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Author: Bob Hancké
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Bob Hancké is Reader in European Political Economy at the London School of Economics and Political Science. This paper is based on a seminar he presented at the Center for Advanced Study in the Social Sciences, Juan March Institute, Madrid, on 21 May 2009.

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Abstract

Between 1970 and today, the share of national income going to labour ('wage share') has fallen significantly more in advanced capitalist countries with strong labour unions and a coordinated wage bargaining system, than in countries like the UK, with weak trade unions and a highly deregulated and decentralised labour market. This paper argues that the fall in the wage share in countries with strong trade unions is related to the interaction between conservative central banks and coordinated wage bargaining systems. Strong conservative central banks contain strong trade unions, which incorporate the low-inflation strategy of the central banks into their own wage demands. Low inflation can be obtained through a low growth rate of unit labour costs: nominal wages face a ceiling set by inflation plus productivity. The implication of this is a fall in the wage share and thus a redistribution of national income from labour to capital.

Between 1980 and today, a series of dramatic shifts took place in the broad macro-political economic framework of advanced capitalist societies. Independent, conservative central banks moved from being the exception in the OECD to being the norm, exchange rates more or less stabilised within trade blocs, especially the EU/ERM, inflation rates fell sharply, and fiscal policies became significantly more restrained. Alongside these well-documented (although not always equally well-understood) shifts in the macro-economic policy framework, a parallel evolution in the political economy of OECD nations took place, which favoured business over labour: globalisation, European economic integration and free trade, the subsequent emphasis on competitiveness, and the rapid shifts in technology combined to undermine the position of (organized) labour in the advanced capitalist world. Where organized labour remained strong, thus this argument, wages and working conditions eroded less than in countries in which unions were weaker or weakened.

This paper addresses this shift in the balance of power between capital and labour – but it does so through a remarkable puzzle. Over the three decades between the first oil shock and the introduction of the Euro in 1999, the share of national income going to labour (the 'wage share') has fallen significantly more in advanced capitalist countries with strong labour unions and a coordinated wage bargaining system – Germany, Austria, The Netherlands, Belgium, Sweden and Denmark – than in the UK and the US, countries with relatively weak trade unions and highly deregulated and decentralised labour markets. In Germany, Austria and The Netherlands, the wage share fell from its highest point, usually at the end of the 1970s, some ten per cent to its lowest point, usually in the second half of the 1990s (see Table 1 below). In the UK and the US, in contrast, countries where conservative governments attacked unions after 1980, and where organized labour never truly recovered from that decade of heavy losses, the development of the wage share has been considerably less dramatic over the last three decades: in the US the fall in the share of national income going to labour was of the order of 3%, while the UK witnessed (after a sharp rise and fall in the late 1970s) a reduction of less than 3% since 1980.

Most attempts to explain the evolution of the wage share face significant problems. Technological change, globalization or deregulation, or any combination of these three factors, are often used to explain shifts in wage shares: they increase the exit options of capital as compared to labour, thus allowing capital to locate where returns are highest, and/or weaken labour unions and Left-wing governments. While there is little doubt that these arguments shed some light on the problem, they have difficulties making sense of the unexpected divergence among the different OECD economies, and especially of the disturbing stylized fact that wage shares fell less in countries with weak trade unions than in countries with strong trade unions. I argue, instead, that the interaction between macro-economic institutions, in this case wage-setting systems and central banks, has led to a dramatic fall in the wage share in countries where unions are strong and central banks conservative, because labour unions are forced to incorporate the low-inflation preferences of the credible, conservative central bank into their own wage demands. They assure minimal wage push inflation with wage claims that are systematically below productivity growth; wages growing more slowly than productivity means that the profit share rises, and thus implies a transfer of income from labour to capital.

The balance of this paper starts, in Section 1, with key descriptive evidence, a discussion of the main positions in the debate, and a presentation of the argument of this paper in more detail. Section 2 examines the broad validity of the claims through a regression analysis of the evolution of the wage share in the OECD economies. Section 3 discusses the dynamics in Germany and the UK in detail to bring out the key mechanism at the basis of the argument in this paper. Section 4, in turn, applies the argument beyond these two countries and analyzes the institutional regime changes in the non-DM bloc countries that joined EMU in 1999, where the rapid and simultaneous imposition of

independent central banks and centrally coordinated wage bargaining in the late 1980s and early 1990s coincided with and led to a markedly sharp collapse of the wage share. The final section concludes by summarizing the argument and relating it to a wider literature on the politics and political economy of central banks.

