The impact of the economic crisis on EU labour markets: A comparative perspective

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Abstract. Using a “crisis management index” to rank the combined GDP and labour market performances of the EU’s 27 Member States, the author considers why some countries performed better than others in managing the economic crisis over the period 2007–11. Based on empirical correlations and regression analysis, he concludes that the best performers share a coordinated market economy model: they feature a mix of economic policies and social institutions – including coordination mechanisms and tighter financial regulation – which helped to stabilize their levels of consumption and aggregate demand. Moreover, they do not have flexible labour markets and thus managed to maintain stable employment levels.

The crisis which started in the United States’ financial sector in 2007 spread rapidly across the global economy, affecting almost all sectors and labour markets (Posner, 2009; United Nations, 2009; OECD, 2010) and causing mass unemployment in the United States and in Europe (Krugman, 2008; Wolff, 2010). Many Member States of the European Union (EU) have yet to recover from the average GDP contraction of −4.2 per cent they suffered in 2009. Their GDP has since stagnated, yet their unemployment levels have not declined (Fitoussi and Stiglitz, 2009; Barba and Pivetti, 2009; Fitoussi and Saraceno, 2010). This is compounded by other problems, such as low levels of consumption and private investment, a bank liquidity squeeze, lack of trust

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and negative expectations in the financial markets and between banks and investors, and high public deficits and debts.

EU labour markets have been variously affected by the crisis, albeit without strictly reflecting country performances on GDP. In some countries where social institutions and trade unions are stronger, unemployment did not increase dramatically and the social costs of the crisis have been less severe. This applies to Poland and Malta, which actually experienced higher GDP growth between 2007 and 2011, but also to Austria, Germany and Luxembourg, despite only modest increases in their GDP over this period. Not surprisingly, in countries where labour flexibility is very high, unemployment increased dramatically. Even in Denmark, Finland and Sweden, which have adopted the so-called flexicurity model in the past decade, employment decreased and unemployment reached historically high levels (around 7 per cent). However, the most dramatic unemployment and employment figures were recorded in those countries that pursued a model based on flexibility alone, such as Estonia, Ireland, Latvia, Lithuania, Spain and the United Kingdom (see figure 1). This variegated picture reflects different employment elasticities relative to GDP performance. The elasticity is negative and comparatively higher in Estonia, Ireland, Lithuania, Portugal, Spain and the United Kingdom, where GDP and employment both declined. These countries are followed by Bulgaria, Cyprus, the Czech Republic, Finland, France, the Netherlands, Slovakia, Slovenia and Sweden, where employment declined while GDP did not. Austria, Poland, Luxembourg and Malta are generally the best performing countries (together with Germany): these four countries experienced relatively higher GDP growth than employment growth. Germany, however, is a special case: it achieved employment growth that was relatively higher than its GDP growth. This highlights the importance of the labour nexus in Germany and the strategic role of trade unions in its industrial relations.

Of the EU’s 27 Member States, Poland is the only one that did not experience a single year of recession during the critical period 2007–11. Eight countries – Estonia, France, Italy, Portugal, Romania, Spain, Sweden and the United Kingdom – suffered a so-called double dip, with two years of recession within that period. Greece, Ireland and Latvia experienced “multiple dips”, while the rest of the EU countries had at least one year of GDP contraction (in 2009). The worst situations in terms of years of recession and the extent of contraction can be observed in the following groups of countries:

- the Baltic countries (Estonia, Latvia and Lithuania), which have small and open economies strongly dependent on the outside and running high current account deficits;
- the Anglo-Saxon countries (Ireland and the United Kingdom), which have competitive capitalist economies featuring financial exposure, very flexible labour markets, inequality and lower public expenditure on social policies;
- the southern European countries (Greece, Italy, Portugal and Spain), which combine features of the two groups above.
Denmark, Finland and Sweden were also badly affected by the crisis, most probably because their flexible labour markets allowed firms to fire with relative ease during recessions, thereby exacerbating the employment effects of the crisis. However, their stronger initial position in terms of GDP, active and passive labour market policies and welfare helped contain the social and human costs. These factors also positioned these countries better for a faster recovery.

