bubble. All these elements characterized the Estonian situation during last recession as well.

If we look at the specific industries that suffered most from the recession (Table 1), then traditionally we can see that construction is number one: during the boom the number of employed reached 82,000, while during the recession it drop to 48,000. In manufacturing we also see a decline by 37,000 employees, while other industries suffered less. Some industries even managed to increase their employment rate including the professional sector, scientific activities, real estate activities, administrative service activities and public administration if 2010 figures are compared to those of 2007. It is also true that during severe cuts in public sector expenditures in 2009 employment in this sector declined too.

**Figure 3**

UNEMPLOYMENT RATE IN FINLAND AND ESTONIA, 1990–2011




Source: National statistical offices, Eurostat (for Finland 1990–2000).

The next question is: how has the recession hit labour market minority groups? Ethnical minorities constitute about one third of the population in Estonia. These ethnical groups are Russians, Ukrainians, Belorussians, and people from various nations in Caucasia and Central Asia. Most of them are Russian speakers.

In the labour force survey we distinguish between minorities in two ways: ethnicity and first language. Here we use second option. Non-Estonians are those who do not speak Estonian as their first language. In reality language plays a major role in labour markets, particularly knowledge of the state language; as there are many jobs, especially in public sector where knowledge of the Estonian language is demanded by law. In the majority of cases, the second first language in Estonia is Russian. So the question is whether the Russian speaking minority

**Table 1**

**Employment by industry (NACE 2008), in thousands**

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Total | 655.3 | 656.5 | 595.8 | 570.9 | 609.1 |
| Agriculture | 30.3 | 25.3 | 24.0 | 24.1 | 26.9 |
| Manufacturing | 131.2 | 135 .0 | 113.8 | 108.4 | 121.0 |
| Construction | 82.1 | 81.0 | 58.3 | 47.9 | 59.0 |
| Wholesale and retail trade | 86.9 | 92.5 | 83.2 | 80.0 | 81.3 |
| Transportation | 52.9 | 49.9 | 49.7 | 43.6 | 48.3 |
| Accommodation | 22.3 | 23.6 | 20.1 | 19.4 | 19.2 |
| Information and communication | 13.6 | 15.3 | 14.3 | 12.4 | 16.7 |
| Financial and insurance activities | 9.5 | 10.4 | 11.4 | 9.4 | 10.2 |
| Real estate activities | 9.7 | 10.2 | 9.2 | 10.1 | 10.4 |
| Professional, scientific activities | 17.6 | 20.5 | 20.5 | 21.2 | 23.3 |
| Administrative service activities | 18.2 | 17.3 | 16.8 | 18.9 | 17.1 |
| Public administration | 39.2 | 38.4 | 36.7 | 40.4 | 40.3 |
| Education | 55,0 | 59.9 | 62.5 | 56.1 | 57.2 |
| Human health | 36.2 | 31.1 | 33.0 | 34.6 | 35.5 |
| Arts, entertainment | 17.7 | 14.8 | 14.2 | 14.7 | 14.3 |
| Other activities | 16.8 | 14.8 | 11.5 | 11.9 | 10.3 |

Source: Estonian statistics.

suffered more from the crises than average. If we look at Figure 4 then we can see that their unemployment rate is permanently higher than the average unemployment rate. The ratio of the unemployment rate of Russian speakers to the average unemployment rate has remained relatively stable (between 1.3–1.5) even during recession. There are several reasons for this. Firstly, as already mentioned, knowledge of the Estonian language is a precondition for many jobs. Secondly, the share of blue-collar workers among non-Estonians is about 50 percent, while this figure among Estonians is 33 percent (Malk 2010). Toomet (2011) investigated ethnical wage differences and his explanation for the differences between the wages earned by Estonians and Russians was the glass ceiling effect. He claimed that members of the minority group find it hard to move towards the upper end of the income distribution curve and rely on less well-paid jobs in largely segregated Russian-speaking workplaces. Thirdly, insufficient language knowledge limits the internal geographical mobility of the Russian-speaking population. The concentration of the Russian-speaking population in the work force is highest in North-East Estonia where traditional industries like heavy industry, the textile industry, energy production and mining are dominant. These sectors have been declining over the past 20 years and as mobility is low, this area has one of the highest regional unemployment rates in Estonia. The second generation of migrants can be expected to be in a better position in labour market terms. Here again, however, language skills are key issue. Lindemann and Vöörmann (2009) found that excellent command of the Estonian language is the factor that allows second generation Russian-speakers to compete on a relatively equal basis in the Estonian labour market. Poor language skills, however, significantly limit the opportunities that are available to Russian-speakers.

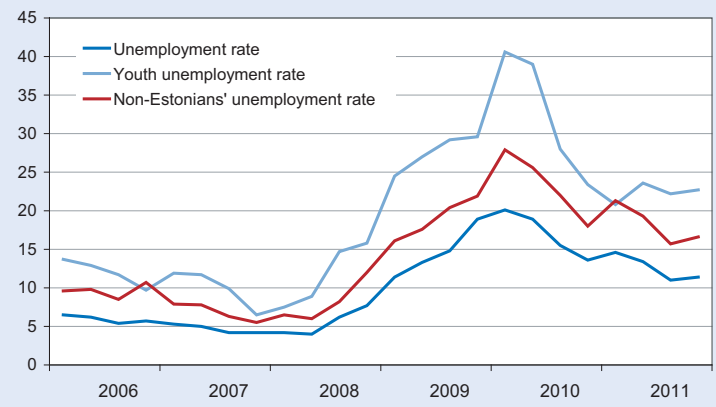
As in many other EU countries, youth unemployment is traditionally high in Estonia. Estonia does not have any special wage regulations for youth employment like youth minimum wages or similar measures. It is also important to bear in mind that inactivity in the youth cohort (15–24 year olds) is 62 percent, as most of these individuals study.

## Wages

The peculiarity of Estonia, and apparently of the other Baltic countries, is the role of trade unions. Unions play a relatively marginal role in industrial relations and employees usually agree on wages with their employers individually at a plant level. As a result, employees' salaries consist of relatively low basic wages and relatively high additional fees and bonuses. When the economy is booming, perfor-

**Figure 4**

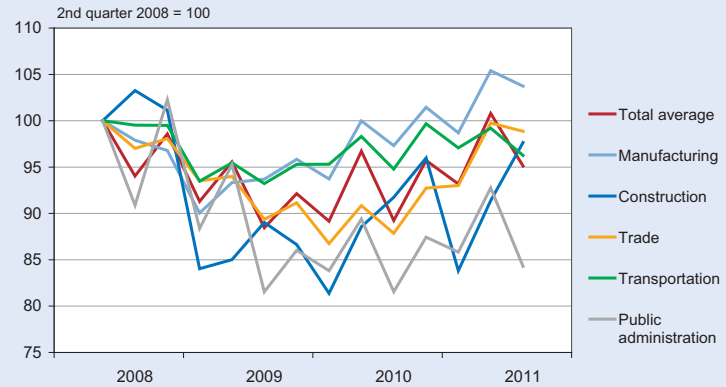
UNEMPLOYMENT RATE OF NON-ESTONIANS AND YOUTH, 2006–2011




Source: ELFS.

**Figure 5**

AVERAGE NOMINAL MONTHLY PRE-TAX WAGES, 2008–2011




Note: The quarterly data are based on monthly wages (three month average).
Source: Estonia Statistics.

**Table 2**

**Changes in working time in selected industries in 2008 and 2009**

| | Total | | | Construction | | | Manufacturing | | | Hotels | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | % | 2008 | 2009 | % | 2008 | 2009 | % | 2008 | 2009 | % |
| EU (27) | 37.3 | 36.9 | -1.1% | 40.6 | 40.2 | -1.0% | 39.2 | 38.4 | -2.0% | 40.6 | 40.2 | -1.0% |
| EE | 39.1 | 37.6 | -3.8% | 40.3 | 38.0 | -5.7% | 39.5 | 37.6 | -4.8% | 40.3 | 38.0 | -5.7% |
| LV | 39.4 | 38.8 | -1.5% | 41.4 | 39.1 | -5.6% | 39.0 | 38.7 | -0.8% | 41.4 | 39.1 | -5.6% |
| LT | 39.2 | 38.6 | -1.5% | 40.6 | 39.6 | -2.5% | 39.9 | 39.3 | -1.5% | 40.6 | 39.6 | -2.5% |

Source: Eurostat.

mance pay increases rapidly, but during recessions, this may result in a rapid decline of gross wages in certain sectors (Eamets and Leetmaa 2008). This phenomenon caused massive nominal wage cuts in several sectors during the last recession. If we take quarter two of 2008 as a pike of average wages, then we can see that despite a good GDP growth rate in 2011 (7.6 percent), not all sectors returned to the wage level of 2008. Among selected sectors only total average wages and wages in manufacturing reached this level (or above) by the third quarter of 2011.

We can see from Figure 5 that in some sectors (public administration, construction) the wage drop was around 20 percent. We can also see high seasonality of wages: during the summer months there are relatively large increases due to holiday payments while various annual bonuses are also paid to employees at the end of the year. There is also anecdotal evidence that in some sectors (for instance, in construction) hourly wages for some occupations or work tasks remained the same, but the piece-wise job requirements were raised. This means that individuals have to work more in order to obtain their previous payment levels. As unions are weak in Estonia (union density is around seven to eight percent and there are no unions in construction), such manoeuvres allow for a de-facto decrease in hourly wages.

### Working hours

One potential way to adjust the labour market to changing market conditions is to reduce the working time. Svejnar and Semerak (2009) argue that the observed adjustment in the form of a shorter working week in new member states may be temporary, and could later translate into unemployment. In Estonia's case this was probably true as unemployment did not peak until 2010. Shortened working hours may appear due to the higher frequency of part-time employment, extra vacations etc. According to the Estonian LFS, among the various reasons for working less than the usual number of hours during the previous week, the importance of the reason "Shortage of work or hours" increased from six percent in 2008 to 14 percent in 2009 (Masso and Krillo 2011).

In total, working time declined in Estonia by 3.8 percent, in 2009. The biggest decline took place in construction and in the hotel sector. Similar tendencies also appeared in another two Baltic countries, as we can see from Table 2. Another form of working time flexibility is part-time work. As economic activity declined during the crises, the working time of employed persons was reduced and full-time workers were given part-time work. The new Employment Contracts Act that came into force on 1 July 2009 changed the legislation for implementing part-time work, making the use of part-time work during the recession somewhat simpler (Masso 2010).

**Table 3**

**Part time-work and underemployment of different social groups (proportion of all employees, %), 2007–2011**

| | | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Total | Part-time job | 7.6 | 6.6 | 9.9 | 10.2 | 9.8 |
| | .. underemployed | 0.9 | 0.5 | 1.8 | 2 | 1.9 |
| Males | Part-time job | 3.6 | 3.3 | 6.1 | 6.2 | 4.3 |
| | .. underemployed | 0.4 | 0.4 | 1.6 | 1.1 | 0.7 |
| Female | Part-time job | 11.3 | 9.7 | 13.1 | 13.8 | 14.8 |
| | .. underemployed | 1.4 | 0.7 | 2.1 | 2.7 | 2.9 |
| Age groups | | | | | | |
| 15-24 | Part-time job | 13.8 | 12.4 | 17 | 21 | 16.2 |
| 25-49 | Part-time job | 4.8 | 4.1 | 7.1 | 6.5 | 6.3 |
| 50-74 | Part-time job | 10.8 | 9.4 | 12.9 | 14.5 | 14.6 |

Source: Estonian Statistics.

The Estonian Labour Force survey enables us to distinguish between "ordinary" part time work and so called "forced" part-time work. Respondents in Labour Force Survey can reply that they are working part-time for economic reasons (e.g. their firm was not able to provide a full-time job because of a decline in demand or for other crisis-related reasons). In such cases a worker is underemployed, in other words s/he would like to work more, but there are no job opportunities in his/her firm. We can see from Table 3 that the share of part-time work is very low in Estonia compared with other EU countries. The EU 25 average share of part-time workers is around 20 percent, while in Scandinavia this figure is over 25 percent and in the Netherlands it is close to 50 percent. The fact that the percentage of part-time employees in Estonia is comparatively low is not surprising, since the general income level is not high enough for people to be able to secure their livelihood through part-time work. In relative terms, there was a greater increase in the share of part-time jobs for males.

## Conclusion

Macroeconomic adjustment in Estonia during the recent crises was achieved by fierce fiscal consolidation in the form of expenditure cuts and tax increases, whereas the wage cuts both in the public and private sectors have helped to restore credibility and competitiveness, and contributed to the subsequent recovery driven by exports. As mentioned, fiscal policy as a policy tool itself has been rather limited historically. The currency board system has set restrictions for money supply and restraining inflation. Therefore, labour market flexibility has been a particularly important channel of macroeconomic adjustment.

If we look at three aspects of labour market flexibility: numerical flexibility, wage flexibility and working time flexibility, then we can see that in all three cases Estonia has seen drastic changes. Employment dropped from 73 to 60 percent, unemployment increased from four to 20 percent, nominal wages dropped in some sectors by 20 percent and the number of work hours diminished.

Perhaps such drastic changes are only possible in small open economies, where the unions have very limited power, where the government pursues a very liberal market-oriented policy and where there is no social unrest caused by the ruling policy.

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# In a Time of Crisis: Some Notes on the Italian Labour Market and Beyond

Luca Nunziata*

## Introduction

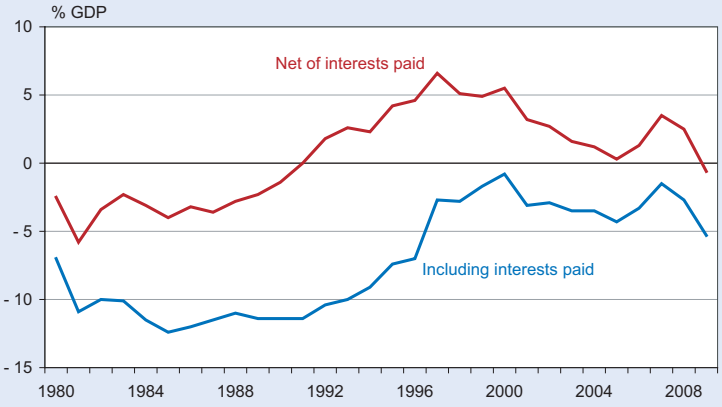
150 years after its foundation as a unitary state, Italy is living another founding moment of its history. The unfolding of the sovereign debt crisis has contributed to reveal the contradictions that still affect Italian society, while focusing attention on the status of the Italian economy and its prospects for the future. In this short article, I will concentrate on the main issues regarding contemporary Italy, the problems plaguing its economy and the dimensions of it that direly need to be reformed.

The Italian economy was characterized by a relatively long period of stagnation and possibly one of the poorest performances in terms of real GDP growth among OECD countries over the last decade. According to the OECD data depicted in Table 1, Italy grew by only four percentage points in the period 2000-2010. These numbers originate from the inability to define new economic strategies in a world where traditional competitive devaluations are no longer an option and fiscal policy is constrained by the burden of a large debt to GDP ratio.

Since the mid-1990s substantial efforts were put into reducing the debt to GDP ratio in order to meet the Maastricht treaty criteria. These efforts resulted in almost a 15 percent reduction in just eight years during the period of 1996–2004. However, the fiscal consolidation process did not advance at the same pace in subsequent years, and the emergence of the global financial crisis did the rest. After a prolonged accumulation of government surpluses net of interests paid since the early 1990s (Figure 1), the finan-

**Figure 1**

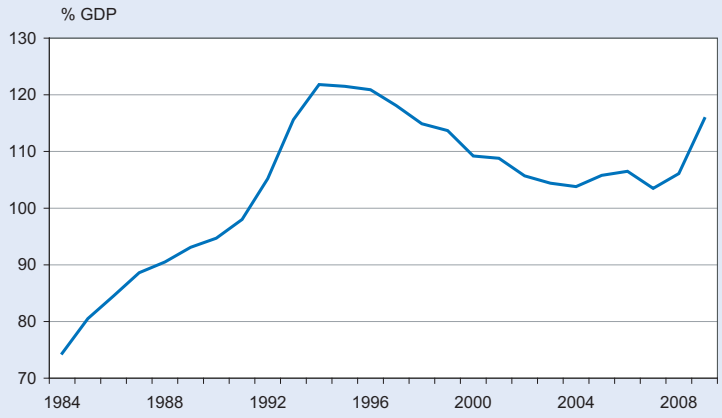
Italian Government Deficit/Surplus, 1980–2009




Source: ISTAT.

**Figure 2**

Italian Government Debt, 1984–2009




Source: ISTAT.