THE EVOLUTION OF WAGE SHARES: THE EVIDENCE AND THE DEBATE

Over the last three decades of the previous century, the wage share in most advanced capitalist countries fell sharply, after two previous decades of growth almost everywhere. But it fell more in some types of capitalist economies than in others. Table 1 synthetically presents the raw data for the adjusted wage share (i.e. the share of national income that goes to wages, adjusted for the number of self-employed) across a large number of European and Anglo-Saxon OECD-countries. The table organizes the data in averages between 1970 and 1999 in different periods and in different categories of countries, organized along the dominant type of wage-setting system. The first group consists of highly coordinated wage-bargaining systems, where wage setting is embedded in a broader supportive institutional framework consisting of such arrangements as well-developed semi-vocational and technical training systems, and plant-level workers' participation schemes (roughly corresponding to the coordinated market economies CME in Hall & Soskice's 2001 Varieties of Capitalism framework). The second group is identified here as France and Ireland. Both are admittedly somewhat difficult to classify unambiguously: France may have weak unions and employers associations, but it also has a well-developed state-centred coordinated wage-setting system through *erga omnes* extensions (which explains the extremely high wage bargaining coverage rate of almost 100% in that country), while the Irish social pacts imply very high central wage coordination, but against the background of an otherwise decentralized labour market. Both therefore are countries with a relatively highly developed system of wage coordination, but which lack the supportive micro-institutional framework of the CMEs – I classify these, for want of a better term, as cases of 'disembedded' wage coordination (in the table 'MME1' for 'mixed market economies 1'). In the third group of countries, there is a modicum of wage coordination, but often this is limited to a small number of sectors, regions or even firms, and rarely encompasses the economy as a whole: the weakly coordinated MME2 (Hancké et al. 2007). The final group are the Anglo-Saxon liberal market economies with decentralized wage-bargaining systems that have at best only sporadic instances of wage coordination: in this descriptive sample the USA and the UK, both economies that unequivocally had deregulated labour markets in the early 1990s. (Australia and New Zealand would belong in this group today, but not as obviously in 1990, when both were slowly moving from a relatively highly coordinated wage-setting system to a decentralized: their wage coordination score for 1990 thus in the case of Australia significantly overestimates and in the case of NZ underestimates the degree of deregulation in the two preceding decades. For that reason, the average of the LME group is calculated without them).

Several evolutions stand out in these descriptive data. The first is that the wage share fell in all these advanced capitalist countries over that period, on average by almost 11%. The second that the drop over the entire period was, somewhat surprisingly, easily the lowest in the LMEs with weak unions, highest in the southern European countries (and Ireland), immediately followed by the standard CMEs with strong unions. Taken at face value, the data in table 1 suggest that in France and Ireland the shift in wage setting toward more coordination also heralded a period of sharp decline in the share of national income going to wages, despite the 'incomplete' form that wage coordination took in those countries. Individual country data tell an even starker story of diverging fates than the averages do: in the UK and the US, both countries with very weak trade unions and decentralized wage bargaining systems for most of the period under consideration here, the fall in the wage