In the southern European countries, the economic crisis was generally deepened by structural problems such as low productivity, scarce innovation, exposure to the housing sector and a higher level of public debt. Moreover, poor labour market policies, wider inequality and the past decade’s extensive labour market flexibilization also reduced domestic consumption capacity in these four countries, making aggregate demand more unstable than in other EU countries, with deflationary pressures further deepening the crisis.

Against this background, this article considers both the labour market and the GDP performances of the EU countries in order to rank them on a Crisis Management Index (CMI) and thus identify those countries which performed the best during the crisis (the top seven countries in the ranking are Austria, Poland, Luxembourg, Malta, Germany, Netherlands and Belgium) and those which performed the worst (the bottom seven countries in the ranking...
are Spain, Latvia, Ireland, Lithuania, Estonia, Greece and Portugal). This division into two groups helps to understand why the countries that performed better did so because it clearly reveals the main features of the best performers and the main features of the worst performers.

The remainder of the article is organized into three sections. The first introduces the CMI and, based on a set of ten hypotheses, examines the correlations between selected variables (e.g. employment protection, financialization, trade union density) and the CMI scores of the top seven and bottom seven performers during the crisis. The second section tests a model explaining the CMI ranking, and the third section concludes.

The Crisis Management Index: Measuring the impact of the crisis

In order to evaluate the depth of the crisis comparatively across countries, I have designed an index, the CMI, which allows for a simultaneous assessment of country performance on GDP (recession and recovery) and on the labour market (employment, unemployment and labour productivity). The CMI thus avoids evaluation biases and distortions in assessing the performance of countries that may have experienced, say, little recession but very bad unemployment or declining employment. The United States is a case in point: despite a relatively shallow recession compared to that experienced in the EU in terms of GDP contraction in 2007–11, its labour market performance was much worse (Tridico, 2011).

The CMI scores are assigned according to the dynamics of country performances on GDP, employment, unemployment and employment elasticity effects over the period 2007–11. Since the first three variables capture related aggregate effects, I use only one of them, unemployment, which I combine with the elasticity variable to give CMI=U+g/n (see table 1). This also avoids collinearity in the construction of the index.

Theoretically speaking, the use of such an index is rather novel. However, its construction is based on a strong empirical intuition and on a comparison that applies the same method across all 27 EU countries. While the CMI does not aim to provide a general theoretical framework of analysis for all countries of the world, it thus allows for consistent comparison between the EU’s 27 Member States and, consequently, for a country ranking based on coherent analysis of each country situation.

The CMI scores range from a maximum of 0.43 for Austria to a minimum of −22.64 for Spain (last column of table 1). The top seven CMI performers are Austria, Luxembourg, Germany, Malta, Poland, the Netherlands and Belgium,

1 This group could have been expanded to include most of the other EU countries with very poor CMI scores in 2007–11 (Bulgaria, Hungary, Italy, the United Kingdom, etc.), but since I consider only seven countries at the top of the ranking, I consider only seven countries at the bottom, for consistency.
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while the bottom seven are Spain, Greece, Latvia, Lithuania, Ireland, Estonia, and Portugal, with values ranging from −22.64 to −12.45. Figure 2 shows the CMI scores and ranking of all 27 countries.

What leads these countries to perform so differently? Why are the worst performing countries performing so poorly? What contributed to the better performance of the top seven countries – which, by the way, do not include the Nordic countries? In order to answer these questions, I have analysed
correlations with selected variables and developed a model which estimates the CMI itself, based on the following hypotheses.

