In Search of the Elusive Trade-Off:

Economic Efficiency and the Income Equality in Western Europe

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Introduction

Policymakers, political pundits, and even political economists, are much enamored by the notion of 'trade-offs.' That is, while we may seek more of good 'X' to satisfy our desires, doing so necessarily implies a diminution in our consumption (or production) of good 'Y'. For example, one of the most famous trade-offs of the post war era was the Philips curve, which purported to show an inverse relationship between the rate of change in money wages and prices (more prosaically, unemployment versus inflation) (Philips 1958). Lower unemployment necessarily implied a trade-off in terms of higher prices. It should give us pause then that as soon as the Philips curve was declared an immutable fact of life, the curve, and the trade-off it implied, collapsed (Friedman 1975/1991).

The validity of theorized trade-offs may matter less than the conviction with which such beliefs are held by policy makers. Once such ideas become the 'conventional judgment' regarding economic affairs, to use Keynes' term, they tend to become self-reinforcing (Widmaier 2004). Options are therefore limited by the trade-off, in large part, because policy-makers believe the trade-off to be real. Path dependent policy making becomes a function of an ideational 'logic of inevitability' courtesy of the purported trade-off (Blyth 2002, Hay and Rosamond 2002).

In this regard, one particular trade-off seems particularly hard to shake-off. A little over thirty years ago, Arthur Okun's well known book *Equality and Efficiency: The Big Tradeoff* argued that "efficiency is bought at the cost of inequalities in income and wealth." (Okun 1975: 51). In Okun's view, societies simply had to choose between an efficient economy and an egalitarian society. If equality undermines incentives or if pro-

equality policies distort market allocation, economic performance can only be improved at the expense of a less equitable distribution of income. This dilemma has informed much of the debate around the relative economic performances of the United States and other Anglo countries on the one hand, and continental Western Europe on the other (for contemporary discussions of this trade-off see Tanzi and Schuknecht 2000, Alesina and Glaeser 2004, Alesina and Giavazzi 2006).

However, the equality/efficiency trade-off is far from universally accepted (Pontusson 2005, Kenworthy and Pontusson 2005). There is a substantial economic literature, for instance, which highlights the negative consequences of high levels of inequality for economic growth (Alesina and Rodrik 1994, Acemoglu and Robinson 2002), a literature in welfare economics that models some of the (for some counterintuitive) pro-efficiency consequences of welfare states (see for example Barr 2001, Mirrlees 2006) and a similarly prominent political economy tradition which describes how such as centralized corporatist wage bargaining can have both egalitarian and pro-growth effects (Calmfors and Driffill 1988, Garrett 1998, Golden, Wallerstein and Lange 1999, Iverson 2001, 2005, Swenson 2002, Pontusson 2005, Mares 2006). Similarly, the Varieties of Capitalism literature (Hall and Soskice 2001) argues that various institutional arrangements for coordination between market actors can create efficiency and redistribute rewards fairly (for critical discussion see Thatcher, Hancké and Rhodes 2007). The literature on the welfare state has also generated a challenge to the trade-off thesis by examining the benign, or even roundly positive, economic effects of generous welfare provision (see for example Blank 2002; Lindert 2003, 2004; Kenworthy 2004 and 2008, Scruggs and Allan 2006a, 2006b). The European Union's Lisbon process aims

to combine economic performance with social cohesion, and European elites have recently become fascinated with the Danish 'flexicurity' model, which combines generous welfare protection with very liberal labour laws (Sapir *et al* 2004, Sapir 2006, European Commission 2007). The unpalatable implications of Okun's argument have encouraged politicians and scholars to find ways around the stark choice between Anglo-Saxon inequality and the economic underperformance of the largest continental European economies. In this paper we provide further evidence to challenge the existence of a trade-off between economic performance and social justice.

Our paper addresses the problem from an unexplored angle, by examining the ways in which the institutions of welfare capitalism regulate markets. Liberalization – the freeing of markets from the burden of heavy market distorting regulation and legalistic restrictions – has been an influential policy prescription for enhancing economic efficiency and growth. The theory underpinning this prescription is that 'free' markets are more efficient than more 'regulated' markets, provided that functional legal and property rights arrangements are in place; in the absence of distortions caused by government interventions, the free operation of the price mechanism will allocate resources efficiently. International institutions such as the World Bank, the IMF, the OECD and the European Union have all exhorted advanced industrial countries to lighten the regulatory burden on economic activity, freeing up markets from distortions and restrictions. In recent years, the same institutions have begun to generate large amounts of data monitoring the degree to which these recommendations have followed, making it possible to measure economic efficiency not just in terms of outputs such as productivity, growth and employment, but also in terms of the institutional environment in which economic

activity takes place. Yet this data has been little used by scholars examining the relationship between economic efficiency and equality, who have tended instead to concentrate largely on the dynamics of welfare spending and the role of labour market institutions in the wage bargaining process.

This article uses data from a variety of sources to assess how this 'institutional' dimension of efficiency relates to levels of inequality in Western European countries. We assess 16 Western European countries in terms of both efficiency - operationalized as the extent to which markets are free of undue distortions from laws, regulations and bureaucratic burdens – and equality - measured as Gini coefficients of post-tax household income inequality. Although it is well documented that high spending welfare states in Western Europe tend to have low levels of inequality and poverty (Stephens et al 1999, Rueda and Pontusson 2000, Pontusson *et al* 2002, Alesina and Glaeser 2004, Pontusson 2005, Swank 2005, Scruggs and Allan 2006b, OECD 2008), we find that the same high spending and egalitarian welfare states also tend to have efficiently regulated markets. In contrast, less regulatory efficiency is generally associated with higher levels of inequality. This analysis therefore provides novel support for the view that there is no simple trade-off between efficiency and equality, by showing that efficient market regulation can be, and usually is, combined with egalitarian policies and institutions, and that inefficient regulation tends to be related to higher levels of inequality. These findings are based on both quantitative analysis and supporting qualitative accounts of three different examples of welfare capitalism in Western Europe, in which the interaction between regulation, social spending and equality are examined in more nuanced terms.

The next section examines the quantitative evidence on efficiency and inequality, followed by the three case studies and the conclusion.

In Search of the Trade-Off: Measuring Efficiency and Equality

Economic Efficiency in Western Europe

In order to assess the validity of the efficiency and equality trade-off we draw on data on market regulation from three main sources: the OECD, World Bank, and Fraser Institute (see Appendix for details). These data provide a number of measures of the extent to which advanced industrial states intervene in markets by regulating, channeling and constraining economic activity. We restrict our attention to Western Europe, and work on a sample of sixteen cases using cross-sectional data (a longitudinal analysis is not possible given the absence of an adequate time series for any of the data used here). We present some simple descriptive statistics, with bivariate correlations for illustrative purposes, and then carry out a tentative multivariate cross-sectional regression analysis which, given the small number of observations, remains exploratory in nature (see Shalev 2007, Kenworthy 2007 for discussion of appropriate strategies for quantitative analysis with small samples).