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cial situation worsened; and in recent years the debt to GDP ratio reversed its course, returning to the level of the late 1990s (Figure 2) once again. Since then Italy has become one of the main players on the stage of the subsequent sovereign debt crisis.

Much needs to be said about the path that brought the country and Europe to this point. However, this would go far beyond the scope of this article. Leaving our focus on contemporary Italy, the impossibility to intervene at a national level through traditional monetary policy since the introduction of the Euro and the constraints on fiscal policy have shifted the focus of policy makers and commentators to the structural factors and bad institutions that contribute to such poor economic performance. Over a decade of political ineptitude has nevertheless left its mark by preventing action in the critical areas that most urgently need to be addressed.

One aspect of the Italian disease that always attracts much attention is the labour market. This is not surprising since labour markets are at the basis of an efficient allocation of resources, they contribute to define the productivity standards of an economy and determine the welfare of a society. In addition, the crucial dynamics of social mobility and income distribution stem from the way labour markets are regulated. This article briefly discusses the fundamentals of Italian labour markets. It mainly concentrates on the actual state of labour in Italy, the open questions, the problems and possible solutions. It claims

**Table 1**

**Real GDP growth rates in selected OECD countries, between 2000 and 2010**

| Country | 2010/2000 | 2010/2005 | 2005/2000 |
|---|---|---|---|
| Australia | 1.36 | 1.14 | 1.19 |
| Austria | 1.17 | 1.07 | 1.09 |
| Belgium | 1.15 | 1.06 | 1.08 |
| Canada | 1.20 | 1.06 | 1.13 |
| Denmark | 1.06 | 0.99 | 1.06 |
| Finland | 1.19 | 1.05 | 1.14 |
| France | 1.12 | 1.03 | 1.08 |
| Germany | 1.10 | 1.06 | 1.03 |
| Greece | 1.23 | 1.01 | 1.22 |
| Ireland | 1.24 | 1.01 | 1.23 |
| Iceland | 1.27 | 1.00 | 1.27 |
| Italy | 1.04 | 0.99 | 1.05 |
| Japan | 1.07 | 1.01 | 1.07 |
| Netherlands | 1.15 | 1.07 | 1.07 |
| New Zealand | 1.29 | 1.07 | 1.21 |
| Norway | 1.16 | 1.04 | 1.11 |
| Portugal | 1.07 | 1.02 | 1.04 |
| Spain | 1.23 | 1.05 | 1.17 |
| Sweden | 1.23 | 1.08 | 1.14 |
| Switzerland | 1.18 | 1.11 | 1.07 |
| United Kingdom | 1.18 | 1.02 | 1.15 |
| United States | 1.17 | 1.04 | 1.13 |
| Euro area (17 countries) | 1.12 | 1.04 | 1.08 |
| European Union (27 countries) | 1.15 | 1.04 | 1.10 |
| China | 2.70 | 1.70 | 1.59 |
| Russia | 1.59 | 1.18 | 1.35 |

Real GDP end year/ Real GDP start year. Source: Author's calculation using OECD data.

that the reform of Italian labour market institutions is a crucial step towards improving Italy's economic prospects. However, the article also stresses that this is only one aspect, albeit crucial, of what lies ahead. Other major corrections are badly needed in order to put Italy back on track and need to be addressed with comparable urgency. In addition, the success of a reform of Italian labour market institutions is strongly tied to a parallel intervention in other crucial areas of the economy. One set of policies intrinsically needs the other.

**Labour market outcomes in Italy**

Table 2 displays the latest data on employment, unemployment and activity rates in Italy in the first quarter of 2012. The picture is of a country with a large variation in performance across the three dimensions of geography, gender and age. As regards activity, the total activity rate goes from 70 percent in the North to 52 percent in the South, with the Centre in between at 67.2 percent. The relative difference increases when we consider females only. In this case, the activity rate goes from 62.6 percent in the North to only 39.1 percent in the South. Not only is the activity rate for females on average very low if compared to other European countries, but the relative discrepancy between North and South is even larger in this respect. Similar patterns are found when we consider employment and unemployment rates across regions and gender. In addition, what is striking is the amount of young individuals aged 15 to 24 who are unemployed. The average unemploy-

**Table 2**

**Labour market indicators by sex and geographical area, 1st quarter 2012**

| Geographical area | Levels (%) | | | Absolute changes on previous year (percentage points) | | |
|---|---|---|---|---|---|---|
| | Total | Males | Females | Total | Males | Females |
| Activity rate 15-64 years | | | | | | |
| Italy | 63.6 | 73.8 | 53.4 | 1.4 | 0.7 | 2 |
| North | 70.4 | 78.2 | 62.6 | 0.9 | 0.4 | 1.5 |
| Centre | 67.2 | 76.1 | 58.4 | 1 | 0.4 | 1.6 |
| South and the Islands | 52.7 | 66.7 | 39.1 | 2.1 | 1.3 | 2.9 |
| Employment rate 15-64 years | | | | | | |
| Italy | 56.5 | 66.2 | 46.9 | -0.2 | -0.9 | 0.5 |
| North | 65 | 73 | 57 | -0.3 | -0.7 | 0.2 |
| Centre | 60.6 | 69.8 | 51.7 | -0.4 | -0.7 | -0.2 |
| South and the Islands | 43.3 | 55.4 | 31.4 | -0.1 | -1.4 | 1.1 |
| Unemployment rate 15 years or more | | | | | | |
| Italy | 10.9 | 10 | 12.2 | 2.3 | 2.1 | 2.6 |
| North | 7.6 | 6.6 | 8.9 | 1.6 | 1.4 | 1.9 |
| Centre | 9.6 | 8.1 | 11.4 | 2.1 | 1.4 | 2.9 |
| South and the Islands | 17.7 | 16.6 | 19.6 | 3.7 | 3.7 | 3.5 |
| Unemployment rate 15-24 years | | | | | | |
| Italy | 35.9 | 33.6 | 39.3 | 6.3 | 5.9 | 6.8 |
| North | 27.3 | 25.9 | 29.4 | 5.4 | 6.4 | 3.9 |
| Centre | 34.7 | 28.6 | 43.3 | 5.3 | -1.2 | 14.5 |
| South and the Islands | 48.3 | 46.1 | 51.8 | 7.7 | 8.7 | 5.8 |
| Inactivity rate 15-24 years | | | | | | |
| Italy | 36.4 | 26.2 | 46.6 | -1.4 | -0.7 | -2 |
| North | 29.6 | 21.8 | 37.4 | -0.9 | -0.4 | -1.5 |
| Centre | 32.8 | 23.9 | 41.6 | -1 | -0.4 | -1.6 |
| South and the Islands | 47.3 | 33.3 | 60.9 | -2.1 | -1.3 | -2.9 |

Source: ISTAT, Employment and Unemployment Quarterly Release, June 2012.

**Figure 3**

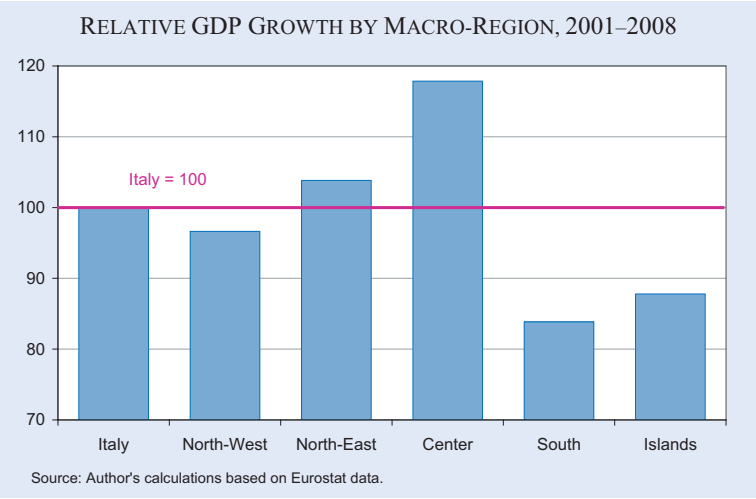



**Table 3**

**Long-term unemployed (12 months or more) as % of total unemployed**

| | 1995-1999 | 2000-2004 | 2005-2009 |
|---|---|---|---|
| European Community (12 countries) | 48.3 | 43.5 | 39.5 |
| Italy | 58 | 58.3 | 47.4 |
| France | 39.8 | 37.1 | 39.2 |
| Germany | 50.2 | 50.3 | 52.8 |
| Spain | 51.1 | 35.8 | 21.6 |
| United Kingdom | 36.7 | 24.4 | 23.1 |

Source: Eurostat.

ment rate in Italy is 10.9 percent. It totals 35.9 percent for the young (48.3 percent in the South) and a striking 51.8 percent for young females who live in the South. These figures actually underestimate the actual unemployment level because they do not account for those employees who are out of work, but are covered by the Cassa Integrazione Guadagni benefit system. In addition, the geographical patterns are persistent and the South is not catching up. If we look at Figure 3, we notice how in the period 2001–2008 the South and the Islands grew just little more than 80 percent of the country average growth rate, while the rich North-East and Centre were above average.

Another important feature of the Italian labour market is the duration of unemployment. Table 3 reports the percentage of long-term unemployed (12 months or more) over the total in a number of European countries. Almost half of unemployed Italians are out of work on a long-term basis, one of the largest shares in Europe, more than twice the percentage in the UK. However, the incidence of long term unemployment has substantially declined since the early 2000s, possibly because of the diffusion of atypical contracts.

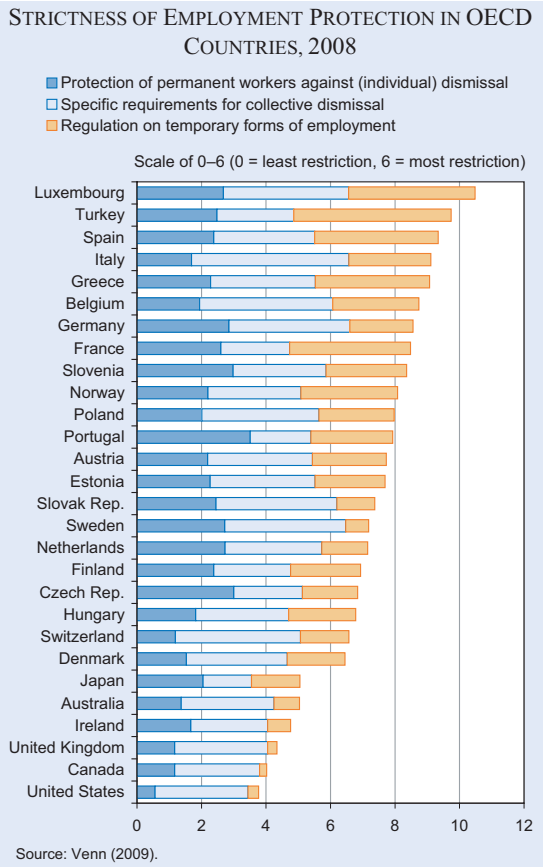
These numbers from the Labour Force Survey only partially account for the jobs that originated in the black economy. According to the recent estimates in Schneider, Buehn, and Montenegro (2010), the share of the Italian black economy amounts to around 27 percent of GDP, i.e. one of the largest among OECD countries. Not only are the jobs that originated in the hidden economy not covered by any form of social protection or regulation, but the wealth that originated through these jobs does not contribute to improve Italian public finances.

The most pressing labour-related issues that need to be addressed by Italian policy makers are therefore how to reduce geographical imbalances, increase female participation and opportunities, increase the chances of young new entrants, reduce the duration of unemployment and crack down on the black economy. In order to intervene in these areas, one first needs to identify the institutional factors that contributed to the status quo.

**Labour market institutions in Italy**

How can we explain the poor outcomes outlined above and how did policy makers respond to this? The Italian labour market is traditionally considered as one of the most rigid in the Euro area. However, the actual picture is not as clear-cut as many imagine. Figure 4 displays how Italy stands among other OECD countries as regards the latest OECD measure of the Employment Legislation (EPL) indicator. This indicator is a useful summary of what is going on, as it represents a synthesis of complex bodies of laws and regulations across countries. It is composed of three dimensions, i.e. protection for regular workers, requirements for collective dismissals and

**Figure 4**



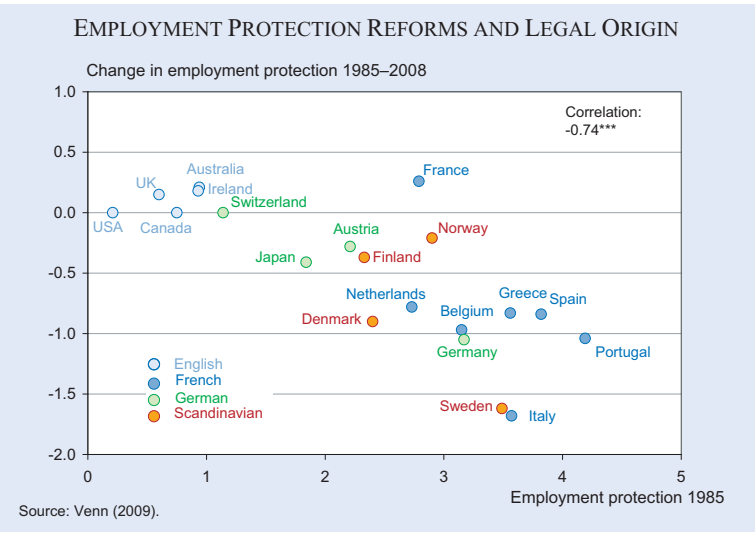

regulation of temporary workers. It increases with the rigidity of regulations. Looking at the 2008 numbers, employment protection in Italy is rigid, but not stricter than Germany. Overall, regulations are less tight than in France and Spain. Indeed, Italy was the country where the EPL indicator decreased the most between 1985 and 2008 as we can see in Figure 5. However, the reforms that took place in the 1990s and 2000s mostly intervened in the regulation of atypical contracts, rather than reassessing the regulations of permanent jobs.

As a result, the share of temporary contracts, especially among young workers, has steadily increased in recent decades and unemployment among the young has decreased (Figure 6). However, a dual labour market has emerged. As of today, some jobs are characterized by very high protection, while others, especially among the young, are sometimes locked in a precariousness trap. In these cases, the chances of having a temporary contract converted into a permanent job are small, as are the resulting training and productivity levels.

The reason why it was decided to intervene in the regulation of temporary contracts only, like in most European countries, has mostly to do with the median voter, who was largely left untouched by these policies. On the contrary, young workers, less likely to be unionized, were affected the most. This may partly explain why this strategy somehow did not face major opposition from the unions, at least initially. According to Visser (2006), around half of Italian union members are retired from the labour market. This striking figure is likely to affect the objective function of the main unions in Italy with important consequences in terms of collective bargaining dynamics and the public role of unionism in Italy. As a result, the instances mostly represented in the public debate by unions have been those of pensioners and permanent employees, rather than the young new entrants under atypical contracts and the new professions.

What are the consequences of this duality in employment protection? High EPL on permanent contracts is likely to depress productivity and flexible temporary work regulations are not going to reverse this negative effect (Bassanini, Nunziata and Venn 2009). The effects of EPL on the employment level are debated. Nevertheless, high EPL is likely to increase the duration of unemployment and reduce the speed of adjustment to negative shocks. This, in turn, contributes to the duality of the labour market

**Figure 5**



and reduces the employment opportunities of young new entrants.

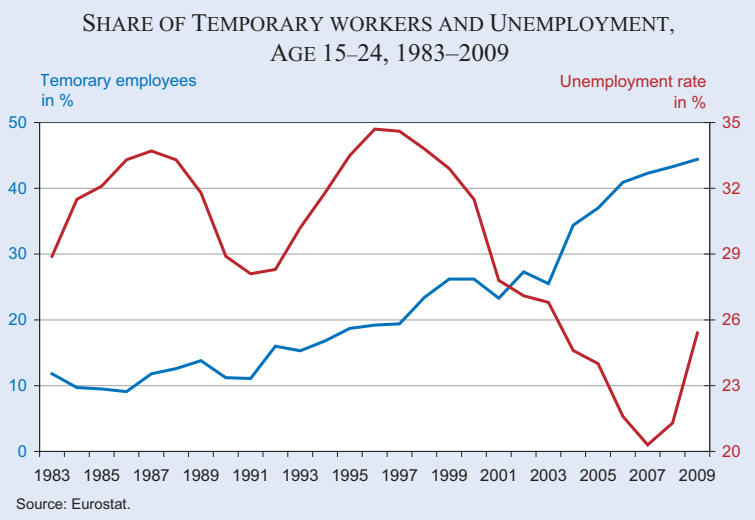
One dimension around which the regulation of individual dismissals is administered is firm size, with some EPL restrictions applying only to firms with over 15 employees. One then may wonder whether stricter EPL may prevent firms growing beyond that threshold in order to avoid EPL. Schivardi and Torrini (2008) show that this effect is limited and not likely to bind. However, as shown by Klueger and Pica (2008) and Leonardi and Pica (2010), Italian EPL decreases accessions in addition to separations and is likely to reduce insiders' wages. Jappelli and Pistaferri (2010), also suggest that the labour market reforms of the 1990s and 2000s may have contributed to an increase in earning instability in Italy, after a historical phase of declining income inequality in the 1970s and 1980s (see also Brandolini and Vecchi 2011). This is in line with the findings in Koeniger, Leonardi and Nunziata (2007) that suggest that an increase in flexibility may be associated with an increase in inequality.