TABLE 1. Evolution of the Wage Share in Selected OECD Economies 1970-1999

	Wage share as % of GDP				Evolution in percentage points			Difference between maximum and minimum value				
Country	1970	1980	1992	1999	1980-1970	1999-1980	1992-1999	Max	Year Max	Min	Year min	Max-Min
CME	Strong and embedded wage coordination											
AT	74.82	88.51	82.74	74.03	13.69	-14.47	-8.71	91.79	1978	74.03	1999	-17.76
BE	64.14	74.33	70.26	70.02	10.19	-4.31	-0.24	75.07	1978	64.14	1970	-10.94
DE	72.60	75.28	70.86	69.08	2.68	-6.19	-1.77	75.70	1974	68.59	1998	-7.11
DK	70.09	73.68	68.94	69.24	3.59	-4.44	0.30	73.68	1980	66.55	1994	-7.13
NL	72.59	76.29	70.68	69.21	3.70	-7.08	-1.48	77.14	1975	68.42	1997	-8.72
SE	71.66	75.85	72.32	65.31	4.19	-10.54	-7.00	77.94	1978	65.31	1999	-12.63
Avg.	70.98	77.32	72.63	69.48	6.34	-7.84	-3.15	78.55		67.84		-10.71
MME1	Strong, not embedded wage coordination											
FR	75.86	79.38	69.92	67.74	3.51	-11.64	-2.19	79.89	1981	67.32	1998	-12.57
IE	74.74	79.34	68.76	58.38	4.60	-20.96	-10.38	79.34	1980	58.38	1999	-20.96
Avg.	75.30	79.36	69.34	63.06	4.06	-16.30	-6.28	79.62		62.85		-16.77
MME2	Weak wage coordination											
ES	68.47	74.29	70.73	67.17	5.82	-7.12	-3.56	76.40	1976	66.18	1989	-10.22
IT	80.37	79.49	77.07	67.80	-0.88	-11.69	-9.26	83.36	1971	67.80	1999	-15.56
PT	63.94	70.26	71.62	67.34	6.32	-2.92	-4.27	84.03	1975	63.07	1973	-20.96
Avg.	70.93	74.68	73.14	67.44	3.75	-7.24	-5.70	81.26		65.68		-15.58
LME	Decentralised wage bargaining											
CA	68.99	63.70	67.27	62.57	-5.29	-1.13	-4.70	69.10	1971	62.57	1999	-6.54
UK	71.63	71.18	72.15	68.91	-0.45	-2.27	-3.24	75.65	1975	67.13	1997	-8.52
US	69.48	69.60	68.67	66.77	0.12	-2.83	-1.90	69.60	1980	66.33	1997	-3.27
Avg.	70.04	68.16	69.36	66.08	-1.88	-2.07	-3.28	71.45		65.34		-6.11

share over the period is almost negligible. In Germany and Austria, in contrast, both countries with strong trade unions and highly coordinated wage bargaining between 1970 and 2000, the fall in the wage share is quite dramatic. From the highest to the lowest point, it is seven percentage points for Germany and almost 18 percentage points for Austria. Finally, the period since the 1980s, which introduced the hard-currency DM-bloc in the 1980s, and the Maastricht regime preceding monetary union in the rest of Western Europe in the 1990s, both were periods of steep decline in the wage shares of the affected countries. Foreshadowing the argument in this paper, the old DM-bloc countries saw their wage share fall most when the bloc (with its conservative monetary policy bias) was formed, while the others witnessed the largest fall in the wage share during the Maastricht convergence period that generalized this restrictive monetary regime throughout the rest of the prospective EMU.

How do we make sense of these evolutions of the wage share, both the pervasive decline in many countries and the counterintuitive outcome that the wage share fell most in economies where labour has had a strong institutional position? The key explanations in the debates in economics and political science, ranging from Marxian to neo-liberal, emphasize the shift in power from labour, which prevailed during the post-war period roughly until the second oil shock, toward capital and its political representatives after 1980. In one version of this argument globalization, European integration and the deregulation of capital and labour markets have increased the exit options of capital (Jayadev 2007; Guscina 2006; Harrison 2002; IMF 2007), which has exploited this newly gained bargaining power to extract higher profits (see Glyn 2009 for a review of the debate). In another version, technological change has put downward pressures on wages, especially in the bottom half of the income distribution, which has led to an average fall in the wage share (Manning 2004; OECD 2007; IMF 2007). On their own or in combination, these trends weaken labour unions, decrease their bargaining power, and stop Left governments imposing regulatory costs on capital that might prevent a dramatic increase in the profit share (and a concomitant fall in the wage share). Monetarist explanations, finally, arrive at the same point from the other side: high interest rates imply that capital goes where its returns are higher, thus leading to a transfer of income from labour to capital.

As a result of the pervasive disintermediation of finance, a process that started in the 1980s and accelerated in the 1990s, the world interest rate is transmitted more rapidly to individual countries, which in principle should lead to a convergence of real interest rate levels everywhere, thus to a convergence of capital shares and, since the wage share is a complement of the capital share (ignoring income from land, K/GDP + L/GDP = 1), of wage shares as well.