First, labour flexibility worsened unemployment and employment levels during the crisis, since countries with greater flexibility displayed higher elasticity of employment reduction relative to GDP contraction. Second, inequality is particularly detrimental during the crisis because it lowers income opportunities for the middle class, thereby weakening consumption and leading to unstable aggregate demand, with further negative consequences for GDP performance. Third, exposure to foreign banks increases financial instability because foreign capital is the first to exit during a crisis, leaving the country in danger of a lack of liquidity, lack of investment and other negative consequences for GDP. Fourth, the greater the weight of the housing sector in the economy, the deeper the impact of the crisis on GDP, since this sector and, by extension, the construction industry were the first to be hit by the financial crisis, with dramatic consequences for employment given the labour-intensive nature of construction, as witnessed in Spain. Fifth, active labour market policies are very important for GDP recovery since job training and education can help workers to transition to other sectors of the economy, thereby improving employment levels. Sixth, trade unions
are essential social institutions to cope with the panic and lack of trust that can emerge during a crisis: a strong trade union which manages to maintain higher levels of employment, at the expense of profits for firms, will contribute, at the macro level, to reducing the negative impact of the crisis on consumption, aggregate demand and GDP that would otherwise ensue from the tendency of firms to resort to mass redundancies, triggering deflationary pressures and a recessionary spiral. Seventh, passive policies are essential to introduce automatic stabilizers, which help to avoid a collapse in consumption, a reduction in the aggregate demand and further GDP decline. Eighth, a high level of credit in the system is a bad symptom, particularly if the level of savings is very low, as was the case in the United States, for example: when the bubble bursts, the negative consequences for the financial sector and the banking system can be disastrous. Ninth, in the long run, a low level of savings is detrimental to the sustainability of the investment needed to drive economic growth. And tenth, financialization of the economy may negatively affect growth in the long run: a finance-led growth regime may be able to generate short- to medium-term growth thanks to credit for consumption and financial investments (as happened in the United States in the 20 years to 2007), but in the long run it may cause excess production, instability of aggregate demand and deflationary pressures for want of savings and investment in the real economy.

While the dependent variable in my model is the CMI, the independent variables are derived from the ten hypotheses outlined above. At this stage in the analysis, however, the variables considered are:

- **inequality**, measured by the Gini coefficient in 2007;
- **employment protection legislation**, i.e. the OECD’s EPL indicator for 2008, which measures the level of worker protection offered by national legislation with respect to regular employment, temporary employment and collective dismissal, and, conversely, the level of labour flexibility, i.e. employers’ freedom to fire and hire workers at will (OECD, 2004, ch. 2);
- **financialization**, which measures the value of stock market capitalization as a percentage of GDP;
- **active and passive labour market policies**, measured as the percentage of GDP spent on labour market policies in 2008;
- **savings**, i.e. the level of savings in 2008;
- **trade union density**, which measures the percentage of employees who are union members, averaged over 2006–10.

All of these variables are correlated with the CMI and appear to explain why the bottom seven countries had the worst performance and why the top seven countries achieved the best performance. Figure 3 clearly shows that

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2 Market capitalization is the share price multiplied by the number of shares outstanding and is based on listed domestic companies, i.e. domestically incorporated companies listed on the country’s stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles.
the top seven countries – i.e. those with the highest CMI scores – have the lowest inequality levels, while the bottom seven countries are in the opposite corner, with the highest inequality levels. A similar pattern can be observed in the relationship between the CMI and EPL. The average indicator decreased consistently over the preceding two decades, reflecting more labour flexibility overall (Tridico, 2009; Leon and Realfonzo, 2008; Nickell, 1997). As shown in figure 4, however, the top seven countries, with the highest CMI scores, are those with the highest EPL levels (i.e. lower labour flexibility), while the bottom seven countries are those with the lowest EPL/highest labour flexibility.

Interestingly enough, the correlation scatter between CMI and the level of financialization of the economy just before the crisis in 2006–07 shows similar results, with the bottom seven countries having the highest levels of financializa-
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Not surprisingly, the only exception among the top seven countries – six of which have the lowest levels of financialization – is Luxembourg.