As regards unemployment benefits, these are provided on the basis of a number of different arrangements. On the one hand the Liste di Mobilità (Mobility Lists) provide a hybrid system characterized by incentives to employment. On the other hand, the Cassa Integrazione Guadagni (CIG) scheme is a form of benefit provision for employees who work reduced or zero hours (with the latter being excluded by the official statistics of unemployment). The provision of the CIG can take place in different forms, some of which rely on policy-makers and unions playing an active role. It is therefore no surprise that the introduction of a universal and automatic system of unemployment benefits has not been so strongly advocated by both in the public debate. For example, in the case of Cassa Integrazione in Deroga the provision of the benefit is actually the result of an intervention by decree by the policy-maker who is likely to extract a political rent from it. A universal and automatic system may prevent the extraction of such rent.

As regards taxation, Table 4 from OECD (2012) shows the extent of the tax wedge in Italy as compared to other OECD countries. Here the tax wedge is intended in the somehow restrictive sense of the difference between labour costs and take-home pay (i.e. excluding taxes on consumption), and in the case of a single worker without children at the average wage level. Taxation on labour in Italy is at the very high level of 47.6 percent, which is only slightly lower than that of France and Germany. It is substantially higher than the tax wedge in Scandinavian countries, where the welfare state provision paid with those taxes is well known to be much more generous than in Italy. This high level of taxation is clearly distorting the incentive structure in the Italian economy with negative consequences in terms of performance (Nickell, Nunziata and Ochel, 2005)

According to the World Bank Doing Business Project (World Bank 2012), in 2012 Italy ranks 87th over 183 economies around the world in terms of ease of doing business. Compared to other European countries (the UK ranks 7th, Sweden 14th, Germany 19th, France 29th, and Spain 44th), this is an astonishingly poor performance. Along the dimensions upon which the index is constructed (ease of starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency) Italy is doing particularly badly as regards paying taxes and enforcing contracts. Complying to tax rules is much more cumbersome than the OECD average (285 hours per year versus 186) and taxation is very high (the total tax rate on

**Figure 6**



profits is 68.5 percent versus an OECD average of 42.7 percent). Contract performance is particularly inefficient. Italy is ranked 158th out of a total of 183 countries. In order to resolve a commercial dispute an average of 1210 days are required, versus the OECD average of 518. The cost is 29.9 percent of the claim (the largest part being represented by attorney cost) versus an OECD average of 19.7 percent.

**Table 4**

**Tax wedge in Italy and other OECD countries (total and components)**

| Income tax plus employee and employer social security contributions as % of labour costs, 2011[1] | | | | | |
|---|---|---|---|---|---|
| Country[2] | Total tax wedge[3] (1) | Income tax (2) | Social security contributions employee (3) | Social security contributions employer (4) | Labour costs[4] (5) |
| Belgium | 55.5 | 21.7 | 10.8 | 23.1 | 64 169 |
| Germany | 49.8 | 15.9 | 17.4 | 16.5 | 65 788 |
| Hungary | 49.4 | 13.6 | 13.6 | 22.2 | 25 960 |
| France | 49.4 | 10.0 | 9.6 | 29.7 | 58 862 |
| Austria | 48.4 | 11.9 | 14.0 | 22.6 | 59 671 |
| Italy | 47.6 | 16.1 | 7.2 | 24.3 | 48 025 |
| Sweden | 42.8 | 13.6 | 5.3 | 23.9 | 55 351 |
| Finland | 42.7 | 18.5 | 5.8 | 18.4 | 53 652 |
| Slovenia | 42.6 | 9.7 | 19.0 | 13.9 | 32 018 |
| Czech Republic | 42.5 | 8.9 | 8.2 | 25.4 | 27 963 |
| Estonia | 40.1 | 12.5 | 2.1 | 25.6 | 25 051 |
| Spain | 39.9 | 12.0 | 4.9 | 23.0 | 46 151 |
| Portugal | 39.0 | 10.9 | 8.9 | 19.2 | 34 446 |
| Slovak Republic | 38.9 | 7.5 | 10.6 | 20.8 | 23 460 |
| Denmark | 38.7 | 28.0 | 10.7 | 0.0 | 48 994 |
| Greece | 38.0 | 3.0 | 12.8 | 22.2 | 28 579 |
| Netherlands | 37.8 | 14.5 | 14.0 | 9.2 | 60 765 |
| Turkey | 37.7 | 10.7 | 12.9 | 14.2 | 25 323 |
| Norway | 37.5 | 19.0 | 6.9 | 11.6 | 57 278 |
| Luxembourg | 36.0 | 13.3 | 11.7 | 11.0 | 60 063 |
| Poland | 34.3 | 5.9 | 15.5 | 12.9 | 23 607 |
| Iceland | 34.0 | 25.6 | 0.5 | 8.0 | 44 011 |
| United Kingdom | 32.5 | 14.1 | 8.5 | 9.9 | 57 711 |
| Canada | 30.8 | 13.9 | 6.5 | 10.5 | 41 939 |
| Japan | 30.8 | 6.6 | 11.7 | 12.4 | 51 089 |
| United States | 29.5 | 15.7 | 5.2 | 8.7 | 51 255 |
| Ireland | 26.8 | 13.5 | 3.6 | 9.7 | 43 442 |
| Australia | 26.7 | 21.0 | 0.0 | 5.6 | 47 530 |
| Switzerland | 21.0 | 9.4 | 5.8 | 5.8 | 54 919 |
| Korea | 20.3 | 3.9 | 7.3 | 9.2 | 48 370 |
| Israel | 19.8 | 8.0 | 7.4 | 4.5 | 33 594 |
| Mexico | 16.2 | 4.4 | 1.2 | 10.5 | 12 337 |
| New Zealand | 15.9 | 15.9 | 0.0 | 0.0 | 32 426 |
| Chile | 7.0 | 0.0 | 7.0 | 0.0 | 14 530 |

1. Single individual without children at the income level of the average worker.
2. Countries ranked by decreasing tax wedge.
3. Due to rounding total may differ one percentage point from aggregate of columns for income tax and social security contributions.
4. Includes payroll taxes where applicable.
5. Dollars with equal purchasing power.

Source: modified version of table 0.2 in OECD (2012).

Other dimensions are possibly not fully captured by the World Bank Indicators. The implicit taxation on economic activity induced by corruption is a serious limit to the competitiveness and the efficiency of both private and public sectors (according to Transparency International, the corruption perception in Italy is one of the highest in the OECD). Organized crime constitutes a grave constraint on the economic development of Southern regions, and its ties are increasingly connected to the rest of the country.

Such a burden on business constitutes a crucial restraint on economic growth and an obvious major obstacle to any positive consequences arising from a reform of the labour market. In other words, increasing the dynamics of the Italian labour market when the economy is crushed by such constraints is simply not going to deliver the results we expect.

**A sketchbook of possible directions for reforms**

One possible direction for reforming the regulation of the Italian labour market is to shift the emphasis from job protection to the protection of the worker. This is the so-called flexicurity framework that has received much attention in the European political debate in the last few years. A flexicurity strategy would require loosening EPL on permanent contracts (especially when seniority is low) in order to reduce dualism and improve the efficiency of the allocation of productive resources, while at the same time improving the earning protection of dismissed workers by introducing an automatic system of unemployment benefit provision. In other words, the logic is to reduce the duration of unemployment spells by increasing the chance of finding a job when unemployed, increase the earning stability across labour market states, and on the job training when a job match is realized. Many authors (for example, Bentolila, Boeri and Cahuc 2010) have argued in favour of substituting the complex variety of labour contracts available in the market with a single contract characterized by a certain level of EPL increasing with seniority. This would also contribute to simplify the suffocating bureaucracy to which Italian firms and workers have to comply.

At the time of writing the Italian Parliament is debating a set of measures aimed at reforming Italian EPL. These measures are still to be finalized and therefore it is not yet possible to provide detailed comments. The overall philosophy seems to be to marginally increase the strictness of the regulations regarding temporary contracts and the flexibility of permanent contracts. However, from what we can infer at the moment we are still far from providing an overall new design of Italian labour market institutions. In addition, it is not clear whether some of the proposed measures may actually have perverse effects especially if the degree of EPL enforcement is supposed to be increasingly defined by labour court rulings.

The question then becomes whether a global reform of Italian labour market institutions is politically feasible; and whether such reform can put the country back on track. Italy is definitively in dire need of a change of pace as regards its economic performance. And policy-makers should design new rules and regulations aimed at tackling the new challenges posed by the global economy. The reform of the labour market is an important step in this direction, but it cannot be considered by any means the one and only step. There are other dimensions of the Italian economy and society that need to be changed. And one cannot provide good enough arguments in favour of a change in labour market regulations when other markets are left untouched. In addition, the political feasibility and the economic success of a reform of Italian labour market institutions is strictly tied to how policy-makers are going to intervene in other aspects of the Italian economy. The Italian productive system is now strangled by bad regulations and policies that favour rents and do not provide enough room for competitiveness and innovation.

In the past the country had many opportunities to show its ability to face tough challenges, but today more than ever Italy needs a change of paradigm. Italy needs to liberalize its markets, introduce efficiency into its public administration including the judicial system, redesign public spending and reduce taxation on productive activities, reduce its asphyxiating level of bureaucracy that constitutes a burden on all sectors of activities, eliminate its intolerable level of corruption and free resources from a convincing fight against tax evasion. The latter is not only a burden on public finances and a constraint on the basic principles of equity, but also one of the distortionary mechanisms that incapacitate the Italian economy. In order to help the South to catch-up with the rest of the country, the plague of organized crime should be definitively eliminated and the efficiency of the judicial system improved. Economic activity

needs the rule of law and certainty about a reasonable duration of trials. Last but not least, improving access to credit for young and innovative economic ventures and creating the conditions for profitable investments from abroad are fundamental steps in the direction of a more dynamic economic system.

This is a rough and incomplete agenda for the future, but the punch-line is that Italy needs to shift power from rentiers to innovators increasing efficiency, productivity and competitiveness. The reform of the labour market is part of this process. But it will never be feasible or successful if other sectors of the Italian economy and society are not equally improved. For example, the introduction of a universal system of unemployment benefits is doomed to fail if corruption, the extent of the shadow economy and tax evasion are not dealt with (Algan and Cahuc 2009). The political support for a reform of EPL on permanent contracts will never be reached if product markets are not liberalized too. More flexibility in the labour market is not of much help if the economic system as a whole is inefficient and unproductive.

Is this a story with a happy ending? We cannot be sure. We are, however, left with a sense of being at a crossroads. In one direction, we see the road of immobility and guilty conservatism, something Italy can no longer afford. On the other side, the historic opportunity to change the course of events by exploiting the great potential of a country that has stood still for too long. It is time for a new generation of policy makers, not compromised with the mistakes of the past, to take the lead and make the right choices.

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# The Impact of Education on Crime: International Evidence

Randi Hjalmarsson* And Lance Lochner **

**Introduction**

Policymakers interested in fighting crime often focus on enforcement and punishment; yet, recent research suggests that other policy mechanisms can also be effective. This review focuses on growing international evidence that suggests that policies designed to increase educational attainment and improve school quality can significantly reduce crime rates.

A few recent statistics from Europe and the United States highlight the strong connection between education and crime. In 1997, 75 percent of state and 59 percent of federal prison inmates in the US did not have a high school diploma (Harlow 2003).[1] In 2001, more than 75 percent of convicted persons in Italy had not completed high school (Buonanno and Leonida 2006), while incarceration rates among men ages 21-25 in the United Kingdom were more than eight times higher for those without an education qualification (i.e. dropouts) relative to those with a qualification (Machin, Marie and Vujic 2011). Finally, among Swedes born between 1943 and 1955, men with at least one criminal conviction had completed 0.7 years less schooling, on average, than men without a conviction; the difference for women was roughly half this size (Hjalmarsson, Holmlund and Lindquist 2011).

In this report, we begin with a brief discussion of the relationship between education and crime from an economic perspective. We then survey recent evidence on the impacts of educational attainment and school quality/choice on adult crime. This is a rapidly growing area of research with a consensus emerging that education leads to important reductions in criminal activity. Finally, we conclude with a number of policy lessons related to education and its potential role as a crime-fighting strategy.

**The economics of education and crime**

Why does education reduce crime and which types of crime are likely to be most sensitive to education policies? We offer a brief economic perspective on these questions.

Lochner (2004) emphasizes the role of education as a human capital investment that increases future legitimate work opportunities, which discourages participation in crime.[2] If human capital raises the marginal returns from work more than crime, then human capital investment and schooling should reduce crime. Thus, policies that increase schooling (or the efficiency of schooling) should reduce most types of street crime among adults; however, certain types of white collar crime (e.g. embezzlement, fraud) may increase with education if they sufficiently reward skills learned in school.

Education may also teach individuals to be more patient (Becker and Mulligan 1997). This would discourage crime, since forward-looking individuals place greater weight on any expected future punishment associated with their criminal activities. To the extent that time preferences are affected by schooling, crimes associated with long prison sentences (or other long-term consequences) should be most affected. Education may also affect preferences toward risk. If schooling makes individuals more risk averse, it should discourage crime with its greatest effects on offenses that entail considerable uncertainty in returns or punishment. Finally, schooling

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[1] Lochner and Moretti (2004) show that substantial differences in incarceration rates by education exist even after accounting for differences in age, state of birth, state of residence, and year of birth. Differences by education are also apparent in self-reported survey measures of crime in the US (Lochner 2004).

[2] This is consistent with numerous recent studies that show that higher wages reduce crime (e.g. Grogger 1998; Machin and Meghir 2004; Gould, Mustard and Weinberg 2002) and decades of research in labor economics showing that education increases wage rates (see e.g. David 1999).

may affect the set of people individuals interact with on a daily basis in school, work, or their neighborhoods. Assuming more educated people interact more with other educated people who are less inclined to engage in crime, this is likely to compound any reductions in crime associated with schooling. In most cases, mechanisms related to changes in preferences or social interactions suggest that educational attainment is likely to reduce most types of crime among adults.

**Evidence on education and crime**

We now discuss evidence on the effects of educational attainment and school quality and choice on subsequent criminal outcomes. We also review empirical studies that analyze the relationship between school attendance and contemporaneous crime.[3]

**Educational attainment and crime**

Early studies of the relationship between education and crime focused on their correlation conditional on measured individual and family characteristics using standard regression methods.[4] These studies must be interpreted with caution, since a negative cross-sectional correlation between education and crime, even after controlling for measured family background and neighborhood characteristics, does not necessarily imply that education reduces crime. Firstly, unobserved individual characteristics like patience or risk aversion are likely to directly affect both schooling and criminal decisions. Individuals who choose more schooling (even after conditioning on observable characteristics) might also choose less crime regardless of their education level, in which case regression-based estimates do not identify a causal effect. Secondly, using variation in crime and education across states or local communities may also produce biased estimates. Governments may face a choice between funding police or good public schools, which would tend to produce a spurious positive correlation between education and crime. Alternatively, unobserved characteristics of communities may directly affect the costs or benefits of both education and crime. Thirdly, reverse causality is another important concern. Individuals who plan to heavily engage in crime (e.g. because they are particularly good at it, enjoy it, or live in areas with plenty of illicit opportunities) are likely to choose to leave school at a young age (Lochner 2004). Arrests or incarceration associated with juvenile crime may also cause some youths to drop out of school early (Hjalmarsson 2008).

Recent empirical studies generally estimate the effects of average educational attainment on arrest, conviction, or incarceration rates. To address concerns with endogeneity and unobserved heterogeneity, researchers have typically exploited exogenous changes in state or national rules that affect schooling decisions, examining the effects of these policies on subsequent crime. This ensures that estimates reflect causal effects of education on crime and not simply spurious correlations.