The first step in this analysis is to develop a broad measure of the extent to which markets are efficient, where efficiency is understood to imply unintrusive regulation, an efficient bureaucracy administering rules and procedures, and open, rather than protected, markets in which the price mechanism is allowed to work reasonably freely in allocating resources. To do this we carried out a principal components analysis on a range of measures of market regulation. The research programmes and institutions generating this

data strongly advocate the prescriptive approach described earlier, in which government intervention is seen as inimical to efficiency. All variables were transformed so that higher values implied lighter regulation and intervention, and therefore higher efficiency. Our principal components analysis generates a regression factor score which we use as an overall measure of efficiency, in which low scores indicate lower and high scores indicate higher efficiency (see Table One). Of course, this is a crude measure of efficiency, which assumes that markets are more efficient when governments intervene less in managing them, and which sees markets as functioning better when regulation is friendly to business. However, any implicit bias in these measures in favour of a liberal, 'small government' model would be expected to favour the 'trade-off' hypothesis, and therefore adds to the robustness of the analysis.

(Table One About Here)

Table One maps levels of efficiency in Western Europe, and yields some predictable and some less obvious findings. Whilst it is no surprise to find the UK, which has enthusiastically adopted the deregulation agenda, at the efficient end of the scale, it is significant that Denmark and Finland – Nordic welfare states - are placed close behind towards the efficient end of the spectrum, whilst Norway and Sweden are also given positive scores for efficiency. At the other end of the scale, the Mediterranean European countries have negative scores reflecting their 'statist' tradition of heavy government intervention in the economy (on statism see Schmidt 2002), whilst Germany and Austria also are rated as less efficient. In the middle we find continental European economies such

the Netherlands and France. These results show that in English-speaking Europe and in the smaller Northern European states business activity is mostly lightly regulated, with the state interfering relatively little in the economic decision-making of private actors (here we disregard the effects of fiscal policy and social transfers). As we move South, state intervention through rules and regulations increases.

The disaggregated data for specific areas of regulation show what this means in practice. Analysis of financial markets, product markets, business conditions, and labor markets confirms that in many policy areas Western Europe is divided between more efficient or 'liberal' and more inefficient 'statist' political economies. For example, as the top graph in Figure One (below) shows, standard measures of financial liberalization group some of the most egalitarian welfare states (the Northern European social democracies) close to the finance-friendly UK, whilst the conservative/Christian democratic welfare states are placed towards the more regulated end of the scale.

(Figure One About Here)

A similar picture emerges regarding product market regulation and barriers to entry. In the middle graph in Figure One, the UK fails to outperform the Northern European social democracies in business start-up costs and removing barriers to entry in product markets, with Denmark, Finland and Norway all enjoying lower start-up barriers. Finally, even in the controversial area of labor market flexibility (bottom graph in Figure One), there are some surprising observations. Although the UK predictably stands out here

for its low employment protection and 'light touch' regulation of the labour market, Denmark has equally high scores for efficient labour regulation.

The key point to take away from this analysis is that it is untenable to equate efficient economic institutions for market regulation exclusively with an Anglo-American 'liberal' economic model. Although the UK and Ireland consistently place at the efficient end of the scale, other European countries associated with a much more egalitarian tradition also have high scores for efficiency. Moreover, as we show in the next section, efficient market regulation has, if anything, a positive correlation with equality, in contrast to the trade-off thesis.

What Does This Mean For Inequality?

Although measuring efficiency presents a number of conceptual and operational difficulties, there is less controversy over how to measure inequality: a range of broadly accepted measures is available. Here we focus specifically on inequality of income, and draw on the Luxembourg Income Study (LIS) and OECD data on income distribution, using Gini coefficients and 90/10 ratios as our main measures of income inequality, although other measures produce very similar results. Figure Two presents scatterplots of income inequality (Gini coefficients and 90/10 ratios using OECD data[i]) and economic efficiency (using the measure presented in Table One).

(Figure Two About Here)

These graphs reveal a negative and statistically significant (at the 90% and 95% level respectively) relationship between economic efficiency and income inequality. Although there are some outliers and the R squared is not overwhelming, the sign is clearly inconsistent with the notion of an efficiency/equality trade-off. But looking inside the data more carefully, we actually see something close to a U-shaped relationship, with the countries displaying the lowest scores on the efficiency variable (Mediterranean Europe) presenting very high inequality, those with the highest scores on efficiency having either very high (the British Isles) or very low (Finland, Denmark) inequality, and most of the other Western European countries having medium to low inequality and middling to high scores on efficiency.

A neat efficiency-equality correlation therefore does not hold. Just two countries – the UK and Ireland - combine efficiency and inequality in the way envisaged by Okun. But neither does the data suggest a neat two-by-two matrix in which all four possible combinations can be identified, as suggested by Sapir (2006), whose typology we reproduce in Table Two, and then run past our data. By scoring low as below the median and high as above the median on both dimensions, we see that there are just four out of 16 cases in the 'trade-off' boxes (combining inverse efficiency/equality relationships). Moreover the two cases of higher than median equality and lower than median inefficiency (Austria and Belgium) have efficiency scores that are quite close to the median, and cannot be regarded as cases offering much support to the trade-off thesis. If we check back to Table Two we see instead that a large group of mainly continental West European countries (France, Germany, Switzerland, Austria, Netherlands, Belgium and Norway) cluster quite close to median values on both efficiency and equality. There are then three further clusters[ii] reflecting different combinations: high efficiency with both high equality (Finland, Denmark, to an extent

Sweden) and low equality (UK and Ireland), and low efficiency with low equality (Greece, Italy, Portugal, Spain). The remaining combination – inefficiency with high equality – cannot be detected in Western Europe, leaving the top left quadrant of Sapir's matrix vacant. This casts further doubt on the thesis that equality is achieved at the price of efficiency. Instead, equality is only achieved by countries with average to high efficiency, and the most egalitarian country – Denmark, on both measures – is the second most efficient. The most that can be said for the trade-off thesis is that the two 'Anglo' countries in the sample indeed combine efficiency with inequality.

(Table Two About Here)

In order to further explore the efficiency-equality relationship, we also ran a cross-sectional regression analysis to assess the robustness of the positive correlation between the two. Data limitations preclude a longitudinal analysis and the small number of observations reduces the scope for introducing all relevant variables and hence affects the reliability of the estimates, which should therefore be treated with some caution. However, this analysis does serve the purpose of assessing the evidence for a *negative* relationship between equality and efficiency, and estimating the explanatory power of efficiency in relation to other independent variables commonly associated with equality. We therefore run stepwise regressions with a small number of appropriate control variables to estimate the effect of efficiency, as well as welfare state arrangements and wage bargaining institutions, on inequality. Welfare institutions are a plausible explanation for levels of inequality, and here we use OECD social expenditure as a share of GDP as a measure of welfare generosity[iii].