The problem with the first set of arguments is simply the unexpected diversity among the different OECD economies, and especially the disturbing stylized fact that wage shares on the whole fell less in countries with weak trade unions. According to the Marxian and neo-liberal arguments, ultimately the political and economic power of labour versus capital determines the extent to which wages fall relative to profits. But such an argument fails to explain the surprising finding that the wage share fell considerably more where trade unions have been, by any conventional independent measure, strongest, and where wages were set through coordinated action among strong trade unions across the entire economy. In addition, the only statistical analysis of the impact that a liberalization of capital controls might have on the wage share (since the 1970s, see Jayadev 2007) suggests a very small, almost negligible, negative effect[1]. The expected effect of technological change on the wage share, in turn, is not obvious. While it may seem to be favoring capital over labour, technological change is likely to have different effects for different skill profiles. A sharper fall in the wage share may, for example, occur more in job categories that are characterized by general, codifiable skills than in jobs that rely on more specific, tacit skills. That was exactly the point made by studies in the 1990s suggesting that low-skilled workers faced more of an adjustment to technological change (and globalization) than highly skilled workers. While general, codifiable skills are by no means synonymous with low skills, the point is that during the 1980s and 1990s, the overall skill profile of the UK and the US (as measured by Estevez-Abe, et al. 2001: 170, see also Jensen 2011) has polarized quite dramatically (Manning 2004), with a group of low-skilled and highly skilled workers who all have acquired general skills. Even if the high flyers in such a system can command higher wages, the low-skilled workers cannot, and the high flyers are ultimately also quite easily replaceable in such a general skill-based system. In countries like Germany, in contrast, where specific skills are relatively more important, the technological trade-off is potentially very different since such specific skills are, because of their tacit nature, on the whole considerably harder to automate. For example, while computer software could be and is often 'written' by other software, it is much harder to imagine computers taking over the work of skilled workers and technicians in complex engineering firms. Workers in the latter categories are not likely to see their wage share fall as a result of technological change; if it happened, something else explains it.

The monetarist argument faces different problems. First of all, not all economies within the DM-bloc (where both nominal and real interest rates have, in fact, converged since the early 1980s) witnessed the same evolution of the wage share: in Belgium and Denmark, the fall of the wage share since 1980 was considerably less pronounced than in Austria, Germany and the Netherlands. In addition, it is not clear to what extent one can rely on rising levels of disintermediation as an explanation of differences in the rise of the capital share. The US and the UK undoubtedly had the most disintermediated financial systems in the world during the three decades since

[1] Jayadev (2007) measures the liberalization of the capital account as an index with the values 0, 1 and 2, where '2' stands for total capital account openness; the relevant regression coefficients are of the order of 0.001 to 0.01 (Jayadev 2007: 432). In other words, a massive liberalizing effect, from complete capital controls to complete freedom of capital to enter and leave the country (the maximum 2 units up in the index) has a negative effect on the wage share of 0.02%. Considering that wage shares fell by over 10-15% in many OECD countries, this is hardly persuasive evidence of a large systemic impact of capital openness.

1970, yet the drop in the wage share was lower there during those two decades than elsewhere, while France had a considerably more closed financial system in the 1980s and most of the 1990s than many other countries, with a more pronounced fall in the wage share. In fact, the only study that regresses the effect of real interest rate changes on the wage share (Jayadev 2007: 432), finds a significant near-zero effect. The relative interest rate and the mechanisms through which it would have effects on the wage share thus at best explain only a small part of the evolution of the wage share.

These analytical frameworks fail to make sense of the puzzle because they ignore two basic macro political-economic institutions: central banks and wage-bargaining systems. The argument developed here builds loosely on a combination of insights from the Varieties of Capitalism (VoC) approach to comparative political economy (Hall & Soskice 2001; Hancké et al. 2007) and the New-Keynesian approach to macro-economics (Carlin & Soskice 2006): the fall in the wage share in countries with strong trade unions is directly related to the interaction between conservative central banks (independent or not) and coordinated wage-bargaining systems (Soskice & Iversen 2000; Franzese 2001; Soskice 2007). The basic idea starts from the fact that, against the background of a conservative central bank with a last-mover advantage (i.e. which can always punish inflationary wage settlements by raising interest rates), low inflation can be obtained through wage restraint, defined as a low growth rate of unit labour costs (ULC). Low ULC growth implies that wages grow at a pace lower than or equal to labour productivity – and this gradually leads to a redistribution of national income from labour to capital.