Lochner and Moretti (2004) examine state-level male arrest rates by criminal offense and age (five-year age categories beginning at ages 20-24 through 55-59) from the FBI's Uniform Crime Reports (UCR) for the US in 1960, 1970, 1980, and 1990. This data is linked to 1960-90 decennial US Census data on educational attainment and race. The main methodological contribution of Lochner and Moretti (2004) is the use of changes in state-specific compulsory schooling laws over time as instrumental variables for schooling. Intuitively, this strategy measures the extent to which an increase in a state's compulsory schooling age leads to an immediate increase in educational attainment and reductions in subsequent crime rates for affected cohorts. Because the laws only affect schooling at low levels (mainly grades 8-12), their instrumental variable (IV) estimates reflect the impact of an additional year of high school on crime.

Lochner and Moretti (2004) find that a one-year increase in average education levels in a state reduces state-level arrest rates by 11 percent or more. These estimated effects are very similar to the predicted effects derived from multiplying the estimated increase in wages associated with an additional year of school by the estimated effects of higher wage rates on crime (Gould, Mustard and Weinberg 2002). This suggests that much of the effect of schooling on crime may come through increased wage rates and opportunity costs. Given the strong relationship between high school completion and incarceration, Lochner and Moretti (2004) also estimate specifications using the high school completion rate as a

[3] See Lochner (2011a; b) for more detailed surveys of the effects of education and human capital policies on crime.
[4] Ehrlich (1975) provides an early empirical exploration of predicted effects of education on crime from a human capital perspective. See Witte (1997) for a survey of the early empirical literature on education and crime.

measure of schooling. These estimates suggest that a ten percentage point increase in high school graduation rates would reduce arrest rates by seven to nine percent.

Lochner and Moretti (2004) also use ordinary least squares (OLS) to estimate separate effects of education for different types of crime. These results suggest similar effects across the broad categories of violent (murder, rape, robbery, and assault) and property (burglary, larceny, motor vehicle theft, and arson) crime – a one year increase in average years of schooling reduces both property and violent crime by about 11-12 percent. However, the effects vary considerably within these categories. A one-year increase in average years of schooling reduces murder and assault by almost 30 percent, motor vehicle theft by 20 percent, arson by 13 percent, and burglary and larceny by about six percent. Estimated effects on robbery are negligible, while those for rape are significantly positive. Additional specifications suggest quantitatively similar effects for a 10-20 percentage point increase in high school graduation rates.[5] Following a similar approach, Lochner (2004) estimates *positive*, though statistically insignificant, effects of schooling on arrest rates for white collar crimes (forgery and counterfeiting, fraud, and embezzlement).

Lochner and Moretti (2004) also use individual-level data on incarceration and schooling from the 1960, 1970, and 1980 US Censuses to estimate the effects of educational attainment on the probability of imprisonment separately for black and white men (ages 20-60). Their estimates control for the age of the respondent, state of birth, state of residence, cohort of birth, and state-specific year effects. Analogous to their analysis of state-level arrest rates, they use state-level changes in compulsory schooling ages as an instrument for educational attainment. That is, identification comes from the fact that in any given state and year, different age cohorts faced different compulsory schooling laws during their high school years, causing them to acquire different levels of schooling and to commit crime at different rates. Both OLS and IV estimates are very similar and suggest that, on average, an extra year of education reduces the probability of imprisonment by slightly more than 0.1 percentage point for whites and by about 0.4 percentage points for blacks. Given average incarceration rates for dropouts, this translates into a 10–15 percent reduction in incarceration rates for both white and black males associated with an extra year of completed schooling.[6] These estimated effects are comparable to those for arrest rates described earlier. OLS results suggest that completion of the twelfth grade causes the greatest drop in incarceration, while there is little effect of schooling beyond high school.

Machin et al. (2011) exploit a 1972–73 increase in the minimum schooling age (from age 15 to 16) in England and Wales to estimate the effects of schooling on criminal convictions for property and violent crimes over the period 1972–96. Using both IV and regression discontinuity methods, identification effectively comes from cohort-level changes in schooling attainment and crime for cohorts turning 15 immediately before and after the law change. Among men, they estimate that a one-year increase in average schooling levels reduces conviction rates for property crime by 20-30 percent and violent crime by roughly one-third to one-half as much, though the latter estimates are statistically insignificant. Compared to estimates for the US by Lochner and Moretti (2004), the impacts of education on property crime appear to be greater in the United Kingdom, while the effects on violent crime are weaker.

Meghir, Palme and Schnabel (2011) and Hjalmarsson, Holmlund and Lindquist (2011) use micro-data and Swedish compulsory schooling reforms to identify the causal effect of education on crime. The Swedish compulsory school reform, which primarily extended compulsory schooling from seven to nine years, differs from the US and U.K. reforms studied by Lochner and Moretti (2004) and Machin et al. (2011). The Swedish reform was implemented at different times across municipalities during the 1950s and 1960s. As such, these studies compare individuals who were exposed to two different school systems, but who are from the same birth cohort and are working in the same labor market. This isolates the partial equilibrium effects of the schooling reform on crime abstracting from any general equilibrium effects that the reform may have had on the Swedish labor market.

[5] Results for rape are surprising and not easily explained by standard economic models of crime. However, the results are consistent with some specifications in Gould et al. (2002), which suggests that local wage rates are positively correlated with local crime rates for rape.

[6] Oreopolous and Salvanes (2009) reproduce the Lochner and Moretti (2004) IV results for black males using the same estimation strategy with a slightly different specification and an expanded sample. Their estimate suggests that an additional year of completed schooling reduces incarceration rates among black men by about 20 percent.

Meghir et al. (2011) study the intergenerational effects of this reform on the crime of males directly affected by the reform and on the sons of men and women affected by the reform. They use census data for everyone born in Sweden between 1945 and 1955 and their children merged with individual register data on all convictions in Sweden between 1981 and 2008. Their estimates reveal a negative effect of the reform on both the likelihood of conviction (a five percent reduction) and the number of convictions (a reduction of 0.25 crimes for those coming from low SES backgrounds) among males directly affected by the reform. They find no effects on the probability of imprisonment. Perhaps more striking, sons whose fathers were assigned to the school reform have a 2.5 percent lower probability of being convicted. In contrast, they find that the reform has no effects on conviction rates among the sons of women assigned to the reform. They argue that these intergenerational effects probably operate through improved parenting and investments in children.

Hjalmarsson et al. (2011) use the same reform to instrument for years of schooling and a 25 percent random sample of those born between 1942 and 1955 from Sweden's Multigenerational Register merged with Swedish crime register data for 1973 to 2007. The first stage of their analysis finds that exposure to the reform significantly increases average educational attainment by 0.28 years for males and 0.16 years for females. Baseline estimates indicate that more schooling significantly reduces criminal activity for both males and females at both the extensive and intensive margins. For males, one additional year of schooling reduces the likelihood of conviction by 7.5 percent, the likelihood of incarceration by 16 percent, the number of crimes by 0.4, and the number of days sentenced to prison by six percent. For females, one additional year of schooling significantly lowers the chance of conviction by 11 percent and the number of crimes by 0.09. Significant negative effects on male convictions are observed in each of the following age categories: 18-29, 30-39, and 40-49. Finally, schooling reduces crime across offense categories. For males, an additional year of schooling decreases the likelihood of a property crime conviction by 10 percent, a violent crime conviction by 13 percent, and a conviction of other types of crime by 5 percent. The magnitudes of these estimates are similar to those for the US (Lochner and Morretti 2004). For females, the impacts are even larger in percentage terms – an additional year of schooling significantly decreases the likelihood of conviction for a property offense by 28 percent and a violent offense by 50 percent.

Buonanno and Leonida (2006) estimate the effects of educational attainment on crime rates using a panel of 20 Italian regions 1980 to 1995. Using OLS, they control for region and time fixed effects, along with region-specific quadratic time trends, and a rich set of time-varying region-specific covariates. Their estimates suggest that a ten percentage point increase in high school graduation rates would reduce property crime rates by four percent and total crime rates by about three percent (effects on property crime are statistically significant, while effects on total crime are not.) They find no evidence to suggest that university completion reduces crime.

Merlo and Wolpin (2009) take a very different approach to estimating the relationship between schooling and subsequent crime. Using individual-level panel data on American black males ages 13–22 from the NLSY, they estimate a discrete choice vector autoregression model in which individuals can choose to engage in crime, attend school, and/or work each year. These decisions are allowed to depend on unobserved individual-specific returns to each activity, as well as crime, schooling, and work choices during the previous year. Simulations that use estimates for their model suggest that, on average, attending school at age 16 reduces the probability of a black male ever committing a crime over ages 19–22 by 42 percent and the probability of an arrest over those ages by 23 percent.

A final study worth mentioning examines the effects of an explicit education subsidy on youth burglary rates in England. Between 1999 and 2002, England piloted Educational Maintenance Allowances (EMA), which provided subsidies of up to GBP 40 per week (plus bonuses for completion of coursework) for low-income 16–18 year old youths to attend school. The program was administered in 15 local areas with low schooling participation rates. During the same time period, the Reducing Burglary Initiative (RBI) funded 63 different local burglary reduction schemes as a separate pilot project. Roughly half of all EMA pilot areas were also selected for the RBI. Sabates and Feinstein (2008) use a differences-in-differences strategy to identify the effects of each pilot program, as well as the combination of the two, on burglary. Their findings suggest that the combination of both the EMA and RBI significantly reduced burglary rates by about

5.5 percent relative to 'matched' comparison areas. The effects of the EMA alone were slightly lower, but still significant.

**School quality and crime**

It is likely that school quality and the type of schools students attend also affect criminal behavior. While there are no studies that directly estimate the effects of measured school quality on crime, three recent studies on school choice and desegregation provide some useful insights.[7]

Cullen, Jacob and Levitt (2006) find that 'winning' a randomized lottery for admission to Chicago high schools significantly raises peer graduation rates by six percent and the share of peers who test above national norms by about 14 percent; however, lottery winners appear to be placed in lower tracked classes within the better schools. Interestingly, they find no evidence that lottery winners perform better on a wide range of academic measures and some evidence that they are more likely to drop out of high school. The latter may be due to a mismatch between student ability and school demands. Despite the disappointing findings regarding academic outcomes, those who won lotteries to high achievement public schools reported nearly 60 percent fewer arrests on a ninth grade student survey. These winners also reported getting into less trouble at school, and school administrative data suggests that they had lower incarceration rates during school ages.

To this end, Deming (forthcoming) examines the impacts of open enrollment lotteries (for middle and high schools) in the Charlotte-Mecklenburg, North Carolina school district on adult criminal outcomes seven years after random assignment. Given his interest in the effects of school choice on crime, he categorizes males based on their likelihood of arrest (a function of demographic characteristics, earlier math and reading test scores, and other school-related behaviors at young ages). For his entire sample of middle and high school lottery participants, 'high-risk' youth (i.e. the top quintile of predicted arrest probability) have seven times more felony arrests (seven years after random assignment) than the average student from the bottom four quintiles combined. Like Cullen et al. (2006), Deming estimates significant effects of winning a school lottery on the quality of school attended, especially among 'high-risk' youth, but no effects on achievement tests. There appears to be some effect on student enrollment during high school years, but there is no evidence that 'high-risk' lottery winners are more likely to graduate from high school. Among high school lottery winners in the high-risk category, Deming estimates a roughly 45 percent reduction in the number of adult felony arrests (cumulative as of seven years after the lottery).

Court-ordered school desegregation policies enacted since *Brown vs. Board of Education of Topeka* in 1954 dramatically altered the types of schools blacks attended in many American districts. In most cases, the resources and average student achievement of schools attended by blacks would have improved markedly. Guryan (2004) estimates that these desegregation efforts significantly increased high school graduation rates among blacks by two to three percentage points, but had no effect on white graduation rates. Weiner, Lutz and Ludwig (2009) examine whether these changes affected county-level homicide rates. Their estimates suggest that homicide deaths among blacks ages 15–19 declined by 17 percent in the first five years after court-ordered desegregation, while homicide deaths among white 15–19 year olds declined by about 23 percent. Homicide deaths among slightly older whites and blacks also declined. In looking at offenders, they find that arrest rates for homicide declined by one-third for blacks between the ages of 15–19 years, while there was no decline for young whites. They argue that much of the effect may be coming from the increased schooling among blacks.

**Contemporaneous schooling and crime**

There are three main ways in which altering youths' schooling attendance is likely to affect their contemporaneous engagement in crime. Firstly, school may have an incapacitation effect – youth cannot be in two places at once, and many criminal opportunities are more limited in school than on the streets. This effect depends, in part, on the ease with which youth can engage in crime during non-school hours. Secondly, longer periods of school attendance should increase labor market skills and improve future employment prospects. This, in turn, may make juvenile arrests and long periods of detention

[7] See Lochner (2011a; 2011b) for additional evidence on the role of early childhood and school-age interventions on crime.

more costly, reducing incentives to engage in crime while enrolled in school. Thirdly, schools bring hundreds of adolescents together for the day. It is quite possible that the social interactions from this lead to altercations and more general group-based delinquency. The incapacitation and human capital effects are likely to imply negative effects of school attendance on crime, while the social interaction effect could be positive or negative.

Three relatively recent studies shed light on these effects by estimating the impacts of different 'interventions' that directly affect youth schooling attendance. Anderson (2009) examines the effect of increasing state compulsory schooling ages (i.e. forcing some youths to stay in school), while Jacob and Lefgren (2003) and Luallen (2006) study the effect of extra days off from school due to teacher in-service days or teacher strikes (i.e. keeping all youths out of school). These interventions differ in two important respects. Firstly, increases in compulsory schooling ages typically 'require' that students stay in school at least one additional year and sometimes more, whereas teacher in-service days and strikes are of very short duration. Secondly, while teacher strikes and in-service days release all students from school, changes in compulsory schooling laws typically affect a small set of marginal students. All three potential effects of school attendance on crime are likely to be relevant to changes in compulsory schooling, while the effects of in-service days and teacher strikes are likely to be limited to incapacitation and social interactions. Social interaction effects are likely to be magnified in the latter cases due to the universal nature of the 'policies'.

Anderson (2009) estimates that increasing the compulsory schooling age from 16 to 17 or 18 years of age reduces arrests at the affected ages by nearly 10 percent, with similar impacts on both violent and property crime. By contrast, Jacob and Lefgren (2003) and Luallen (2006) estimate mixed effects of extra days off from school on crime due to teacher in-service days or strikes. Their estimates suggest that in urban areas an additional day of school reduces juvenile property crime by 15-30 percent; however, it increases violent crime by roughly 30 percent. Interestingly, Luallen (2006) finds that the impacts of an extra school day are insignificant in rural and suburban areas, suggesting that the incapacitation and social interaction effects of school attendance are particularly strong in urban areas and negligible (or offsetting) elsewhere.

**Policy lessons and conclusions**

We conclude with a discussion of important policy lessons regarding education and crime.

Firstly, increasing educational attainment and school quality can yield sizeable social benefits. Lochner and Moretti (2004) calculate that the social savings of a one percentage point increase in male US high school graduation rates (from reduced crime alone) in 1990 would have amounted to more than USD 2 billion. This represents more than USD 3,000 in annual savings per additional male graduate. In the UK, Machin et al. (2011) estimate a social savings of over 10,000 pounds per additional student qualification (similar to high school completion in the US) from reductions in property crime alone (estimated effects on violent crime in the UK are statistically insignificant.)

Deming (forthcoming) estimates that reductions in crimes leading to an arrest realized from offering better quality school options to a high-risk youth would conservatively produce USD 16,000 in social savings to victims over the next seven years. Because better schools are also likely to have reduced crimes that never lead to an arrest, total victimization savings are likely to be substantially higher. Total social savings should be still larger after factoring in savings on prisons and other crime prevention costs.

Secondly, given that the most sizeable reductions in crime appear to result from the final years of secondary school, policies that encourage high school completion would seem to be most promising in terms of their impacts on crime. Because crime rates are already quite low among high school graduates, policies that encourage post-secondary attendance or completion are likely to yield much smaller social benefits from crime reduction.