Similarly, an extensive literature discusses the importance of centralized wage bargaining arrangements for compressing wages and maintaining low levels of income inequality; we use the measure of centralization collected by Traxler, Blaschke and Kittel (2001). Alternative measures of the dependent variable (90/10 ratios) are also used as a robustness check[iv].

The results reported in Tables Three and Four show that efficiency shows the expected sign – a negative relationship with inequality – in all seven regressions for each measure, and in several specifications the negative relationship is statistically significant at at least the 90% level[v]. Given the small sample and limited number of control variables we do not wish to overstate the importance of the statistical significance, but the consistently negative sign confirms the lack of evidence for any equality/efficiency trade-off. The country cases with highest scores for efficiency tend to be those with the lowest inequality, controlling for social expenditure and other relevant variables. This confirms the impression found in Tables One and Two, that efficiency and equality are positively correlated, and that cases of efficiency and inequality are the exception rather than the rule.

The absence of a longitudinal dimension in this analysis is an important limitation, so some doubts must remain over the efficiency/equality relationship. The positive correlation may be a misleading snapshot of a dynamic process in which, for example, efficiency resulting from recent economic reforms may have a negative effect on equality with a lag, which would not be captured by this static analysis. The data measuring efficiency does not go back far enough in time to assess the extent to which our measure reflects recent changes which have not had time to feed through into downward pressure on equality. However we do have reliable – albeit patchy – time series data on income inequality, which means that

we can at least assess the extent to which inequality has changed over time in our sample. If we were to find that inequality clearly increased more quickly over time in 'efficient' countries, this would still lend some support to the trade-off thesis, since it would indicate the possibility that efficiency had been achieved at the expense of a trend towards higher inequality, suggesting the likely unsustainability of the currently positive equality/efficiency relationship. Figure Three charts the change in Gini coefficients over the past 20 years in 15 of our 16 countries using LIS data[vi].

(Figures Three and Four About Here)

This evidence is reasonably consistent with the picture provided by the cross-sectional analysis. As the OECD reports (2008) there has been a general upwards tendency in inequality amongst advanced nations, and an upwards drift can be detected throughout the sample. However, there seems to be no real evidence of greater increases in inequality in more efficient countries than in less efficient ones. Figure Three shows that the most striking changes during this period of roughly two decades are the sharp rises in inequality of Italy, Spain and the UK between 1985-95, although all three saw slight reductions in the more recent period. The UK is already established as our key 'outlier case' of efficiency and inequality, whilst Spain and Italy fit the positive correlation identified in the cross-sectional analysis. Other substantial rises in inequality are seen in Austria, Belgium and Finland, and only the latter has a high efficiency score. Figure Four - a scatterplot of changes in inequality by levels of efficiency – shows that efficiency is positively but weakly correlated with lower increases in the Gini coefficient. Efficient countries have not suffered higher increases in

inequality than less efficient ones; Finland and the UK have the second highest increases over the period, but other cases of high efficiency (Denmark and Ireland) have enjoyed declining income inequality, whilst all of the countries with very low efficiency have seen noticeable increases in the Gini coefficient. In sum, there is no clear evidence that efficiency has been achieved at the expense of more rapid increases in inequality over the recent period.

In sum, although in the absence of time series data we cannot be entirely confident of our findings, there is no positive empirical support for the trade-off thesis here. Of course, this does not mean that such evidence will not appear in the future. First, recent liberalizing reforms undertaken by some Western European countries which may bring about changes in levels of inequality in the future. Second, the strong impact of encompassing labor market institutions on inequality is well documented (Wallerstein 1999). Countries lacking such institutions may find that liberalizing reforms have stronger effects on levels of inequality than on countries with such institutions. Third, inequality can have an independent causal effect on welfare arrangements. There is, for instance, some evidence that high levels of inequality make it less likely that income support programs will be established (Moene and Wallerstein 2003). However, these notes of caution remain speculative; recent experience instead points to a complementary rather than conflictual relationship between efficiency and equality.

In Search of the Elusive Trade-Off: Efficiency and Equality Revisited

It could of course be argued that these raw data tell us little about the real effects and interactions of institutions and policies in practice. This section therefore adopts a

qualitative approach to illustrate how different strategies of market regulation and welfare provision interact in three short case studies, examining representative cases of each of the three efficiency/equality combinations identified above. The case of Sweden, the paradigmatic Nordic welfare state, is taken first to show how efficiency and equality are not necessarily in conflict. Next we discuss the United Kingdom, a (relatively isolated) West European case where efficiency has trumped any commitment to equality. Alhough the British case appears to confirm Okun's claims, we caution that the efficiency/inequality combination results from deliberate policy choices which undermined pro-equality institutions for political reasons, which tells us little about the logic of the trade-off. Finally, the case of Italy is examined to show how a state can intervene heavily in the market economy through regulation rather than welfare provision, compromising efficiency without achieving low inequality.

Equality Plus Efficiency: The Scandinavian Social Democratic Model

Despite its well-known welfare model based on generous universalistic benefits, Sweden has undergone a range of quite radical liberalizing measures over the past two decades. After a brief period of conservative government, the Swedish social democrats (SAP) returned to power in 1994, and sought to further structural reform in the areas of pensions, labor markets, and social welfare provision, while adhering to a market-conforming macroeconomic framework. The SAP government began a program of deregulation and privatization that eventually encompassed postal services, telecommunications, domestic aviation, electricity, and the rail network. Further

microeconomic reforms, such as the 1993 competition law that restricted anti-competitive behavior, and incremental changes to labor market regulation to encourage flexibility and part-time work, were made throughout the decade. The fact of these reforms suggests a profound transformation of the Swedish political economy, while the results of these reforms on Swedish business have been dramatic. Was Sweden, even under a social democratic government, trading in equality for efficiency?