As shown in figure 6, active and passive labour market policies display a pattern that is consistent with the hypothesis on their effects. Though Poland appears to be an exception (with relatively little spending on labour market policies), this is not entirely unexpected since the hypothesis was that labour market policies would help countries recover from crisis, and Poland did not experience any recession during the period considered so it did not need labour market policies as much as other countries of the EU. In Spain, by contrast, with the highest unemployment level in the EU (around 20 per cent), active and passive labour market policies acted as automatic stabilizers and were used consistently during the crisis.

Figure 5. Crisis Management Index and financialization

Figure 6. Crisis Management Index and active and passive labour market policies
As regards savings, which were hypothesized to inhibit investment and growth in the long run if too low, the only exception among the bottom seven countries is Spain whose relatively high level of savings is equal to Poland’s, i.e. the lowest among the top seven countries (figure 7). On trade union density, the pattern displayed in figure 8 shows no exception: the top seven countries have the highest trade union densities which, as hypothesized, helped them to maintain higher levels of employment and aggregate demand.

Explaining the CMI ranking

In the light of the preceding hypotheses and correlations, I now estimate a model investigating the variables which determine the highest CMI scores, as follows:
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CMI = C + B1 x EPL – B2 x TW – B3 x Ineq + e

where C is the constant, EPL is the Employment Protection Legislation Index in 2008 (measuring labour flexibility), TW is the ratio of temporary to total employment in 2008, Ineq is the Gini coefficient in 2008, and B1, B2 and B3 are the respective coefficients of these three variables.3

I have tested this model in two ways: first, with a simple OLS cross-section regression, using the average values of these variables for the period 2007–11 and 27 observations (i.e. the 27 EU Member States); and second, with a more sophisticated GLS model using panel data for 2006, 2007, 2008, 2009, 2010 and 2011 and 162 observations (27 times the six years). The results of these two analyses are very consistent with each other, robust and statistically significant. The signs and magnitudes in both regressions highlight the same effects. Moreover, the panel analysis uses a random effects regression with a dummy variable for each year, and the Hausman test is used to check the reliability of the observed effects.

Table 2 reports the results of the GLS model, which is considered more appropriate than the OLS model, given the number of variables involved. These results, which should be analysed together with the correlations examined in the preceding section, indicate that a higher CMI score is driven by a higher EPL index (lower labour flexibility), a lower incidence of temporary employment and a lower level of inequality. All of the variables are very significant (mostly at the 5 per cent level), as reflected in the p-values reported in table 2.

These results call for reflection on the structure and operation of labour markets and suggest a specific direction for policy-making. Labour flexibility is a negative factor and contributed to deepening the effects of the crisis. At the same time, countries with a higher incidence of temporary employment suffered more during the crisis and score lower on the CMI. Inequality also exacerbated the negative effects of the crisis, and countries with higher levels of inequality have lower CMI scores. From a Keynesian perspective, the explanation is quite obvious: in societies with wider inequality, middle class incomes and consumption are depressed, thereby weakening aggregate demand and, consequently, the economy as a whole.

Labour flexibility has increased throughout Europe in the past 10–15 years. However, Germany, Malta, Luxembourg and a few other countries still maintain rigid labour markets. Along with Poland and Austria, these are the countries which have managed to cope better with the current economic crisis.