Thirdly, policies designed to encourage schooling among more crime-prone groups are likely to produce the greatest benefits from crime reduction. Deming (forthcoming) estimates that improved school choice for middle and high school students

[8] Fast Track provides group- and individual-based services to children from high-poverty and high-crime neighborhoods in the US who exhibit conduct problems in kindergarten. With the goal of preventing antisocial behavior and psychiatric disorders, the program provides services during grades one to ten focusing on three elements of development: social and cognitive skills, peer relationships, and parenting.
[9] Estimates from Machin et al. (2011) suggest that education reduces property crime more than violent crime in the UK.
[10] As Heckman, Stixrud and Urzua (2006) show, both 'cognitive' and 'non-cognitive' skills are acquired in school, are rewarded in the labor market, and affect crime.

leads to significant reductions in arrests for high-risk youth, but not for others. Consistent with this, the school-age Fast Track program appears to have reduced juvenile crime only among very high-risk children, showing little impact on even moderately high-risk children (CPPRG 2007; 2010).[8]

Fourthly, education policies can reduce property crime as well as violent crime. In both the US and Sweden, the estimated effects of educational attainment or school enrollment on property and violent offenses appear to be quite similar in percentage terms (Lochner and Moretti 2004; Anderson 2009; Hjalmarsson et al. 2011).[9] Even murder appears to be quite responsive to changes in educational attainment and school quality (Lochner and Moretti 2004, Weiner et al. 2009).

Fifthly, higher wages increase the opportunity costs of both property and violent crime. Lochner and Moretti (2004) show that the estimated effects of educational attainment on crime can be largely accounted for by the effects of schooling on wages and the effects of wages on crime. This is important since it suggests that policymakers can reduce crime simply by increasing labor market skills; they need not alter individual preferences or otherwise socialize youth.[10]

Lastly, education-based policies need not increase educational attainment to reduce crime. Studies on school choice lotteries (Cullen et al. 2006; Deming forthcoming) suggest that providing disadvantaged urban youth with better schools can substantially reduce juvenile and adult crime, even if it has little effect on traditional education outcomes.

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# The 2012 reforms of higher education finance in England

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## Introduction

This article gives a (mostly gloomy) assessment of the 2012 reforms of higher education finance in England, which are a retrograde step from the 2006 reforms of the Blair government.[1]

After introductory discussion, the second section summarises lessons from economic theory and empirical evidence, which set the scene for explanation of the Blair reforms in the third section. The fourth section assesses the 2012 proposals. The conclusion argues that the 2012 reforms are unsustainable and foreshadows the next reform.

Higher education finance in England has seen considerable change.

In 1990, the government introduced loans with fixed monthly repayments to supplement tax-financed grants that covered living costs.

Reform in 1998, following the Dearing Report (National Committee of Inquiry into Higher Education, 1997), introduced annual tuition fees of GBP 1,000 and loans with income-contingent repayments (i.e. repayments calculated as x percent of the borrower's subsequent income, collected alongside income tax) to cover living costs but not fees.

Reform in 2006 introduced variable fees of up to GBP 3,000 but, importantly, covered by a loan, so that nobody had to pay upfront charges (for assessments ex ante and ex post, see Barr 2004; 2010a).

Reforms in 2012 raise the maximum fee to GBP 9,000, make changes to the design of the student loan, withdraw most taxpayer support for teaching in the arts and humanities and the social sciences, and abolish Education Maintenance Allowances and AimHigher targeted at disadvantaged schoolchildren.

Higher education matters for the transmission of knowledge and skills, the promotion of core values and the pursuit of knowledge for its own sake. More recently, it has come to matter also for national economic competitiveness and for individual life chances. This article assesses the reforms in terms of three specific objectives: quality (higher), participation by different socioeconomic groups (wider) and size, i.e. the number of students in higher education (larger). The first two are widely accepted. The third is often overlooked. Size is relevant to the Lisbon objectives, in terms both of european competitiveness and social mobility. Implicit in these objectives are several value judgements: that higher education has intrinsic importance; that national economic performance matters; and that widening participation is important.

## Economic theory and empirical evidence

*Lessons from economic theory*[2]

*Lesson 1: Graduates should contribute to the cost of their degree*. Higher education creates social benefits above those to the individual, including the transmission of values, social and political engagement and economic growth, justifying continuing taxpayer subsidies. That these are difficult to quantify does not invalidate the argument. But graduates also receive private benefits (Blundell et al. 2005), including higher average earnings and (often overlooked) more enjoyable jobs. It is therefore both efficient and equitable that the beneficiaries should bear some of the costs. However, students are credit constrained. Efficient consumption smoothing suggests that they should bear those costs when they can afford them, as graduates. This leads directly to the second set of lessons.

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[1] Though the student loan system applies to the UK, the rest of higher education is organised separately in England, Scotland, Wales and Northern Ireland. This paper considers only the reforms in England.

[2] For fuller discussion, see Barr 2004; 2012, Ch. 12.

*Lesson 2: Well-designed student loans have core characteristics.* Loans should have income-contingent repayments. The original argument was set out by Friedman (1955; on why loans rather than a graduate tax, see Barr 2010b), who noted that borrowing to finance investment in human capital, in contrast with a home loan, offers no physical collateral. Thus lenders charge a high risk premium, and borrowers also face considerable risk, leading to sub-optimal investment in human capital. Income-contingent repayments protect borrowers from excessive risk, and collection via the tax system reduces the risk to lenders of making an unsecured loan.

Additionally, loans should be large enough to cover fees and realistic living costs, thus addressing credit constraints and assisting access by making higher education free at the point of use.

A third feature is that loans should charge an interest rate related to the government's cost of borrowing. The UK, like some other countries, charges a zero real interest rate. Since that is less than it costs the government to borrow the money, loans include a blanket interest subsidy – in present value terms not even the best-off graduates repay their loan in full. With a loan like that in the UK, with (a) income-contingent repayments and (b) forgiveness of any balance unpaid after 25 years, interest subsidies are unambiguously badly designed.

Since the argument is central to assessment of the 2012 reforms it is worth amplifying. Firstly, the subsidy is expensive. In the UK, nearly one-third of all lending to students never comes back simply because of the interest subsidy. Secondly, because of the resulting fiscal cost, loans are too small, harming access. Thirdly, the subsidies crowd out university income, putting quality at risk and, more recently, leading to a cap on student numbers, hence a shortage of university places. Finally – and counterintuitively – the subsidies are regressive. Graduates with low monthly earnings are protected by income-contingent repayments, and those with low lifetime earnings by forgiveness after 25 years. Interest subsidies do not help high-earning graduates early in their careers: with income-contingent loans, monthly repayments depend only on earnings; interest rates affect only the duration of the loan. Thus the major beneficiaries are successful professionals in mid-career, whose loan repayments are switched off earlier because of the subsidy than would otherwise be the case. Shen and Ziderman (2009) give an international perspective on the high cost and bad targeting of blanket interest subsidies

*Lesson 3: Competition is beneficial.* In most countries, higher education has been centrally planned. With the sharp increase in the range of subjects taught central planning is no longer feasible or desirable. The argument has its roots in the economics of information. Students (in contrast with school children or people with complex medical problems) are well-informed, or potentially well-informed, and hence better able than planners to make choices which conform with their interests and those of the economy. An important exception concerns people from poorer backgrounds, with implications, discussed below, for the design of policies to widen participation.

*Lesson 4: Government has an important continuing role*. The argument for competition does not negate a continuing role for government (Barr 2012, section 12.4.5). Government should provide continuing taxpayer support to higher education; ensure that there is a good loan system; adopt, encourage and mandate policies to widen participation; regulate the system, for example ensuring that there is effective quality assurance; set incentives by offering larger subsidies for subjects the government wishes to favour, and larger subsidies for some students; and redistribute within higher education.

*Evidence on the determinants of participation*

The evidence points to two central drivers of participation: credit constraints, and constraints with earlier roots (for fuller discussion, see Barr 2012, section 12.4.4).

The primary role of student loans is to address credit constraints. Though the UK has had income-contingent loans since 1998, discussion continues to conflate credit-card debt, which is unforgiving, with student loans, which are a payroll deduction (Table 1).

Constraints with earlier roots arise in several ways, largely manifesting themselves in poor school grades. In 2002, when students from poor backgrounds paid no fees, 81 percent of children from professional backgrounds in England went to university; the comparable figure for children from manual backgrounds was 15 percent (Education and Skills Select Committee, 2002, p. 19). However, about 90 percent of students with good high school gradu-

**Table 1**

**Student loan repayments effective 2012**

| Annual earnings | £21,000 | £25,000 | £30,000 | £50,000 |
|---|---|---|---|---|
| Income tax (monthly) | £215 | £282 | £365 | £824 |
| National Insurance contributions (monthly) | £134 | £174 | £224 | £361 |
| Loan repayments (monthly) | £0 | £30 | £87.50 | £217.50 |

Note: the deductions for income tax and national insurance are calculated from the tax schedules for 2012-13, see http://www.uktaxcalculators.co.uk/.
Loan repayments are calculated from the loan repayment formula (9% of income above £21,000 per year).

ation grades went to university, irrespective of their background. In other words, controlling for attainment, the socioeconomic gradient in participation largely disappears (for fuller discussion, see Chowdry et al. 2010).

Many commentators argue that 'debt aversion' harms access, but studies are frequently flawed because they fail to control for attainment, and thus wrongly attribute to the credit constraint problems that have their roots in the attainment constraint.

*The resulting strategy*

Economic theory and empirical evidence point to a strategy with three parts:

- Element 1: quality and size: universities should be financed from taxation (lesson 1) and tuition fees (lessons 1 and 3). Fees give institutions more resources and, through competition, combined with quality assurance, help to improve the efficiency with which those resources are used. However, students generally cannot afford these costs, hence:
- Element 2: loans to address credit constraints: loans with income-contingent repayments should make higher education free at the point of use (lesson 2), addressing problems of participation for well-informed students with good school attainment.
- Element 3: policies to address constraints on participation that have earlier roots, notably lack of attainment, imperfect information and low aspirations.

To achieve multiple objectives, policy needs multiple instruments. Tuition fees *combined with* policies to address credit constraints and earlier constraints on participation address all three of quality, access and size. To economists, these elements are totally familiar: higher fees move people back up their demand curve; the pro-access policies shift the demand curve of people from disadvantaged backgrounds outwards.

**The 2006 reforms**

*The strategy*

The 2006 reforms were based explicitly on the three-part strategy just outlined.[3]

*Fees.* Instead of the previous fixed tuition charge of GBP 1,000, universities could choose what fee to charge up to GBP 3,000 per year.

*Loans.* The 1998 system provided an income-contingent loan to cover living costs, but with no loan to cover fees. The 2006 reforms introduced a loan to cover fees. Loans for fees and living costs charged an interest rate equal to the rate of inflation, so the system incorporated an interest subsidy for all graduates.[4] Any loan that remains unpaid after 25 years is forgiven.

*Policies to widen participation.* The 2006 reforms restored tax-financed grants, required universities that charged GBP 3,000 to provide students from poor backgrounds with financial assistance, and established an Office for Fair Access.

Crucially, other reforms tackled inequalities earlier in the system.

- Policies targeting early childhood included Sure-Start, which provided child care and training for mothers on low incomes; a National Child Care Strategy made affordable child care more available; and nursery school and pre-school places were increased.
- Increased emphasis on basic skills included a Literacy Hour and Numeracy Hour.

[3] Barr (2004). In a comprehensive OECD study, Santiago et al. (2008) reach the same conclusion.
[4] The arguments against blanket interest subsidies were understood and accepted by government. The decision to retain interest subsidies was based on the political calculation that otherwise the proposal would be rejected. This reading was correct: in the key Parliamentary vote, at a time when the Blair government had a majority of 160, the Bill passed by 5 votes.

- Education Maintenance Allowances provided financial support for students from poor families from age 16 to encourage them to stay at school.
- AimHigher sought to improve the information of schoolchildren and to raise aspirations.

*Outcomes*

Notwithstanding widespread misgivings, the 2006 reforms had beneficial effects. Tuition fees brought in significant additional resources, and the trend in applications continued upwards. Participation improved sharply: the conclusions of a study by the Higher Education Funding Council for England (2010) are worth quoting at length.

> " … there is no indication … that changes to HE [higher education] tuition fees or student support arrangements have been associated with material reductions in the overall HE participation rate" (para. 23).
> "Substantial, sustained and materially significant participation increases for the most disadvantaged areas across the 04:05 to 09:10 cohorts are found regardless of whether educational, occupational or income disadvantage is considered. *Typically, young people from the 09:10 cohort living in the most disadvantaged areas are around +30 percent more likely to enter higher education than they were five years previously* (04:05 cohort)" (para. 28, emphasis added).
> "Trends in social statistics – such as HE participation rates – that are associated with deeply rooted differences in advantage do not usually show rapid change. A set of robustness and credibility checks give confidence that the analysis in this report is faithfully describing HE participation trends. In particular, the unusually rapid increases in HE participation recorded since the mid-2000s for young people living in disadvantaged areas *are supported by changes in the GCSE attainment* [public exams at around age 16] *of the matching cohorts of young people* …." (para. 31, emphasis added).

*Unfinished business*

Though a major advance, the 2006 reforms left unfinished business.

On fees, the stress point was the cap of GBP 3,000. Almost all universities charged the maximum, so there was little price competition, muting competitive incentives to quality.

On loans, the stress point was the costly and regressive interest subsidy. Though not evident in 2006, the major distortion was a cap on total student numbers which came about when the fiscal cost of loans collided with the economic crisis. In 2010, about 210,000 students – 30 percent of total applicants – were unable to find a university place.

The Browne Review (Independent Review of Higher Education Funding and Student Finance 2010) was set up with cross-party political support to address these issues.

**The 2012 reforms**

*The Browne review and government's response*

According to a leader in The Guardian (13 October 2010, p. 32), "The scheme devised by Lord Browne is in many ways a development of (and a vindication of) Labour's existing tuition fee system …".[5]

The Browne review was a genuine strategy designed to address the shortage of university places (Barr 2010c). However, the government cherry picked the Browne recommendations, so that the result is no longer a coherent strategy.

The government's response came in two parts, an announcement in November 2010 and a later White Paper (Department for Business Innovation and Skills (2011a; b).

*Fees.* The reforms followed Browne in abolishing taxpayer support for teaching in the arts and humanities and the social sciences. Partly as a result, the fees cap was raised to GBP 9,000.

*Loans.* The reforms introduce a real interest rate, in most cases 2.2 percent, broadly the government's long-run cost of borrowing. Nevertheless, loans continue to be expensive for two reasons discussed below: the level of income at which graduates start to repay is too high; in addition, universities had an incentive to charge GBP 9,000, since the costs of unrepaid loans falls not on the university but on taxpayers. A major purpose of the White Paper was to counter-act that effect by strengthening competition within a student numbers constraint. Because of the cost of loans, constraints on student numbers remain, with adverse effects also for quality and access.

[5] www.guardian.co.uk/commentisfree/2010/oct/13/lib-dems-university-fees-cable.

*Participation.* As discussed below, action to widen participation was negative.

The rest of this section evaluates the resulting system (for fuller discussion, see Barr 2011a; b). The good elements are the increase in the fees cap; the increase in the interest rate on loans; improving information for prospective students; and improved support for part-time study. The bad elements are the withdrawal of taxpayer support for teaching; the large increase in the loan repayment threshold, leading to the cap on student numbers; and the retrograde steps in policies to widen participation.

Progress

*Raising the fees cap.* From 2012, universities can charge up to GBP 9,000. Two questions arise: should there be a fees cap; and, if so, is it right to increase it?

The case for variable fees is that they (a) bring in additional resources and (b), in combination with robust quality assurance, strengthen competitive incentives to use those resources efficiently. The argument for some form of regulation of fees is that though universities compete in terms of teaching, some are also selling access to the student's network of peers. Thus they are selling a positional good, giving them an element of monopoly power which, it can be argued, partly explains the very high fees at some US universities.

Why, then, is it right to increase fees? The cap of GBP 3,000 was too low: it brought in additional resources but not enough, and produced no variation in price, muting competitive incentives. However, the increase is too large, First, abolishing taxpayer support for teaching in most subjects is mistaken; as argued below, positive taxpayer support could be accompanied by a lower fees cap. Secondly, change should avoid large shocks, allowing people time to adjust their expectations and plans, particularly for long-term policies like student loans and pensions.

*Raising the interest rate on student loans*. From 2012, the default real interest rate on student loans will be 2.2 percent, broadly the government's cost of borrowing over the long run, structured as follows.

- During student days: a real interest rate of three percent;
- Graduates with total income below GBP 21,000 per year: a zero real interest rate;
- Graduates with total income between GBP 21,000 and GBP 42,000 per year: 2.2 percent rising gradually to three percent;
- Graduates with incomes above GBP 42,000: three percent.

The new structure has a series of desirable characteristics. By reducing the fiscal cost of loans, it is an essential element in relaxing the constraint on student number. Moreover, graduates with annual incomes above GBP 42,000 pay slightly above the government's cost of borrowing and hence repay slightly more than they borrowed, partly covering part of the loss on low-earning graduates. The loan thus incorporates a social insurance element.[6]

*More and better information for prospective students.* The government broadly followed the Browne recommendations. Quality assurance is necessary (a) where consumers are not sufficiently well-informed to provide their own quality assurance, particularly (b) where the cost of mistaken choice is high. Thus, where consumers can understand the information, a natural approach is to make information readily available.