Certainly efficiency seemed to be achieved. Sweden has performed well in international comparison of enterprise demographics. Though enterprise birth rates are marginally higher in the UK than in Sweden, the death rate of enterprises in LMEs such as the UK is almost double that of Sweden (Schror 2004: 3). This picture is further enhanced by international comparison of labor productivity and unit labor costs. Looking at output per employed person in manufacturing, and taking 1992 as the baseline year (index value 100), LMEs such as the US and the UK racked up impressive gains in productivity (index values of 185.6 and 142.5 respectively) between 1992 and 2004, but Sweden more than doubled its labor productivity in constant dollar terms over the same period to an index value of 242.6.[vii] Unit labor costs in manufacturing tell an even more interesting story. Taking 1992 as the baseline and 2004 as the terminus, we find that while the US had some success in reducing unit labor costs (from 100 to 87.9), the UK's unit labor costs actually increased from (from 100 to 121.1), whilst Sweden's plummeted by over forty percent in real terms over the same decade (from 100 to 57.4).[viii]

Given these institutional, policy, and performance transformations, it is tempting to conclude that the Swedish model, and its emphasis on equality, has gone out the window. Equality must have been traded off given these efficiency enhancements? Yet

we have seen that Sweden's Gini coefficient has hardly moved in the past three decades. Therefore, in this case at least, the issue of structural reform engendering Okun's trade-off, as is commonly painted, is in fact much more complicated than the simple 'liberalization -> inequality' equation would allow. Reforms in Sweden have certainly occurred. On pensions and unemployment benefits, while changes were made to replacement rates, overall "the generosity of Swedish social security was on average the same in 1998 as in 1980" (Lindbom 2003: 178). Spending on private health and retirement certainly has increased, as have means tested benefits, which implies more markets and less equality. As Lindbom argues, increased expenditure on social assistance is not the result of less universalism and more liberalism. Rather, it is the opposite case where benefits cover more people who need more assistance and who were not part of the older, narrower, regime (Lindbom 2003: 182).

Furthermore, while taxes were cut in the early 1990s, they were raised again in the latter half of the decade when the regressive nature of the 1990 reforms became apparent (Steinmo 2003: 40). Once Sweden recovered from the collapse of the early 1990s and began to run a surplus in 1998, as well as paying down the national debt, the government increased spending on child support and other benefits. As Prime Minister Persson said to the SAP Congress in Sundsvall the previous year "healthcare, social services and schooling come before tax cuts,"[ix] and indeed they did, consistently.

In sum, while there has been structural transformation in the Swedish welfare state, it is simply not the case that equality has been sacrificed for efficiency. Despite efficiency enhancing measures being implemented from early 1990s on, Sweden remains a social democracy with a large public sector, generous social benefits and public

services, and low levels of inequality. As Steinmo puts it "the Swedish model (which comprises corporatist decision-making institutions, solidaristic wage policies, and perhaps even the 'politics of compromise') may well be dead. But the ambition and political support for a largely egalitarian polity with a very large welfare state and the taxes to support it live on quite healthily today." (Steinmo 2003: 42). Contrary to expectations then, marketization and liberalization, which undeniably has occurred in Sweden, does not have to lead to greater inequality. Okun's trade off seems conspicuous by its absence.

Efficiency at the Expense of Equality: The Anglo Model

In contrast to Sweden, the United Kingdom is the clearest example in Western Europe of a society that has embraced liberalizing structural reforms without managing to cushion the effects of liberalization on the social fabric. Yet this seeming conformation of Okun's trade off in fact rests upon a series of contingent political choices rather than any logic of inevitability. As such, even the confirmatory case rests upon less than secure foundations.

The Thatcher and Major governments of the 1980s and 1990s carried out important liberalizing reforms in financial, product and labor markets. In the financial sector, an already lightly regulated banking and investment industry was deregulated further, fuelling a significant expansion of financial services, which became the motor of the British economy. In product markets, reforms to the retail sector and the Thatcher governments' enthusiastic championing of the European single market contributed to

further liberalization and the phenomenal growth of the service sector. As Coates (2002: 160) put it, so many people worked in banking and retailing by the year 2000 that Britain had genuinely become, by then, "a nation of shopkeepers."

In labor markets, significant reforms had a direct and lasting effect on social cohesion. A series of legislative measures to undermine the position of trade unions, in combination with a rapid and extensive restructuring of the British industrial sector, skewed industrial relations in favor of employers and reduced the role of collective bargaining in the determination of wages. All of this occurred against a background of exceptionally rapid deindustrialization. UK manufacturing employment fell from 35 percent of the total labor force in 1960 to just under 12 percent in 2005 (OECD 2005). As Wells has observed, UK manufacturing shed employment at an unprecedented rate. In the 1980-82 recession 27 percent of the 1979 manufacturing labor force disappeared (Wells 1989: 25), and this process continued under New Labour (Matthijs 2006: 22). Reforms to the welfare system moved in a similarly restrictive direction, reducing the real value of welfare benefits, limiting entitlement, and de-indexing the state pension system from inflation.

The consequences of these changes have been far-reaching. On the one hand, proponents of structural reform can point to the United Kingdom's comparatively good growth performance in the 1990s and early 2000s as evidence of the effectiveness of market-friendly liberalizing measures. In particular, the higher than average percentage of the active population in employment is often attributed to the increased labor market flexibility resulting from the Thatcher reforms. On the other hand, these changes have been accompanied by an extraordinarily rapid increase in income inequality. In 1979, the

UK had a Gini coefficient of 0.27, lower than France and only slightly higher than Germany. By 1995 the UK Gini coefficient had reached 0.34, a level matched only by the United States and Italy amongst advanced industrialized nations (LIS 2008). Moreover, as noted above, despite its 'flexibility', as noted above, UK unit labor costs have actually risen while inequality deepened. Under the New Labour administration of Blair, the picture has changed relatively litle, despite the much lauded 'redistribution by stealth' and welfare reforms the party has undertaken. Shephard (2003: 4) found that income inequality in 2000-2002, after almost a full term of Labour government, was higher than in any other period since 1979.

The UK also shows starkly the potential costs in terms of social inequality and cohesion of an aggressive and uncompromising approach to structural reform. Political choice is critical here. Where the Swedish SAP crafted institutions that maintained equality, the Thatcher, Major, and even to a degree the Blair governments have been quite open about not buffering inequality since it is seen to harm 'incentives'. Yet without the kinds of buffers to social inequality present in the Northern European CMEs, such as equalizing public services and pensions, social benefits with high replacement rates, and centralized wage bargaining, liberalizing reforms can cause a rapid deterioration of social cohesion. In sum, one can have market reforms that do indeed lead to greater inequality, but this tends to occur most in societies where the political commitment to a policy of egalitarianism is absent, and most often, where inequalities were higher to begin with. This case suggests then that Okun's trade-off is only 'real' when policymakers either lack the political will to challenge it, or see the removal of social protection and the resulting inequality as a intrinsic feature of a market economy.

Inequality and Inefficiency: Italy and the Mediterranean-Statist Model

The Southern European members of the European Union are characterized by heavy regulation of financial, product and labor markets countries, and more substantial state holdings in the economy than most other European countries: a kind of 'statist' political economy model (see Schmidt 2002). One of the most interesting features of this particular model of state-market relations is that, despite the apparently 'social' justifications often presented for maintaining state interventions, it has a poor record in securing social objectives, as our data show. Here we draw on the Italian case to illustrate the implications of such economic institutions for equality and efficiency. Italy is perhaps the most extreme case of what could be described as a 'Mediterranean-statist' model, which allows us to bring into sharp relief the potential for particular types of state interventionism to have *inegalitarian and inefficient* implications.