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3 As regards the Ineq variable, a clarification is needed. On the one hand, inequality may be considered an outcome, i.e. a consequence of policies. From this perspective, it would be difficult to include it in an equation alongside EPL, which is clearly a policy. On the other hand, however, inequality is a variable which is a mirror of policies and institutions and therefore easy to control (see for instance Alexander and Kumaran, 1992). Unlike more complex measures such as GDP growth or unemployment/employment, which are clearly outcomes, inequality is so directly linked to policies and institutions that can be considered as a public choice, or at least a proxy for it. Wider inequality thus equates with acceptance of certain policies and institutions. Or, to cite Alexander and Kumaran (1992), inequality is an outcome of values which tolerate bad income distribution. In this sense, inequality, as used in this equation, is not only an outcome but also a public choice, hence a policy.
Labour flexibility allows for the reduction of labour costs at the expense of wage earners, i.e. consumers. This ultimately widens inequality and depresses aggregate demand because consumption decreases. Of particular interest in this connection is the inverse relationship between inequality and the EPL index: the lower the EPL (higher flexibility), the wider the inequality (see figure 9). Confirming the pattern observed earlier in this respect, Germany and, more generally, the CMI’s top seven countries, performed better: they have stronger EPL (i.e. lower flexibility) and less inequality. Conversely, those countries which suffered the most during the crisis – Estonia, Lithuania, Latvia, Ireland, Spain, Portugal, Greece, Italy, the United Kingdom and some others – have wider inequality and weaker EPL (i.e. higher flexibility).

The experience of the crisis strongly suggests that a coordinated (or corporatist) market economy may be a more appropriate model for reshaping global governance and helping to prevent further crises (Pontusson, 2005; Euro Memo Group, 2010; Semmler and Young, 2010).4 Such economic governance

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4 For a comparative perspective on corporatist labour markets, see the article by Simon Sturn in this Special Issue of the *International Labour Review*. 

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### Table 2. GLS model regression results (panel data)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff. (standard errors)</th>
<th>P-values</th>
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<tbody>
<tr>
<td>EPL</td>
<td>1.615307 (0.7324882)</td>
<td>0.027</td>
</tr>
<tr>
<td>Temporary work</td>
<td>−0.1578564 (0.0694321)</td>
<td>0.023</td>
</tr>
<tr>
<td>Inequality</td>
<td>−0.2716993 (0.107862)</td>
<td>0.012</td>
</tr>
<tr>
<td>Constant</td>
<td>4.225772 (3.638554)</td>
<td>0.245</td>
</tr>
<tr>
<td>Year 2006</td>
<td>−0.5277289 (0.9971861)</td>
<td>0.597</td>
</tr>
<tr>
<td>Year 2008</td>
<td>−3.037997 (0.9973313)</td>
<td>0.002</td>
</tr>
<tr>
<td>Year 2009</td>
<td>−10.86284 (0.9978834)</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2010</td>
<td>−4.382909 (0.9970402)</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2011</td>
<td>−6.065116 (0.9974051)</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Year 2007 dropped because of collinearity

<table>
<thead>
<tr>
<th>R-sq: within = 0.5610</th>
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<tbody>
<tr>
<td>between = 0.2293</td>
</tr>
<tr>
<td>overall = 0.4880</td>
</tr>
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**Wald chi2(8) = 170.93; Prob > chi2 = 0.0000**

**Number of observations = 162. Number of groups = 27**


Hausman Test (RE vs FE):
Ho: difference in coefficients not systematic
\[(b − B)'[(V_b − V_B)^{−1}](b − B) = 20.75\]
Prob > chi2 = 0.0001
H (alternative) accepted

Source: Author's calculations.
would ensure a more stable path of development and accumulation, mitigating the risk of boom and bust cycles, as illustrated by Minsky (1986). In the EU, Germany and Austria in particular offer examples of coordinated market economies which combine functional elements of competitive market economies, such as competition and private investment, with useful market coordination systems, such as financial regulation and public strategies for investments, welfare and important public goods (Rochon and Rossi, 2010; Pitelis, 2010; Whelan, 2010).