A bright 16-year-old will ask questions like 'will it be fun?', 'will I be well taught?' and 'will I get a good job?'. In the reforms, an important part of quality assurance is mandatory publication of information that addresses those questions, e.g. data such as evaluation by students and others of teaching quality; surveys of the student experience more broadly; and next destination statistics – a market test of employers' views of quality. The various data should have common definitions, and should be audited.

Information also has a matching purpose. Over time the demand for skills has increased, as has the diversity of skills; in addition labour-market relations have become more fluid. Given diversity of objectives, degree subjects, academic approaches, modes of study, financial constraints and labour-market constraints, information has a key role in matching students and courses.

*Improved support for part-time study.* The reforms make fees loans available to students studying at least 25 percent of full time. Widening part-time options is another element in matching, and also

[6] For fuller discussion of combining student loans with social insurance, see Barr (2010d).

assists participation by offering students a low-cost experiment. Someone who is uncertain might not take the risk of full-time study. The option to dip one's toe in the water (evening or online study) assists participation.

*Regress*

*Abolishing taxpayer support for teaching.* The reforms follow Browne in largely replacing taxpayer support for teaching (known as the T grant) by a larger loan entitlement.

The policy is mistaken because it ignores the external benefits of higher education. Without a subsidy, demand will be below its efficient level: if universities increase fees by the full amount of lost subsidy, too few students will apply; if universities do not increase fees to cover lost subsidy, the risk is an inefficient reduction in quality.

A major driver for this policy is that replacing T grant by loans reduces the budget deficit as measured by the Public Sector Borrowing Requirement (PSBR). Suppose that it is estimated that 30 percent of lending is not repaid. If total lending is GBP four billion, GBP 2.8 billion, the part that will be repaid, is excluded. Only the estimated non-repayment of GBP 1.2 billion is included in the PSBR.

Thus replacing T grant of GBP 4,000 per student by a loan has the following effect.

- A million students each attracting a T grant of GBP 4,000 increases PSBR by GBP four billion.
- A loan of GBP 4,000 for a million students increases PSBR by GBP 1.2 billion.

Thus replacing T grant by a loan entitlement reduces PSBR by GBP 2.8 billion. The main motive for replacing T grant by loans is an accounting trick. There is an apparent decline in public spending, but at the cost of distorting higher education policy.

*Raising the threshold at which loan repayments start.* The government followed the recommendation of the Browne Review that the formula for loan repayments should be changed. Under the 2006 arrangements, graduates repay nine percent of income above GBP 15,000 per year. Under the reforms, the repayment threshold is increased to GBP 21,000 and is indexed to earnings. Any loan balance that remains outstanding after 30 years will be forgiven.

The higher threshold has profound ill-effects. The change is expensive because it reduces monthly repayments by GBP 540 per year (i.e. nine percent of GBP 6,000). That is true for someone earning GBP 21,000; it is also true for someone earning GBP 121,000. With lower monthly repayments, more graduates will not repay fully within 30 years. Thus the higher threshold leads directly to the cap on student numbers.

Amplifying costs, the higher threshold creates an upward bias in fees. The cost of non-repayment by graduates of a small local university do not fall on the university but on taxpayers, giving all universities an incentive to charge higher fees. Thus the average fees that universities announced were higher than the government had assumed, an outcome that was both predictable and predicted.[7] The White Paper (Department for Business Innovation and Skills 2011b) is an attempt, within a numbers cap, to exert downward pressure on fees (for a critique, see Barr 2011b).

As well as being costly, the higher repayment threshold also has distributional effects that are not as progressive as presented. Graduates earning below GBP 21,000 (presumably the intended beneficiaries) benefit least; and anyone earning GBP 15,000 or less does not benefit at all. In addition, the resulting restriction in student numbers particularly harms students from disadvantaged backgrounds. Thus the policy is badly-targeted: the focus of political discussion was on the cohort of graduates, ignoring the policy's wider distributional effects.

The main reason for the policy was to give political cover to the Liberal Democrats. The reality is that increasing the repayment threshold (a) gives least benefit to low earners, (b) is expensive, and hence (c) leads to restriction of student numbers. Indexing the threshold to earnings locks in this regressive pattern.

*Adverse effects on participation.* Earlier discussion stressed the importance of prior attainment, and pointed to the improvements that followed the 2006 reforms. The 2012 changes are deeply retrograde.

The reforms abolish Education Maintenance Allowances and AimHigher and make cuts to

[7] Barr and Shephard 2010, para. 22; Smith and Smith (2010) illustrate the point by considering a degree with GBP 9,000 fees targeted at old-age pensioners.

SureStart – the very policies which address problems of participation at their source. Whether or not there was a case for reforming those policies, abolition is a major error, and calls into question the commitment to widening participation.

A second problem, excessive focus on grants (i.e. non-repayable support to university students), to a significant extent targets resources at the wrong part of the problem. The error is not just an exercise in academic logic chopping. In failing to distinguish credit constraints and constraints with earlier roots, policy is based on the wrong diagnosis and therefore leads to the wrong prescription. It spends money on 'free' higher education rather than on addressing the constraints on participation that arise much earlier, and thus spends money on a policy that does not work. Beyond subsidies commensurate with external benefits, when did it make sense to subsidise a superior good?

Politicians talk loudly about widening participation. Their policy actions do not support their words.

## Conclusion

In the 2006 system the interest subsidy makes loans fiscally expensive. The reforms rectify that problem, but loans continue to be fiscally expensive because of the large increase in the repayment threshold. Thus the new system creates the same problem – the cap on student numbers – for the same reason – the high cost of loans. As a result, there is substantial excess demand for places. Thus, "universities are not competing for students […]. Instead, students are competing for places".[8]

In sum, the reforms are (a) expensive, (b) restrict student numbers and (c) weaken the policies that widen participation. They will not stand the test of time. When the time comes, I am happy to volunteer an article on the 2016 White Paper, in which the resources currently spent on a fiscally incontinent loan system should be diverted to restoring some taxpayer support for teaching, adjusting the design of the loan system so as to relax the constraint on student numbers, and strengthening policies to widen participation.

[8] Economist, 4 February 2012, http://www.economist.com/node/21546003/print.

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# Embedding Futures Thinking into Environmental Policymaking

This article summarizes the main obstacles for embedding long-term thinking into environmental policymaking and presents a cross-country comparison study from the European Environment Agency, analysing institutional arrangements, barriers and success factors.

Embedding long-term environmental perspectives into policy actions poses a big challenge for institutional and governance arrangements. The main obstacles for decision-making arise from both the problem structure and the problem solving context.

Firstly, the problem structure. Environmental problems tend to be very complex, highly uncertain and long-term, which can lead to institutional resilience to change and failure to act. The high complexity and uncertainty of environmental problems, for example, may create the perceived need for more evidence on which to base policymaking and, in turn delay, or avert decisions[1]. As for environmental models and forecasts, their technical nature means that often only experts can interpret the results, whilst non-technical policymakers struggle to use them.

Secondly, the problem-solving context. Policymaking tends to be short-term focused, led by electoral and budgetary cycles. Short-termism may also be exaggerated by external advocacy pressure, lobbying for policy change with short-term aims. Furthermore, environmental policymaking is often compartmentalised, leading to several government departments defending their territory and budgets. As a result, overarching issues, such as long-term environmental issues, can suffer from the competitiveness of departments and ministerial ambitions.

An important element of environmental futures thinking in foresight exercises is the timely identification of issues and priorities that should alert and support the decision-making process[2]. Hence techniques are needed that can better engage policymakers in long-term thinking. However, whilst future thinking and foresight[3] is being increasingly used as an instrument for shaping policies (for example see European Foresight Monitoring Network), evidence suggests that the institutional and governance aspects of foresight work have received little attention to date and need to be better understood: *"Even well-constructed, thoroughly analysed scenarios are of little use and relevance if the organizational capacity to absorb them is poor - if there is no policy backing, or if the relevant characteristics of the policymaking process have not been taken into account"*.[4]

With its BLOSSOM Project[5], the European Environment Agency (EEA) started to analyse institutional arrangements, barriers and success factors for embedding long-term perspectives in environmental policymaking. The main aims of the cross-country comparison was to:

- Identify a "toolbox" of approaches to institutionalising long-term futures thinking;
- Identify which countries have introduced respective approaches and tools: finding pioneers and commonplace tools;
- Look for commonalities and differences; identifying factors for and barriers to success.

Based on interviews with practitioners in government, administration and policy advisory bodies and a review of relevant literature, twelve country case studies were compiled between 2009 and 2010 (Austria, Finland, France, Germany, Hungary, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, United Kingdom). Each country case study addressed those aspects of most relevance to foresight and environmental policymaking, notably:

- Institutional and governance arrangements for futures work and for policymaking;
- The nature of the issues addressed in futures studies;
- How the preceding arrangements interact.

The study concludes that the key success factors emerging from the cross-country analysis were policy demand and political support, parliamentary involvement, embedded (internal) institutions, broad participation, communication, timeliness and relevance, as well as the skills and capacity, and

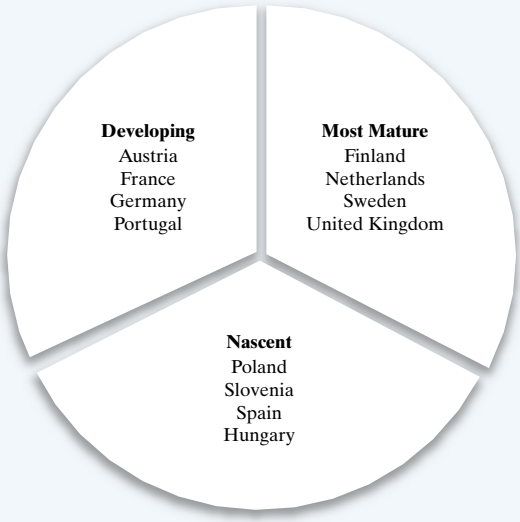
[1] European Environment Agency (2011), page 9.
[2] European Foresight Monitoring Network (2009), page 27.
[3] For a definition of foresight and futures thinking see http://cordis.europa.eu/foresight/definition.htm.
and Euro-pean Foresight Monitoring Network (2009), page 27
[4] European Environment Agency (2011), page 7.
[5] BLOSSOM = Bridging LOng-term Scenario and Strategy Analysis: Organisation and Methods.

'champions' in government. However, major barriers to success arose from a dominant focus on electoral / budgetary cycles, lack of political support, lack of staff continuity ('institutional memory'), departmental change, responsiveness of studies to policy needs and compartmentalisation[6].

Based on the case study reports, the BLOSSOM project developed a simple typology comparing the relative 'maturity' of future work in relation to environmental policy making (Figure 1).

**Figure 1**

RELATIVE MATURITY OF FUTURES ARRANGEMENTS IN 12 EU MEMBER STATES




**Most Mature:** most permanent and formalised systems, diverse networks across government, and experience of futures studies having clear influence on policy;
**Developing:** some features have been introduced and show evidence of lasting structures and influence
**Nascent:** mainly ad-hoc or fragmented arrangements, or very recent introduction of institutional structures or governance arrangements to facilitate futures thinking into policy at national government level

Source: EEA (2011), page 61.

A comprehensive summary of the cross-country comparison (including institutional settings, main actors, mechanism for foresight in environmental policymaking) and a SWOT analysis on the state of embedding futures research in environmental policymaking in each participating country can be found in the DICE database under Natural Environment – Regulatory and Other Policy Instruments.

S.R.

[6] European Environment Agency (2011), page 61.

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# "End-of-Life" Drug Policies in the UK, Australia and Germany

The ongoing rise in pharmaceutical spending in industrial countries is primarily due to higher spending on expensive new treatments for cancer and rare indications like HIV/AIDS. In the case of cancers, the gains in life expectancy come at a very high price. For the United States, Fojo and Grady (2009) estimate that for new cancer treatments the cost of surviving an additional month is $80,000. Extending the life of all 550,000 Americans that die of cancer annually by one year would, by this estimate, cost $440 billion – with none of the patients being cured.

Governments are trying to cope with this challenge of balancing entitlement to the best possible care and upholding the financial sustainability of healthcare systems.
This article summarizes a recent paper by Chalkidou, Lopert, and Gerber (2012) that describes the institutional arrangements for access to costly end-of-life treatments in the UK, Australia, and Germany.

*United Kingdom*

In the UK, drugs that satisfy the comparative clinical and cost-effectiveness requirements of the National Institute for Health and Clinical Excellence (NICE) are available free under the National Health Service (NHS). Many new end-of-life treatments, however, do not meet NICE's criterion of purchasing an additional quality adjusted life-year (QALY) at £20,000-£30,000. Instead, cost estimates for new renal cancer treatments, for instance, amount to £70,000-£170,000 per QALY. In response to public pressure for a more generous coverage policy for terminal cancer treatments, the UK government has introduced a number of exceptions to NICE's rules.

NICE's End-of-Life Guidance permits the violation of its cost-per-QALY threshold if the costly treatment is limited to a small, terminally ill patient population and if there is robust evidence for the treatment to extend life expectancy by at least three months compared to the current NHS treatment. The current Conservative Government has also put in place the Cancer Drugs Fund. The fund, financed separately from the NHS, aims to make cancer drugs available regardless of cost-effectiveness considerations. Its financial sustainability, however, is in question, as is the legitimacy of limiting exemptions from cost-effectiveness requirements to cancer treatments. Another instrument to improve access to costly end-of-life care is patient access schemes. Here the NHS reaches an agreement with pharmaceutical companies to pay for treatment only for those patients for whom the treatments work in that they increase life-expectancy so much as to meet NICE cost-effectiveness criteria.

Despite these exceptions, 30 percent of cancer drugs remain non-reimbursable due to a lack of clinical or cost-effectiveness. To address this issue, the UK government aims to add "value-based pricing" to NICE's standard criteria to determine NHS coverage: from 2014, it seeks to negotiate with manufacturers the prices for all new drugs and thereby reaches prices that better represent "broader societal benefits, disease severity, and the degree of innovation represented by the new therapy".

*Australia*

In Australia, the Pharmaceutical Benefits Advisory Committee (PBAC) undertakes comparative clinical and cost effectiveness analysis to make recommendations to the federal Pharmaceutical Benefits Scheme (PBS) on whether or not to list a new drug on the national formulary. If on the formulary a drug can be purchased at a subsidized price. The final listing decision is with the Ministry for Health and Ageing. The Ministry, however, cannot turn around a non-positive PBAC recommendation.

While cost is a factor in PBAC's analysis, there is no cost-threshold as at NICE. Instead, comparative clinical effectiveness is crucial: new, costly medicines only qualify for subsidization if they represent a clinically significant improvement in effectiveness or reduction in toxicity.

With its flexible approach to cost-effectiveness, PBAC has no particular process for assessments of end-of-life drugs. Instead, certain assessment criteria like the availability and effectiveness of alternatives, total cost projections, and the affordability at non-subsidized prices here gain particular importance. In addition, a "rule of rescue" permits recommendation of costly but effective medicines for rarely occurring serious or fatal diseases for which no other treatments exist. With PBAC's rather generous assessment standards, the rule of rescue is, however, rarely applied.

To strengthen financial sustainability, PBAC can recommend restricting indications for the use of expensive treatments – for instance, a new drug can be recommended as part of a stepped or last-line therapy when no other treatment has helped. Alternatively, subsidized access is limited to highly targeted patient groups for which there is clear evidence of comparative clinical effectiveness. Australia also employs risk sharing arrangements similar to the UK's patient access schemes. For instance, rebates apply when total annual expenditure on a treatment exceeds a cap negotiated between government and industry.

*Germany*

Under the German Statutory Health Insurance (SHI) system that covers 90 percent of the population, all effective prescription drugs become part of the benefit package, excluding so-called life-style drugs. Effectiveness assessments are carried out by the Federal Joint Committee (FJC), a self-governing board comprising of representatives of the national association of SHI funds, ambulatory care physicians, hospitals, and nonvoting patient representatives. New drugs enter the market at industry-set prices. To contain costs, the FJC can determine reference groups of drugs of similar effectiveness. SHIs then only reimburse to reference-price, with patients having to cover the difference to the listing price out-of-pocket. To inform its reference-group decisions, the FJC refers to unbinding comparative effectiveness studies undertaken by the Institute for Quality and Efficiency in Health Care (IQWiG). IQWiG has also recently been commissioned to carry out comparative cost-effectiveness analysis to provide additional guidance for SHI reimbursement policies.