The quantitative measures of market regulation analyzed earlier reinforce more qualitative evidence that the Italian economy remains, despite some privatization and supply-side reforms undertaken in the 1990s, very heavily constrained by legalistic state intervention (Signorini 2001, Alesina and Giavazzi 2007). Regulations and backdoor protectionism restrict free competition in a range of sectors, such as city-center retail, travel and transport, public utilities, and housing. Italy also retains a significant state presence in industrial production and services through state-owned or part-owned companies. These features make Italy one of the least 'marketized' economies in the advanced industrialized world (Giavazzi 2005).

In terms of its product markets Italy has the most restrictive regulation of entry in Western Europe, with complex and bureaucratic procedures for starting new businesses and a variety of regulations restricting entrepreneurs' freedom of action. Examples of this abound of burdensome regulation of markets leading to high prices, low efficiency, and vast monopoly rents for well-positioned market participants (for example, the difficulties of obtaining licenses for pharmacies of taxi services, which once possessed becomes private assets which can be transferred to family members; see Giavazzi 2005). Clearly much of this regulation has its roots in longstanding institutional arrangements (related by Djankov *et al* to factors such as legal origin), and the intricate nature of Italy's legal system stands as a constant through Italy's recent periods of economic growth and stagnation. Such restrictiveness has high costs, hindering the full development of the service sector, which in comparable western economies has proved the major source of employment growth. It also has distributive consequences, shifting resources towards relatively inefficient parts of the economy with little scope for productivity growth, such as small-scale retail and legal services, which also enjoy tax advantages. In comparison with the UK and Sweden, Italy's unit labor costs *increased* (100 to 144.6) from 1992-2004 while its productivity remained stagnant (100 to 103) over the same period.[x] At the same time Italy's Gini coefficient increased from 0.306 in 1986 to 0.346 in 1998 (LIS 2008). In short, product market regulation and associated rent-seeking has anti-competitive as well as inegalitarian consequences, depressing both efficiency and equality.

While Italy has relatively regulated labor markets, some parts of the labor force face a very deregulated environment, in particular the substantial numbers of 'outsiders'

(Rueda 2007) - workers in the black and 'grey' economies, as well as increasingly large numbers of new entrants to the labour force dependent on temporary contracts (Sestito 2002, Graziano 2004). This dual labour market ensures that the egalitarian effects of regulation extend only to a comparatively small part of the workforce, leaving overall inequality similar to deregulation labour markets like the United States (Flinn 2002). However, some parts of the labor force are relatively protected both by legalistic provisions and by practices of collective bargaining, which is reflected in Italy's inflationary levels of wage growth, even during the lean years since the country's entry into EMU. The labor market also promotes both inefficiency and inequity given the inability of collective bargaining (except for short, exceptional periods) to achieve encompassing coverage and secure pay increases consistent with maintaining competitiveness.

Moreover, the job protections offered to the more privileged sectors of the workforce impede rapid adjustment of the labor market (Esping-Andersen 1996). As Lindert (2006: 247) notes, while such employment protection laws must take some of the blame for European unemployment in general, its seems to be the case that Italy is a place where such effects are particularly strong. Meanwhile, the patchy coverage of unemployment insurance further impedes labor market clearing (see essays in Ferrera 2005). In sum, the structure of the Italian labor market has failed to ensure equitable wage growth or an efficient allocation of resources, contributing to both economic decline and increasing inequality. In contrast to Sweden's 'big state', Italy's tradition of state interventionism has become a drag on growth at the same time as it fails to address inequalities.

Italy is certainly the most dramatic case of the failings of the 'statist' model, and it has performed comparative poorly in terms of efficiency and equality even compared to the other 'statist' cases. This analysis should therefore only be extrapolated to the other European countries with great caution. The other Southern European economies are in a different position, with lower levels of productivity but with lower wage costs, which have helped them to take advantage of the opportunities provided by the single European market and the dramatic monetary easing resulting from the entry into the single currency. However, all these economies to some extent share the problems of weak job growth and low overall levels of employment (Bermeo 2000), patchy and excessively selective welfare provision (Ferrera 1998, Boeri 2000, Lynch 2006), and regulatory measures which have the effect of shielding inefficient producers of goods and services from competition. They also display high levels of economic inequality. In the Italian case in particular, statist policies and institutions appear to combine the 'worst of both worlds' by acting as a drag on efficiency whilst doing little to deal with inequality.

Conclusion

This paper has assessed the relationship between efficiency and equality in the advanced democracies of Western Europe. We have found that there is no empirical basis for a trade-off between equality and efficiency as such; indeed states that do in fact combine efficiency and inequality are more the exception than the rule, pointing to a positive relationship between the two concepts. Okun's original trade-off thesis may be

another one of those economic truths that turn out to be more 'true by conviction' than 'true by examination.'

This has important implications. First, it suggests that liberalization does not have to work against the welfare state. We have shown here that, in contrast to much of the conventional wisdom, pro-business and market-friendly institutions can coexist with generous welfare provision and tend be associated with low inequality. This suggests that some of the more doom-laded analyses of the welfare state as unsustainable in a post-industrial global era are missing the point. Liberalization and welfare state retrenchment are two distinct concepts, and distinct outcomes, which need to be measured separately. Put another way, the choice of market regulation and the choice of welfare effort are orthogonal. Inequality in not an inevitable price to be paid for efficiency, and indeed only those states that were most unequal to begin have became significantly *more unequal* under the pressures of globalization (see Swank 2002, Kenworthy and Pontusson 2005).

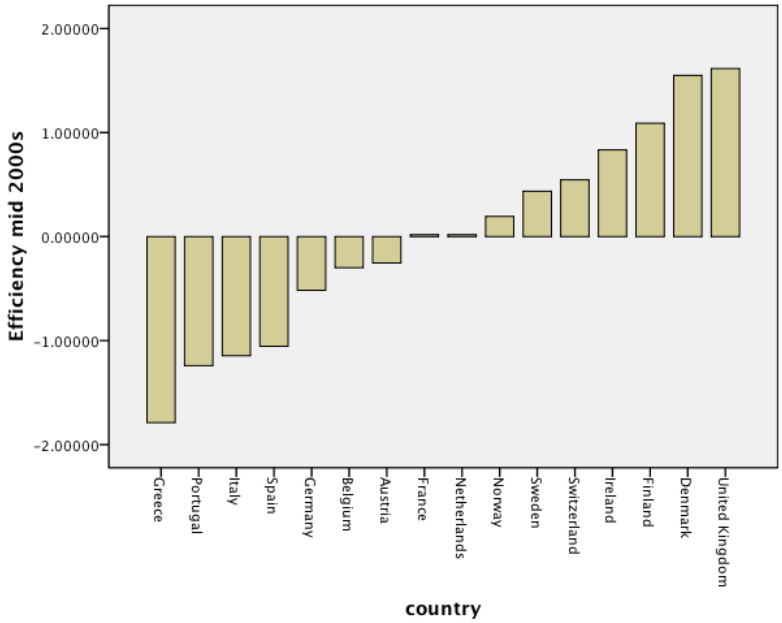
Our findings have analytical implications for the study of contemporary welfare capitalism. To the extent that typologies remain useful in the study of European welfare capitalism, we suggest a broad comparative picture which matches neither Hall and Soskice's 'varieties of capitalism', nor indeed Sapir's four types of European political economy. Instead we observe a continuum of positions of countries on a dimension of 'statism' and 'liberalism' of market regulation, in which the most 'statist' countries have weak welfare states and high inequality, and the more liberal countries mostly have strong welfare states and low inequality, with only the British Isles standing out for combining economic efficiency with inequality. Rather than a dichotomy between coordinated and liberal market economies, we see important differences between coordinated market economies, some of which are more