Luxembourg, Malta and Poland and can also be seen as broadly representative of the socio-economic model shared by Austria and Germany. Indeed, these countries managed the crisis better on all of the indicators analysed here. By contrast, the countries which rely more on a liberal market economy like Estonia, Ireland, Latvia, Lithuania and the United Kingdom are among those that suffered the most during the crisis. This was also the case of the southern European economies (Greece, Italy, Portugal and Spain), which flexibilized their labour markets extensively during the past 15–20 years, thereby combining liberal labour markets with inefficient social policies (Sapir, 2005). The Nordic countries (Denmark, Finland and Sweden) also suffered during the crisis, in particular in terms of employment reductions, which were mostly attributable to the very flexible labour markets these countries had created during the preceding decade. Although this flexibilization was coupled with an efficient income and employment security model and safety net, employment fell dramatically during the crisis.

**Conclusion**

In this article, I have argued that the EU countries which performed relatively better during the economic crisis of 2007–11 are those which have less flexible labour markets and thus managed to maintain stable employment levels. These countries typically feature a mix of economic policies and social institutions
that operate to stabilize their levels of consumption and aggregate demand. Coordination mechanisms and tighter financial regulation and monitoring are also important features of these economies. The countries in this group are Austria, Belgium, Germany, Luxembourg, Malta, the Netherlands and Poland.

By contrast, the countries which performed the worst during the crisis typically have very flexible labour markets combined with wider inequality, greater exposure to foreign banks, stronger reliance on the housing sector, less effective labour market policies and lower related expenditure, lower trade union density, higher levels of private indebtedness, strong financialization and a lower level of savings. These countries include Estonia, Greece, Ireland, Latvia, Lithuania, Portugal and Spain, followed by Italy and the United Kingdom.

Clearly, the first group of countries identifies better with a coordinated or corporatist market economy model, while the second group identifies better with a liberal (or hybrid) market economy model. This was confirmed by the regression results presented above: countries in the first group score higher on the CMI because of their stronger employment protection legislation (i.e. lower flexibility), lower incidence of temporary employment and lower levels of inequality.

In the context of the EU, however, the policy situation looks very complex. With the onset of the Greek crisis, EU Governments turned their attention, irrationally, to budget cuts and policies of contraction (Arestis and Pelagidis, 2010). The objective was to reduce deficits. In January 2012, the European Council approved a new fiscal treaty, the “Fiscal Compact”, which strengthened the restrictive rules of the Stability Pact, by introducing the principle of a structural equilibrium budget that Member States are required to write into their national constitutions. Under the Fiscal Compact, countries with a debt ratio over 60 per cent of GDP are allowed a maximum deficit of 0.5 per cent and those with a debt ratio lower than 60 per cent, a maximum deficit of 1 per cent. This seems more like a reaction to the Greek, Irish, Portuguese and Spanish crises than a rational decision to support economic recovery (ibid.).

As DeLong (2010) and others have already stressed, surplus countries such as Austria, Germany and the Netherlands need to implement expansionary policies rather than austerity measures, spending more and taxing less. Also, a strong institution acting as a lender of last resort should be created for the EU or at least for the Eurozone. The biggest European economies – particularly Germany, France and the United Kingdom – should expand their aggregate demand to allow for more imports from southern European economies (Greece, Italy, Portugal and Spain) to help the latter redress their current account deficits. At present, these deficits are being financed, dangerously, by German, French and British banks through the purchase of sovereign bonds from the southern European countries. But if these countries cannot repay their debts, the northern European banks will, in turn, go into default.

Finally, the EU should address the root causes of the current crisis, namely, labour market flexibilization and uneven income distribution – which
weaken consumption and aggregate demand – and the financialization which has occurred in many EU economies over the past two decades with further negative effects on economic growth. Indeed, a finance-led growth model, driven by consumer credit, is not sustainable in the long run because a stable economic growth path ultimately depends on aggregate demand being sustained by investments in the real economy and consumption derived therefrom. While such investments may also be supported by finance, consumption should be driven by wage increases accruing from labour productivity gains. This type of growth model is better identified in countries like Austria, Belgium, Germany, Luxembourg, Malta, the Netherlands and Poland – the EU’s seven best performers during the current economic crisis.

References