An additional cost-containment instrument was introduced in early 2011. Since then, manufacturers must provide comparative effectiveness analyses as a precondition for market entry. If the new drug offers no additional benefit over existing treatments it enters a reference group. If it does, its price is negotiated with the association of SHI funds. If the parties reach no agreement within six months, a central board of arbitration determines a price with reference to international prices.

At the moment, no specific policy that regulates access to expensive end-of-life treatments is in place in Germany and uncertainty about IQWiG's future path in comparative clinical and cost-effectiveness methodology prevails. In 2005, the High Court ruled it unconstitutional to deny patients access to care that bears at least a remote chance of cure or discernible improvement in the course of the disease in the case of a life-threatening disease. Still, with the increase in pharmaceutical spending being largely driven by expensive patent-protected drugs, Germany is under pressure to develop a coherent, transparent, and ethical reimbursement policy for costly end-of-life treatments.

As value for money becomes an increasingly important concept in healthcare policies across the world, the stance towards end-of-life care remains an important field of public debate: what legitimates appropriating more funds per QALY to end-of-life care than to other, more cost-effective measures to save lives? Who should decide on such prioritizations and what would a legitimizing methodology look like? And what incentives does a shift in preference towards end-of-life treatments bear for research in the pharmaceutical industry?

S.N.

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Fojo, T. and C. Grady (2009), "How much is life worth?", *Journal of the National Cancer Institute*, 101(15), 1044-8.

# Income Inequality in OECD Countries

Income inequality is an issue that is permanently under public debate. While it is often argued that high levels of inequality are morally unjust, most economists emphasize the detrimental social effects of high income inequality. The most common way to measure how material resources are distributed across society is the Gini coefficient.

**Table 1**

**Levels and trends in the Gini Coefficient of inequality in the distribution of equivalised household disposable income mid-1980s to late-2000s**

| | Level late-2000s | Percentage point changes mid-1980s to late-2000s |
|---|---|---|
| Austria | 0,26 | 0,407 |
| Belgium | 0,27 | 0,325 |
| Czech Republic | 0,26 | 1,139 |
| Denmark | 0,25 | 0,524 |
| Estonia | 0,31 | |
| Finland | 0,26 | 1,163 |
| France | 0,29 | -0,098 |
| Germany | 0,30 | 0,719 |
| Greece | 0,32 | -0,759 |
| Hungary | 0,27 | -0,014 |
| Ireland | 0,30 | -0,651 |
| Italy | 0,34 | 0,360 |
| Luxembourg | 0,27 | 0,475 |
| Netherlands | 0,29 | 0,320 |
| Poland | 0,31 | |
| Portugal | 0,36 | -0,172 |
| Slovak Republic | 0,25 | |
| Slovenia | 0,24 | |
| Spain | 0,31 | -0,530 |
| Sweden | 0,26 | 1,095 |
| United Kingdom | 0,34 | 0,768 |
| Iceland | 0,28 | |
| Norway | 0,25 | 0,543 |
| Switzerland | 0,28 | |
| Turkey | 0,41 | -0,259 |
| Australia | 0,34 | 0,642 |
| Canada | 0,32 | 0,396 |
| Japan | 0,33 | 0,373 |
| New Zealand | 0,33 | 0,860 |
| United States | 0,38 | 0,478 |
| Empty cells: Data not available. | | |

Source: OECD, Society at a Glance 2011: OECD Social Indicators, Paris 2011, p. 67.

Technically speaking, the Gini coefficient is a statistical measure of the degree of concentration of a variable (here: income) in a distribution of its elements. In the case of income inequalities, it compares a situation whereby each individual has the same in-come ("line of perfect equality") with distribution of the individuals ranked according to their income (the Lorenz curve). The values of the Gini coefficient range between 0, where every individual has the same income, and 1, where all income is concentrated on a single individual.

Gini coefficients refer to various kinds of income. The OECD provides Gini coefficients that measure the inequality in the distribution of equivalised household disposable in-come. Disposable income is gross household income after deduction of direct taxes and payment of social security contributions. Among others, it excludes in-kind transfers and consumption taxes. To facilitate comparison of income levels between households of differing size and composition, the total gross is adjusted by the application of an equivalence scale.

The OECD (2011a) reports levels and changes in Gini coefficients of OECD countries between mid-1980s and late 2000s. As evident from Table 1, income inequality varies considerably across OECD countries. It is highest in Turkey, followed by the United States, Portugal and the United Kingdom. Slovenia, Slovakia and most Nordic countries show the lowest levels of income inequality. Overall income inequality has grown moderately across the OECD since the mid-1980s, but individual countries experienced very different trends.[1] In formerly autocratic countries like Greece, Spain, Turkey and Portugal inequality was reduced considerably. Other countries such as Finland, the Czech Republic and Sweden experienced a considerable increase in inequality.

M.D.

**References**

OECD (2011a), *Society at a Glance 2011*, Paris.

OECD (2011b), *Growing Income Inequality in OECD Countries: What Drives it and How Can Policy Tackle it?*, Paris (http://www.oecd.org/dataoecd/32/20/47723414.pdf).

[1] For a detailed discussion see OECD (2011b).

# Policies for Tackling Youth Unemployment

Young people in Europe are subject to higher rates of unemployment than older generations. They are the hardest hit by economic downturns and the first to lose their jobs as the result of a crisis. Furthermore, they face a number of challenges in making the transition from education and training to the labor market. In order to identify the chances and address the challenges facing young people in the labor market, the European Commissions surveyed youth employment policies in 33 European countries (European Commission 2011).

Policy measures that target students when they are still in school can facilitate the transition of young people from the education system into the labor market. Table 1 summarizes the European Commission's survey of school education and training policies in European countries. The table shows that there are vast differences in the countries' approaches to facilitate the transition of students to the labor market.

Labor market programs designed specifically with young people in mind are another way to tackle youth unemployment. See Table 2 for a summary of the policies in place in 2010 according to the European Commission (2011). Active labor market programs, for example, include the provision of information, advice and guidance (France, Malta, and Iceland), new types of contracts for young people (Luxembourg, Serbia), employer incentives to hire or train young people (Luxembourg, Serbia), matching young job seekers with job opportunities (Netherlands), providing young people with work experience (Slovakia, all countries that have measures to link education with work experience, see Table 1) and establishing a job guarantee for the young unemployed (see the last column in Table 1). In several countries, active labor market programs are not specifically designed for young people, but young people are targeted in the context of larger labor market programs (Czech Republic, Estonia, Lithuania, Slovenia, Macedonia, Norway, Belgium, UK). Another way to encourage unemployed youths is to condition their access to unemployment benefits to their willingness to participate in labor market programs. Furthermore, a number of countries have introduced incentives such as hiring subsidies and reductions in the non-wage costs of labor in order to encourage companies to recruit young people and/or create additional jobs for young people. Another policy approach is to promote self-employment. This can be achieved via the development of appropriate support and guidance in terms of business plans and the access to start-up capital.

The European Commission's summary of youth employment measures allows a comparison of existing labor market policies, which is an important step towards being able to evaluate different forms of labor market interventions. Such evaluations are an important base for future investments and the design of policies. Finally, it is important to bear in mind that the impact of all measures to address (youth) employment depends greatly on the stage that the economy is at, and on the ability of the labor market to create jobs.

S.F.

**Reference:**

European Commission (2011), *European Employment Observatory Review: Youth Employment Measures*, 2010, European Union.

**Table 1**

**School education and training policies (in place in 2010)**

| Country | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Austria | | | | x | | | | x |
| Belgium | x | | | | x | | | |
| Bulgaria | x | | | | | | x | |
| Cyprus | | | | | | | x | |
| Croatia | x | x | x | | | | | |
| Denmark | | | | | x | | | |
| Estonia | x | x | x | | | | | |
| Finland | x | | x | | x | x | | x |
| France | x | | | | x | | | |
| Germany | | x | | | x | x | x | |
| Greece | x | | x | x | | | | |
| Hungary | | x | x | | | | | |
| Iceland | x | | | | | x | | |
| Ireland | | | | x | x | | x | |
| Italy | x | | | | x | | | |
| Latvia | x | x | x | | | x | | |
| Lithuania | | x | x | | | | | |
| Luxembourg | x | | x | | x | | x | |
| Macedonia | x | x | | x | x | x | | |
| Malta | | | | | x | | x | |
| Netherlands | | | x | | | | | |
| Norway | | | x | | x | x | | x |
| Poland | | | | | x | x | x | |
| Portugal | x | | x | | x | | | |
| Romania | x | | x | | | | | |
| Serbia | | x | | | | | | |
| Slovenia | | | | | x | | | |
| Slovakia | | x | x | | | | | |
| Spain | x | x | x | | x | | | |
| Sweden | | | | | x | | | x |
| United Kingdom | | | | | x | | | x |

1 Measures to prevent early school leaving and to guarantee that all young people acquire basic skills
2 Measures to ensure that the vocational training system enables young people with only basic education to enter the labor market
3 Measures to promote the recognition of non-formal and informal learning
4 Measures to encourage the young unemployed to follow special training programs aimed at facilitating insertion in the labor market
5 Measures to link education with work experience
6 Measures to ensure that education systems meet the qualification demands of the labor market (reforms)
7 Measures relating to higher education and lifelong learning
8 Youth guarantees

Source: European Commission (2011).

**Table 2**

**Labor market and employment-related policies and access to benefits (in place in 2010)**

| Country | Active labor market policies | Access to social security benefits | Tax system and labor market legislation | Promoting self-employment among young people | Promoting mobility of young people |
|---|---|---|---|---|---|
| Austria | x | x | x | | |
| Belgium | x | x | x | x | x |
| Bulgaria | | | x | | |
| Croatia | x | x | x | | |
| Czech Republic | x | | x | | x |
| Estonia | x | | x | | |
| Finland | | x | x | | x |
| France | x | | | | |
| Germany | x | | | | |
| Greece | | | x | x | |
| Hungary | | | x | | |
| Iceland | x | | | | |
| Ireland | x | x | | | |
| Italy | | | x | | x |
| Latvia | x | | | x | |
| Lithuania | x | | x | x | x |
| Luxembourg | x | | x | | |
| Macedonia | x | | | | |
| Malta | x | | | | x |
| Netherlands | x | x | x | | x |
| Norway | x | | x | | |
| Portugal | | | | x | x |
| Romania | | | x | x | |
| Serbia | x | | | x | |
| Slovenia | x | | | x | |
| Slovakia | x | x | x | x | x |
| Spain | | | x | | x |
| Sweden | x | | | | |
| United Kingdom | x | x | | | |

Source: European Commission (2011).

# Unemployment Benefits: Sanctions in Case of Resignation from Previous Job

Unemployment benefit schemes provide an important safety net by guaranteeing sufficient resources in case of a job loss. This basic protection is, however, subject to certain eligibility criteria, which define if and how much unemployment assistance is paid. These range from proofs of job-search activity and availability for work during participation in ALMPs to demands in terms of occupational and geographical mobility. Furthermore, sanctions are possible for refusing job offers or resigning from a previous job.

This database report will focus on the different sanctions in case of resignation from a previous job. As shown by the Table 1, the options range from no sanction at all to no entitlement to unemployment benefits. In most countries, payments are suspended for a certain timeframe. Moreover, a few states reduce the replacement rate and/or distinguish between dismissals for a reason and voluntary quits.

Venn (2012) invented an indicator to measure the different levels of strictness of the regulation for better cross-country comparability:

(1) 0-4 weeks (including benefit reductions)
(2) 5-9 weeks
(3) 10-14 weeks
(4) More than 14 weeks
(5) Ineligible for benefits

Score of 1: The least strict regulations range between no sanctions and suspension of benefits for up to four weeks. Austria and Denmark postpone the payments of benefits for four and three weeks respectively. In Bulgaria and the Czech Republic a cut of the benefits is designed for, whereas in the Czech Republic there is no entitlement to benefits in the case of repeated termination or serious breach of duty. No sanctions are imposed in Lithuania and the Slovak Republic, whereas the Lithuania postpones any payments for three months in the case of dismissal for misconduct.

Score of 2: In most cases Belgium suspends the payments for five to nine weeks, but the regulation allows for leeway in both directions. Cyprus and Ireland suspend the payments for up to six and nine weeks respectively. In Norway suspension lasts for a minimum of eight weeks, whereas in Australia the period varies between eight and twelve weeks, depending on the cause of unemployment.

Score of 3: Voluntary unemployment is usually punished with a suspension period of about 12 weeks in Finland, Germany, Hungary and Japan, and in the latter case this suspension period only starts after the first job application has been made. Sweden differentiates between a valid cause and suspension from work due to improper conduct, which implies suspended benefits for a timeframe of nine and twelve weeks respectively. If a worker leaves a job without a just cause in the United Kingdom the sanction varies between one to twenty-six weeks. Six to twelve weeks of benefit suspension are possible for voluntary unemployment in Switzerland. Thirteen weeks is the usually suspension period in New Zealand, but a jobless person can obtain provisional benefits if s/he completes certain activities.

Score of 4: Stricter sanctions are implemented in France, Malta and Poland. The first two countries do not grant unemployment benefits for a timeframe of four (respectively six) month if employment was terminated without a good reason. Poland distinguishes between a job termination with notice (or with the agreement of the employer) or without notice, which means no payment of benefits for 90 days in the first case and 180 days in the second.

Score of 5: Jobless persons have to face the strictest sanction of no entitlement to benefits for voluntary unemployment in Estonia, Greece, Italy, Luxembourg, the Netherlands, Portugal, Romania, Slovenia, Spain, Turkey, Canada and the United States. However, most countries evaluate whether the resignation was made with good cause and pay benefits in this case. In Estonia, payments are tied to certain criteria, for example job search activity and the duration of employment prior to resignation.

Although the indicator presented tries to capture the strictness of the regulation or legislation, it can only measure the strictness of the regulation itself. It has no component to quantify how the law is implemented. This can vary significantly between different countries. Furthermore, a stricter regulation may not end up in a stricter realization of the rule, as the person in charge may shy away from imposing the intended sanctions if there is considerable scope for

action. This can especially be the case if the sanctions are perceived to be too harsh. If so, a milder punishment may be more effective as it may be carried out more thoroughly.

A.H.

**Reference:**

Venn, D. (2012), "Eligibility Criteria for Unemployment Benefits: Quantitative Indicators for OECD and EU Countries", *OECD Social, Employment and Migration Working Papers*, No. 131.