'liberal' than others, the more liberal CMEs enjoying the lowest inequality. This suggests that in terms of the dilemmas of economic reform, existing approaches fail to capture the relationship between liberalizing markets and social cohesion. Our findings therefore also point towards a need to revise the dominant conceptual maps of comparative welfare capitalism.

Finally, we hope that this research contains some optimistic news for politicians on the progressive left in advanced democracies. Efficiently regulated markets are actually far more compatible with the institutions of the welfare state than is generally acknowledged. Many European countries have managed to combine market-friendly regulation of key areas of the economy with high levels of state spending, which permit generous welfare provision and public services, as well as good economic performance[xi]. In particular, the Nordic social democracies, despite undertaking significant reforms, have enjoyed relatively high economic growth whilst maintaining social solidarity. Okun's trade-off thesis purports to show that inequality is the inevitable price to be paid for economic efficiency. This simplistic view has had an extraordinarily loyal following amongst opinion-makers and even some academics. However, there is barely any evidence to support it.

Table One

Efficiency as Market Regulation, Western Europe mid-2000s



Explanation: Regression Factor Scores (one factor extracted, 40.231% of total variance) from Principal Component Analysis using 22 variables measuring regulatory approaches to product, financial and labour markets. High scores imply more 'efficient' regulation. Further details in Appendix.

Table Two

Equality and Efficiency in Advanced Industrial Democracies: The Sapir Typology Revisited

		Efficiency	
		Low	**High**
Equity	**High**	Continentals	Nordics
	Low	Mediterraneans	Anglo-Saxons

Source: Sapir 2006: 380.

		Efficiency (Table One)	
		Low (< median)	**High (> median)**
Equality (Gini, OECD)	**High (< median)**	AT, BE	NL, NO, SWE, CH, FI, DK
	Low (> median)	GR, PO, IT, SP, FR, GE	UK, IRE

Table Three

Regression Analysis: Determinants of Income Inequality (Gini coefficients, OECD, mid-2000s)

Independent Variable	**[1]**	**[2]**	**[3]**	**[4]**	**[5]**	**[6]**	**[7]**
Efficiency	-0.0207*	-0.0172	-0.0189**	-0.0133	-0.0210*	-0.0180	-0.0165
	0.0098	*0.0119*	*0.0083*	*0.0092*	*0.0111*	*0.0133*	*0.0092*
Social Expenditure			-0.0056**	-0.0064**			-0.0066**
			0.0021	*0.0024*			*0.0026*
Wage Bargaining					0.0024	0.0044	-0.0013
					0.0043	*0.0082*	*0.0038*
Logged Population		0.0093		0.0124		0.0127	
		0.0140		*0.0107*		*0.0176*	
Ethnic Fragmentation		-0.0358		-0.0439		-0.0084	
		0.0784		*0.0599*		*0.1019*	
Electoral System		0.0004		0.0007		0.0008	
		0.0021		*0.0016*		*0.0025*	
Social Democratic Vote		-0.0010		-0.0004		-0.0005	
		0.0011		*0.0009*		*0.0016*	
Constant	0.2946	0.2401*	0.4289***	0.3479**	0.2825***	0.1578	0.4648***
	0.0095	*0.1245*	*0.0519*	*0.1028*	*0.0274*	*0.2089*	*0.0741*
p	0.053	0.432	0.10	0.91	0.205	0.632	0.39
n	*16*	*15*	*16*	*15*	*14*	*15*	*15*
R^2	0.2417	0.3749	0.5040	0.6767	0.2507	0.3897	0.5505
Adj. R^2	0.1876	0.0276	0.4277	0.4342	0.1144	-0.1335	0.4156

Standard errors reported in italics under unstandardized coefficients

***, **, and * denote significance at the 99% (p = >0.01), 95% (>0.05) and 90% (>0.1) respectively.

For variable descriptions see appendix.

Table Four

Regression Analysis: Determinants of Income Inequality (90/10 ratios, OECD, mid-2000s)

Independent Variable	**[1]**	**[2]**	**[3]**	**[4]**	**[5]**	**[6]**	**[7]**
Efficiency	-0.4788**	-0.4361	-0.4478**	-0.3670	-0.4730**	-0.4658	-0.3924*
	0.1957	*0.2517*	*0.1747*	*0.2195*	*0.2106*	*0.2705*	*0.1805*
Social Expenditure			-0.0974*	-0.1145*			-0.1184**
			0.0450	*0.0564*			*0.0503*
Wage Bargaining					0.0478	0.1001	-0.0180
					0.0821	*0.1669*	*0.0745*
Logged Population		0.0972		0.1529		0.0877	
		0.2969		*0.2572*		*0.3570*	
Ethnic Fragmentation		-0.2781		-0.4224		0.0615	
		1.6616		*1.4331*		*2.0695*	
Electoral System		0.0084		0.0128		0.0244	
		0.0446		*0.0385*		*0.0504*	
Social Democratic Vote		-0.0133		-0.0030		0.0051	
		0.0236		*0.0209*		*0.0331*	
Constant	3.7563***	3.2368	6.1027***	5.1557*	3.5543***	2.0281	6.8287***
	0.1895	*2.6393*	*1.0973*	*2.4619*	*0.5220*	*4.2433*	*1.4588*
p	0.028	0.497	0.013	0.227	0.122	0.677	0.35
n	*16*	*15*	*16*	*15*	*15*	*14*	*15*
R^2	0.2996	0.3441	0.4850	0.5674	0.3177	0.3660	0.5610
Adj. R^2	0.2495	-0.0203	0.4058	0.2429	0.1937	-0.1775	0.4293

Standard errors reported in italics under unstandardized coefficients

***, **, and * denote significance at the 99% (p = >0.01), 95% (>0.05) and 90% (>0.1) respectively.

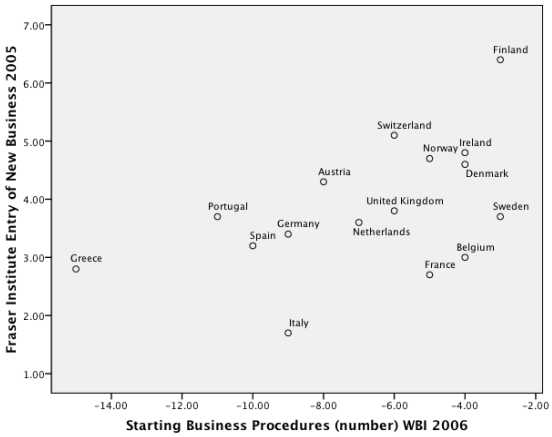
For variable descriptions see appendix.

Figure One

Some Measures of Regulation of Financial, Product and Labour Markets, Western Europe mid-2000s

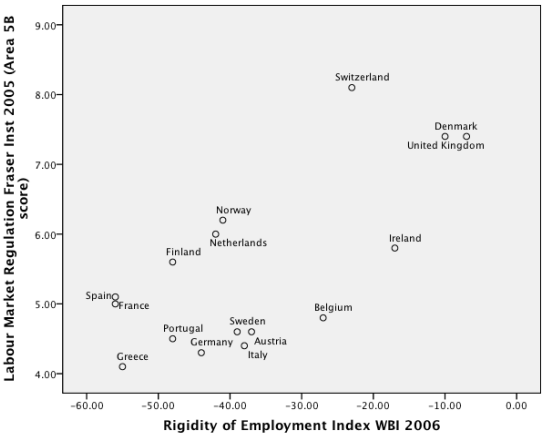
Financial Market Regulation

Sources: OECD/World Bank database, Fraser Institute (see appendix)



Regulation of Market Entry

Sources: Fraser Institute, World Bank Group (see appendix)

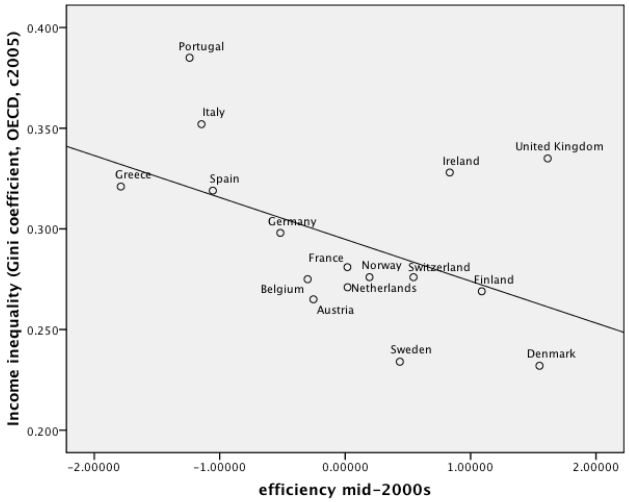


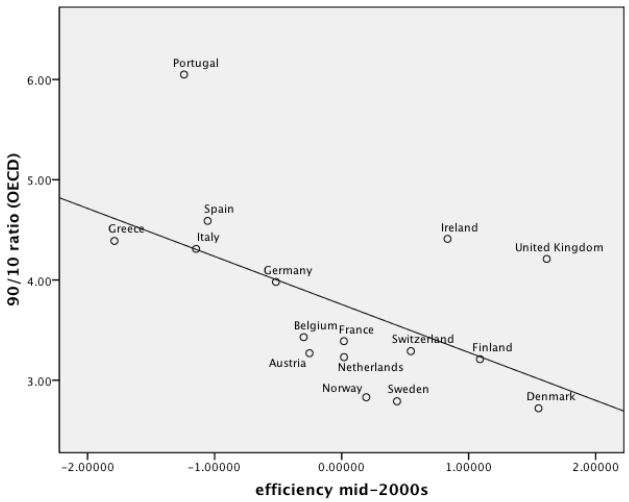
Labour Market Regulation

Sources: Fraser Institute, World Bank Group (see appendix)

Figure Two

Economic Efficiency and Income Inequality (Gini and 90/10 ratio), Western Europe, Mid-2000s

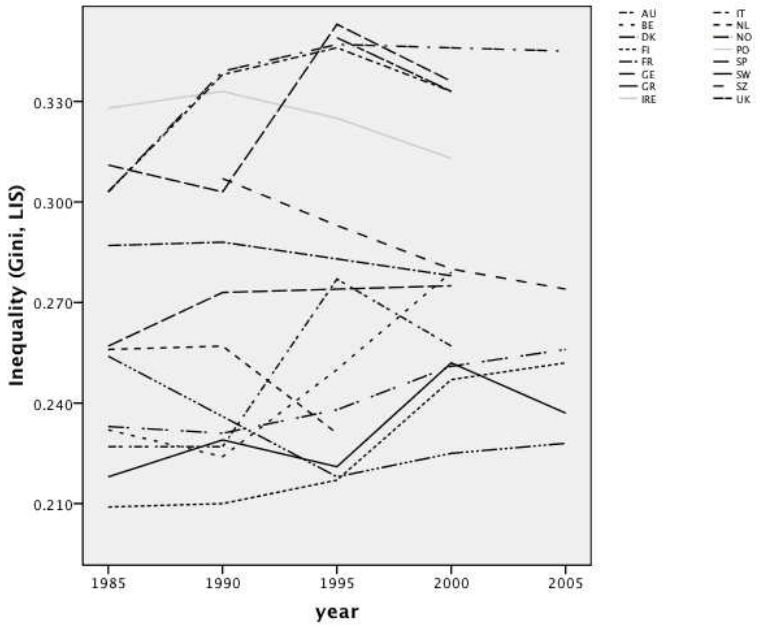




Sources: economic efficiency, as in Table One; equality, OECD.

Figure Three

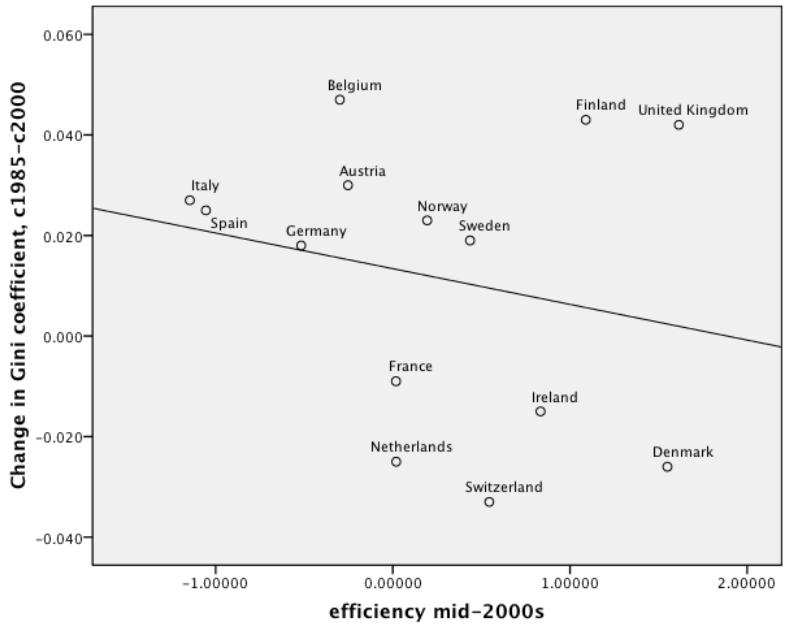
Changes in Income Inequality, Western Europe mid-1980s to early 2000s



Source: Luxembourg Income Study (December 2008).