**Table 1**
**Eligibility criteria for unemployment benefits: sanctions in case of resignation from previous job, 2011**

| | Description | Score |
|---|---|---|
| Austria | If a person loses his/her job due to his own fault or terminates work voluntarily, no entitlement to benefits under the unemployment insurance scheme will apply for the first four weeks. In this case, the duration of benefit payment is not shortened, but postponed. If certain circumstances apply, the sanction can be partially or fully revoked. | 1 |
| Belgium | A worker who leaves a job without proper reason can be temporarily excluded from receiving benefits for a period of 4-52 weeks. In place of a sanction, the unemployed person can be issued with a warning in extenuating circumstances if in the two preceding years, no similar event giving rise to an exclusion occurred. The sanction can be a total loss of rights to benefits if it can be shown that the worker left the job with the deliberate intention of receiving unemployment benefits. Typical sanction 5-9 weeks. | 2 |
| Bulgaria | Unemployed persons whose employment has been terminated at their own initiative or because of their guilty behavior shall be granted the minimum amount of the unemployment benefit in cash for a period of 4 months. | 1 |
| Cyprus | Should the job loss be "voluntary" or the employee's fault, then the payment of the unemployment benefit may be postponed for up to six weeks. | 2 |
| Czech Republic | In cases where the jobseeker quits his/her job without serious reason or agreed on job termination with his employer preceding his Labour Office registration, the unemployment benefit amounts to 45% of his/her average monthly net wage for the duration of the benefit period (compared with 65% for the first two months, 50% in the following 2 months and 45% in the remaining months. The total support period is 5 months for jobseekers under 50 years, 8 months for those aged 50-55 years and 11 months for those aged over 55 years). The jobseeker is not entitled to unemployment benefits if the employer terminated his/her job due to a serious breach of duty or if the jobseeker himself repeatedly terminated a suitable job in the past 6 months. | 1 |
| Denmark | The person is quarantined for 3 weeks during which s/he would otherwise have been entitled to unemployment benefits. | 1 |
| Estonia | There is no entitlement to unemployment insurance benefit if the unemployment is voluntary i.e. the employment contract has been terminated by the agreement between an employee and an employer or at the initiative of the employee. If the unemployed person has quit a job voluntarily and is now registered as unemployed, actively looking for work and has worked or engaged in other activities for at least 180 days prior to his/her registration as unemployed, s/he will be entitled to unemployment allowance. | 5 |
| Finland | If an unemployed person quits a job without good cause, s/he usually loses entitlement to unemployment benefit for 90 days after the termination of employment. If the remaining duration of employment would have been 5 days at a maximum, unemployment benefit will be lost for 30 days. | 3 |
| France | People quitting a job without good reason will not obtain unemployment benefit before four months after the beginning of unemployment. Good reasons can include to follow a spouse who changes residence, for non-payment of salary, etc. | 4 |
| Germany | If a person has terminated employment thus causing unemployment deliberately or through negligence without good reasons, benefits will, as a general rule, be suspended for twelve weeks. In addition, the period of entitlement to unemployment benefit will be cut by the suspension time, at least by a quarter of the period of entitlement. | 3 |
| Greece | In case of resignation, the unemployed person is not entitled to unemployment benefit. | 5 |
| Hungary | A 90 calendar day waiting period exists after registration with Labour Centre. | 3 |
| Ireland | People leaving employment voluntarily may be disqualified for a period of up to nine weeks from the date of leaving their last employment. | 2 |
| Italy | People quitting a job will not obtain unemployment benefits unless they show that they were not paid, or that they suffered sexual harassment, or their tasks were changed. | 5 |

**Table continued**

| | Description | Score |
|---|---|---|
| Lithuania | An unemployed person, who is dismissed for misconduct will receive unemployment bene-fits after three months of registration at the Labour exchange instead of eight days as usual. There are no sanctions for the unemployed who resign voluntarily from their previous job. | 1 |
| Luxembourg | Unemployment benefit is only paid in cases of involuntary unemployment. No benefit will be paid if the unemployed person left their previous job without exceptional reasons. | 5 |
| Malta | In cases where unemployed persons quit their job without good cause (supported by documentation), they will be registered under Part 2 of the unemployment register for six months, which means that jobseekers will lose entitlement to benefits, as well as priority on the unemployment register. | 4 |
| Netherlands | If the employee is culpably unemployed and if the employment relationship was finished without any objection from the employer, then the employee is not entitled to unemployment benefits. | 5 |
| Poland | If ,within a period of 6 months preceding registration, the unemployed person terminated the employment contract with notice or with the agreement of the employer, the unemployed cannot obtain benefits for 90 days. If the employment contract was terminated by the employee without notice, unemployment benefit cannot be obtained for 180 days. | 4 |
| Portugal | When the employment contract ends at the employee's initiative and that end is not considered justified or with good cause, then the employee can be registered as seeking employment but cannot be a beneficiary of unemployment benefits. | 5 |
| Romania | If employment is terminated for reasons imputable to the unemployed person, s/he is not eligible to receive unemployment benefit. | 5 |
| Slovak Republic | When assessing entitlement to unemployment benefit, the reason why previous employment ended is not examined. | 1 |
| Slovenia | A person who is voluntarily unemployed will not be eligible for unemployment benefit. | 5 |
| Spain | To obtain unemployment benefits, workers must, among other requirements, have lost their jobs for involuntary reasons and will not be considered if their employment was voluntarily terminated. | 5 |
| Sweden | An applicant will be suspended from benefit for 45 benefit days (9 weeks) if s/he leaves his or her work without valid cause or for 60 benefit days (12 weeks) if s/he is suspended from work due to improper conduct. | 3 |
| United Kingdom | A variable sanction of 1-26 weeks depending on the circumstances of the case will apply when a jobseeker contributes to his/her own unemployment by leaving a job voluntarily without just cause. "Just cause" involves balancing the interest of the jobseeker with those of the wider community. | 3 |
| Norway | If a person quits a job without good cause, the jobseeker will be subject to a waiting period of minimum 8 weeks before s/he receives benefits. | 2 |
| Switzerland | If the unemployed left a suitable job without being sure of having a new job, they are subject to a benefit suspension of 31-60 benefit days (6-12 weeks). | 2.5 |
| Turkey | The unemployed person will not be eligible for unemployment benefit. | 5 |
| Australia | If the person became unemployed due to a voluntary act or became unemployed because of misconduct, an unemployment non-payment period applies. This means that a payment is not payable to the person for 8 weeks (or 12 weeks for a person who leaves a job after receiving relocation assistance). | 2 |
| Canada | A disqualification from employment insurance benefits is imposed when a claimant fails to prove that leaving their employment was the only reasonable alternative available to them under the circumstances. A disqualification for voluntarily leaving employment without just cause is indefinite and applies to all weeks of the benefit period for which regular benefits are requested. | 5 |
| Japan | A person quitting a job will not obtain unemployment benefit before 3 months after finishing the waiting period (a total of seven days counting from the day of first job application). | 3 |
| New Zealand | A person who quits a job voluntarily is not entitled to a benefit for 13 weeks from the date his or her employment ceased. A person subject to a 13 week non-entitlement period can complete certain activities for a continuous period of 6 weeks (or until then end of the 13 week non-entitlement period, whichever is the earlier) in order to get a provisional benefit. Approved activities include full-time employment and participation in an employment skills programme or employment-related training. | 3 |
| United States | The reason for the separation from employment is examined. In general, individuals will be disqualified from receiving unemployment insurance benefits if they voluntarily quit their jobs without good cause attributable to the work. The states differ, however, in their approaches to defining what constitutes good cause. Individuals can purge their disqualifications for voluntarily quitting their employment, typically by returning to work or serving a period of disqualification. The specific sanctions vary from state to state. In the seven largest states, disqualification lasts until the unemployed finds a new job. | 5 |

Source: Venn (2012).

# Progress in the Implementation of Basel III

During the financial crisis banks' capital buffers turned out to be insufficient to cover their losses from credit defaults, trading and off-balance sheet exposure. The loss of confidence in banks' solvency and li-quidity led to the collapse of several banking institutions, with severe consequences for the real economy.

In response to the lessons learned from the financial crisis, the Basel Committee on Banking Supervision, a body of representatives of bank supervisory institutions and central banks from 27 countries, has set up new guidelines for banking regulation and supervision referred to as Basel III (See BIS, 2011a).

Basel III primarily aims to increase the quality and the quantity of banks' capital base. Another goal is the improvement of transparency since the opaqueness of bank operations made it difficult for investors to assess the strength of an institution's capital base, as well as its risk exposure. In addition, the risk coverage of the capital framework is enhanced by the Basel III rules. The Basel Committee also introduces a leverage ratio and features to take into account the procyclicality of the capital framework. Finally, the regulatory rules address the interconnectedness between institutions, which was an aggravating factor of the financial crisis.

Since the agreements made among the members of the Basel Committee are not legally binding per se, the transfer of the Basel III guidelines into binding law at the national level is fundamental to strengthen the global banking system. For this reason, the Bank for International Settlements (BIS) has published a report on the implementation of Basel III in the 27 countries that seconded representatives to the Basel Committee (BIS, 2011b).

The progress as of September 2011 is summarised in Table 1. It focuses on the implementation of rules concerning capital requirements, while the progress of bringing liquidity ratios and the leverage ratio into force is beyond the scope of this report.

For the purpose of comparability, four levels of implementation of the Basel III regulations are defined. Level 1 indicates that not even a "draft law, regulation or other official document" is published in this country. At Level 2 a "draft law, regulation or other official document" is publicly available. This is a typical stage of implementation at which the regulations are subject to public or legislative discourse. Cases in which the regulatory framework is "finalised and approved" but not yet applicable to banks are classified as Level 3. Finally, Level 4 is assigned to countries in which the legal and regulatory framework is established and already applies to banks.

The Basel Committee agreed on a phase-in schedule for the implementation of Basel III. Table 2 shows that the first elements of the guidelines are only to be implemented as of 1 January 2013. The schedule aims to reach full scale applicability of Basel III as of 1 January 2019. Most capital requirements are supposed to be implemented at lower levels initially, and then gradually increased to the target levels. The Minimum Tier 1 Capital, for example, is planned to be at least 4.5 per cent as of 1 January 2013 and rise to 6.0 per cent by 1 January 2019. Only the Minimum Total Capital has to be set at 8 per cent immediately as of 1 January 2013.

As countries have time until January 2013 to bring the Basel III guidelines into force, it is not surprising that the overall picture in Table 1 shows that the implementation into national law is still at an early stage. No country has yet reached Level 4 of full implementation and application of the regulations.

Saudi Arabia is the leading country and has already provided banks with the final regulations, although they are not applicable yet. For member states of the European Union (EU), the European Commission published a proposal on 20 July 2011, which leads all EU members to be classified at Level 2.

For Japan, the final version of the regulation was scheduled to be published at the end of March 2012. In September 2011, however, Japan was still at Level 1 with public consultations yet to be held. The United States planned consultations during 2011, but the BIS (2011b) points out that an implementation of Basel III has to be aligned with the regulatory framework imposed by the Dodd-Frank Act.

China is also classified as a Level 2 country. When the BIS report was published in September 2011, the Chinese regulation was expected to be established in

November 2011 and applicable as of the start of 2012. This goal has not been met and a revised implementation schedule is awaited. It is therefore worth following the revisions of the expected status of implementation over the coming months.

M.W.

## References

BIS – Bank for International Settlements (2011a), "Basel III: A global regulatory framework for more resilient banks and banking systems", revised version June 2011, http://www.bis.org/publ/bcbs189.pdf .

BIS – Bank for International Settlements (2011b), "Progress report on Basel III implementation", http://www.bis.org/publ/bcbs203.pdf .

**Table 1**

**Status of Basel III adoption (as of end September 2011)**

| Country | Basel III | Next steps-implementation plans |
|---|---|---|
| Argentina | 1 | On-going work to draft preliminary documents. |
| Australia | 1 | Discussion paper (not draft regulation) issued which describes the key policy elements that will be included in the draft Prudential Standards - Consultation until 02/12/2011 - Draft Prudential Standards to be issued 02/2012. |
| Belgium | 2 | (Follow EU process - EU proposal published on 20 July 2011) |
| Brazil | 1 | Draft regulation expected in Q4 2011 - Road map for Basel III implantation published in February 2011. |
| Canada | 1 | Draft regulation expected in May 2012 and final guidance before the end of 2012 for implementation in Q1 2013. OSFI has issued a number of public communications concerning the implementation of Basel III. |
| China | 2 | Regulation expected in November 2011 - Application expected at the start of 2012. |
| France | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Germany | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Hong Kong | 1 | Formal consultation on a draft Banking (Amendment) Bill planned in Q4 2011 (legislative process). In parallel, industry consultation planned in Q4 2011 on HKMA policy proposals on implementation of the various requirements under Basel III. |
| India | 1 | Draft regulation to be released for consultation within next few months. |
| Indonesia | 1 | Draft regulation to be released for consultation with industry in Q1 2012. |
| Italy | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Japan | 1 | Public consultation planned in early 2012 - Publication of final rules text by the end of March 2012 - Implementation of final rules (end of March 2013 - In Japan, the fiscal year for banks starts in April and ends in March). |
| Korea | 1 | Draft regulation to be published in the first half of 2012. |
| Luxembourg | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Mexico | 1 | Consultation to end in the fourth quarter this year. Final rule expected at the end of 2011 for an application during 2012. |
| The Netherlands | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Russia | 1 | Draft regulations under development. |
| Saudi Arabia | 3 | Final regulation issued to banks. |
| Singapore | 1 | Announcement made on 28 Jun 2011 on Basel III minimum capital requirements, capital con-servation buffer and transition arrangements - Draft rules to be published for consultation in Q4 2011. |
| South Africa | 1 | Draft amendments to legislation expected at the end of Q1 2012 for consultation. |
| Spain | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Sweden | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| Switzerland | 1 | Draft regulation on Basel III to be published for public consultation on 17 October 2011 - Final SIFI regulation (level: Banking Act) adopted by parliament on 30 September 2011 - Draft SIFI regulation (level: accompanying ordinances) to be published in Q4 2011. |
| Turkey | 1 | Draft regulation expected to be published in mid-2012. |
| United Kingdom | (2) | (Follow EU process - EU proposal published on 20 July 2011) |
| United States | 1 | Draft regulation for consultation planned during 2011. Basel 2.5 and Basel III rulemakings in the United States must be coordinated with applicable work on implementation of the Dodd-Frank regulatory reform legislation. |
| European Union | 2 | Proposal (directive and regulation) published by the European Commission on 20 July 2011. |

Source: BIS (2011b).

**Table 2**

**Phase-in arrangements** (bold indicates transition periods-all dates are as of 1 January)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | As of Jan. 2019 |
|---|---|---|---|---|---|---|---|---|---|
| Leverage ratio | Supervisory monitoring | | Parallel run 1 Jan 2013-1 Jan 2017 disclosure starts 1 Jan 2015 | | | | Migration to Pillar 1 | | |
| Minimum common Equity capital ratio | | | **3.5%** | **4.0%** | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% |
| Capital conservation buffer | | | | | | **0.625%** | **1.25%** | **1.875%** | 2.50% |
| Minimum common equity plus capital conservation buffer | | | **3.5%** | **4.0%** | **4.5%** | **5.125%** | **5.75%** | **6.375%** | 7.0% |
| Phase-in of deductions from CET1 (including amounts exceeding the limit of DTAs, MSRs and financials) | | | | **20%** | **40%** | **60%** | **80%** | 100% | 100% |
| Minimum tier 1 capital | | | **4.5%** | **5.5%** | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| Minimum total capital | | | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% |
| Minimum total capital plus conservation buffer | | | 8.0% | 8.0% | 8.0% | **8.625%** | **9.25%** | **9.875%** | 10.5% |
| Capital Instruments that no longer qualify as non-core tier 1 capital or tier 2 capital | | | Phased out over 10 year horizon beginning 2013 | | | | | | |
| Liquidity coverage ratio | Observation period begins | | | | Introduce minimum standard | | | | |
| Net stable funding ratio | Observation period begins | | | | | | | Introduce minimum standard | |

Source: BIS (2011a).

## New at DICE Database

**Recent entries to the DICE Database**

In the second quarter of 2012 the DICE Database received around 200 entries, consisting partly of updates of existing content and partly of new topics. The institutional fields of "Natural Environment", "Transport" and "Other Topics" were also restructured to enhance usability.

The new or updated topics include:

- Antitrust Laws
- Business Regulations
- Learning Environment and Organisation of Schools
- Labour Market and Educational Attainment
- Taxation on Labour and Wage Subsidies
- Regulations in the Natural Environment Sector
- Health Resources and Expenditures
- Renewable Energy
- Energy Taxation

## Forthcoming Conferences

**CESifo Area Conference on Economics of Education**

31 August–01 September 2012, in Munich

The conference aims at bringing together members of the CESifo Network to present and discuss their ongoing research within the broad domain of the Economics of Education.

Scientific organisers: Eric A. Hanushek , Ludger Woessmann

**Ifo/CESifo & Bundesbank Conference on The Banking Sector and the State**

14–15 September 2012, in Munich

This conference is jointly organised by the Department of International Institutional Comparisons of the Ifo Institute, CESifo and the Deutsche Bundesbank. As recent years have shown, there exist manifold linkages between the banking sector and the state. The conference is intended to address these links by discussing the following topics:
The role of institutions and interlinkages before and during financial crises, bank liquidity and systemic stability: the macroprudential perspective, "too big to fail": bailouts and exit strategies and the economics of "bad banks", and the political economy of public banks.

Scientific organisers: Christa Hainz , Florian Buck

**CESifo Economic Studies and UCLS Conference on Families, Children and Human Capital Formation**

19–20 October, in Munich

Among the issues to be covered include the causes and (short- and long-run) consquences of child health, early-life interventions and events, education and familiy policies and divorce (including the role of the family more generally). The keynote lectures will be delivered by Anna Aizer (Brown University) and Kevin Milligan.

Scientific organisers: Matz Dahlberg, Eva Maria Mörk and Anna Sjögren

## New Books on Institutions

**Policing: politics, culture and control**
Tim Newburn and Jill Peay,
Hart Publishing, Oxford 2012

**A Europe Made of Money:**
**the emergence of the European monetary system**
Emmanuel Mourlon-Druol,
Cornell University Press 2012

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The information of the database comes mainly in the form of tables – with countries as the first column – but DICE contains also several graphs and short reports. In most tables, all 27 EU and some important non-EU countries are covered.

DICE consists primarily of information which is – in principle – also available elsewhere but often not easily attainable. We provide a very convenient access for the user, the presentation is systematic and the main focus is truly on institutions, regulations and economic policy conduct. Some tables are based on empirical institutional research by Ifo and CESifo colleagues as well as the DICE staff.

DICE is a free access database.

Critical remarks and recommendations are always welcome.
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