Figure Four

Economic Efficiency (mid-2000s) and Changes in Income Inequality (mid 1980s-early 2000s), Western Europe



Sources: Gini coefficients changes, LIS (authors' calculations from LIS data); efficiency, Table One.

Notes

[i] The OECD measures correlate highly with the LIS measures, but we use the former in the cross-sectional analysis because the data is consistently more recent. The positive correlation between efficiency and equality remains when the LIS data is used. The LIS data series is used for the longitudinal analysis of inequality trends in Figure Three for reasons of data availability.

[ii] It is worth noting that these three clusters only partly match Esping-Andersen's three types of welfare regimes (1990).

[iii] We recognize the limitation of social expenditure as a measure of welfare generosity, but it has the merit of being available for all the cases we study here over the relevant period. The decommodification data collected by Scruggs and Allan (2006a, 2006b) are perhaps a better measure of welfare generosity, but do not include Greece, Portugal and Spain, further reducing our already limited degrees of freedom.

[iv] Data and full results available at http://personal.lse.ac.uk/hopkin/data

[v] Although we are assessing the evidence for an equality/efficiency trade-off, the measures used for the dependent variable - the Gini coefficient and 90/10 ratios – measure *inequality*. Both are frequently used and widely understood measures of inequality, so to invert them would create confusion. The expected relationship of efficiency to the dependent variable is therefore negative.

[vi] Portugal is not included in the LIS study. We take data points from 1985-90, 1990-95, 1995-2000 and 2000 onwards. Where a series is interrupted we smooth the series using the mean of the two adjacent variables (in just two cases: Spain 1985 and Switzerland 1995) in order to make the graphic representation of trends clearer. In neither case does this involve controversial assumptions since the gaps are over short periods of time with minimal changes in values. The change in Gini coefficient is calculated by subtracting the first data point after 1985 from the last in the series, and is an absolute value.

[vii] Data available at U.S. Department of Labor, Bureau of Labor Statistics, ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/prodsuppt02.txt accessed May 10th 2006 11:58am.

[viii] Data available at U.S. Department of Labor, Bureau of Labor Statistics, ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/prodsuppt10.txt accessed may 10th 2006 12:05pm.

[ix] Quoted in Keesings Record of World Events on line edition. http://keesings.gvpi.net/keesings/lpext.dll/KRWE/krwe-23594/krwe-24472/krwe-24706/krwe-24798/krwe-24799. Accessed August 17[t]th 2005.

[x] Data available at U.S. Department of Labor, Bureau of Labor Statistics, ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/prodsuppt02.txt and ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/prodsuppt10.txt

[xi] Indeed, the World Economic Forum's 'Competitiveness Report' for 2004 found that Finland, Denmark and Sweden – all high-spending social democratic welfare states – were more 'competitive' than even the United States ('US Still More Competitive than EU', Financial Times, 27 April 2004, p.2.).

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Appendix

Principal Components Analysis:

Twenty-two variables included measuring regulatory approaches to product, financial and labour markets. Extraction method: principal components, select one factor. Factor scores method: regression (one factor extracted, 40.231% of total variance). High scores imply more 'efficient' regulation. Full results available on request.

Variables (Higher scores imply higher efficiency)

Fraser Institute 2005 - Data for 2005 generated by Fraser Institute, (http://www.fraserinstitute.ca/; http://www.freetheworld.com/). See Gwartney and Lawson *et al* 2007 (Ch.1) for a full description.

Labour Market Regulation (Area 5B score)

Credit Market Regulation (Area 5A score)

Competition Domestic Banking (Area 5Aii score)

Entry of New Business 2005 (Area 5Cii)

OECD/World Bank database 2003 (de Serres *et al* 2006):

Banking Barriers to Competition

Banking Stability OECD/WB 2003 (degree of restriction of bank lending)

Banking Regulation OECD/WB 2003

World Bank Institute 2006

Data for 2004-5 generated by the World Banks' *Doing Business* project, (http://www.doingbusiness.org/). See World Bank (2008) for a full description of data. This variable records the number of administrative procedures required in order to open a new business. For methodological details see the *Doing Business* project website (http://www.doingbusiness.org/MethodologySurveys/StartingBusiness.aspx).

Starting Business Procedures (number)

Starting Business Time (days)

Starting Business Cost (% of income per capita)

Starting Business Min. capital (% of income per capita)

Dealing with licences number of procedures

Dealing with licences time (days)

Dealing with licences time (cost)

Difficulty of Hiring Index

Rigidity of Hours Index

Difficulty of Firing Index

Firing Costs

Rigidity of Employment Index

Global competitiveness index 2005-6 Pillar One: Institutions

The 'institutions' score for each country case from the World Economic Forum's *Global Competitiveness Report 2005-2006*. (Lopez-Claros, Porter, and Schwab 2006). The report generates a Global Competitiveness Index measuring 'the set of institutions, policies and

factors that determine the level of productivity of a country'. For methodological details see the WEF website (http://www.gcr.weforum.org/). We exclude competitiveness variables which do not tap the concept of efficiency adopted in this article. Higher scores imply greater efficiency.

Global competitiveness index 2005-6 Pillar Six: Market Efficiency

The market efficiency score taps the level of market competition and distortions caused by government intervention in product, financial and labour markets. Higher scores imply greater efficiency.

Other Data

Income Inequality

Gini coefficients and 90/10 ratios calculated from the OECD income distribution survey for around 2005 (OECD 2008).

Gini coefficients calculated by the *Luxembourg Income Study* (LIS) for the most recent available survey (usually around 2000-4). See http://www.lisproject.org/ for methodological details.

Logged Population

The log n of population in 2005.

Ethnic Fragmentation

A measure of ethnic diversity within a state around 2000 (score taken from Montalvo and Reynard-Querol 2005).

Electoral System

The index of disproportionality between electoral vote share and share of parliamentary representation for the political parties; a proxy for majoritarian vs. proportional electoral systems.

Social Democratic Vote

Average vote share of social democratic or labour party, post-war (to 1999).