What, then, are the conditions for wage restraint in countries with strong trade unions? Analytically, the problem is perhaps best approached through a central-bank augmented version of what is known as the Calmfors-Driffill (1988) model: small numbers of strong trade unions are likely to exploit their wage-setting power without paying the full cost in terms of inflation externalities. If they are kept under tight control by the central bank, however, they will deliver wage restraint if they coordinate wage bargaining (Soskice & Iversen 2001). The two logically possible alternatives to this situation – one large, encompassing union or a multitude of small unions – do not necessarily require such a hard monetary constraint to deliver low inflation: in the first case, the single union (which can also be thought of as an extremely high level of wage coordination) in fact ends up bearing all the benefits and the costs of high wages, and is, therefore, as an abstract collective worker, subject to the negative inflationary or employment externalities of its actions. The opposite situation of a large number of unions approximates a decentralised wage-setting system, in which wages are much more closely aligned with company-level productivity. Most of the North-West European economies typically have highly coordinated wage-setting systems that involve a handful of strong trade unions. Credible conservative central banks, relying on their last-mover advantage to punish inflationary wage settlements, are able to pre-empt the potential inflationary consequences of such a set-up (Soskice 2007: 98-100). Since the bargaining power of workers (especially through unions) is relatively weak in more deregulated capitalist economies such as the UK and the US, and since there are many wage-setters that are not coordinating their actions, there is neither the possibility nor the need for central banks to intervene by imposing wage restraint.

If this argument is correct, it implies that conservative central banks – monetary authorities that have more or less become the norm in contemporary advanced capitalist economies – have been instrumental in a massive redistribution of income from labour to capital over the last three decades, especially in economies where labour developed a strong institutional position in the post-war decades. Neither 'market forces', therefore, nor technology can explain the collapse of the wage share in countries where organized labour was and is strong. Instead, the political decisions to impose low-inflation targets rather than full

employment (with a higher inflation rate), enforced through conservative central banks, were at the basis of the shift in the share of national income from (organized) labour to capital.

In what follows I will examine this basic claim through a combination of quantitative analysis and detailed case study material. The paper starts with a broad statistical analysis of the evolution of the wage share in the OECD since 1980, which concludes that the simultaneous presence of coordinated wage-bargaining systems and a conservative central bank leads to a large fall in the wage share, while other arrangements do not, or at least not as strongly. It will then examine two instances of case-based empirical material. The first is a comparative analysis of the different regimes in the Germany and the UK, which will demonstrate that the dense institutional set-up in Germany, involving strong labour unions, coordinated wage bargaining and a very conservative central bank, has led to a decline of the wage share in the former but not the latter. The second set of case studies dynamically examines the adjustment of the high-inflation prospective EMU member-states during the Maastricht period of the 1990s and shows, in line with the regression analysis, that shifts in the macro-economic framework (almost) everywhere led to a large drop in the wage share during that period. The final section concludes.

ANALYZING WAGE SHARES IN THE OECD

Statistical analysis of the effects of macro-economic regimes on wage shares is not easy. Regimes are, by definition, very stable until they change, but they rarely do change: for most of the OECD, there has, in terms of variables relevant to this paper, only been one such shift in monetary policy and one, at most two, in wage-setting systems throughout the last thirty years. That implies that, on a conservative reading, there are only some 50-75 observations in a data set (the upper limit is set by the number of OECD economies multiplied by the lowest number of regimes, i.e. about 25*2 or 25*3). Considering that a large set of control variables needs to be introduced, as well as interaction terms of central bank conservatism and wage coordination, regression analysis is unlikely to yield significant coefficients.

To circumvent this problem, I deploy a measurement and a method that does justice to the 'regime' nature of the analytical problem while significantly increasing annual variation and therefore the number of observations. On the left-hand side of the regression model is the first (year-on-year) difference of the wage share. The right hand side of the equation contains the two following composite variables: an index that measures the degree of coordination in wage bargaining (CWB), and a monetary non-accommodation index (NAI), which measures the degree of 'conservatism' of the central bank. CWB combines two variables with equal weight, one a time-variant but in fact relatively stable variable measuring the degree of wage coordination (Kenworthy 2006) and the other the adjusted coverage of collective bargaining in per cent (Visser 2009). The logic behind the inclusion of both coordination scores and coverage rates is primarily conceptual, with the first concentrating on an institutional and the second on a behavioural dimension of the independent variable. In addition, both dimensions are relatively strongly but far from perfectly correlated: the (statistically significant) correlation between the wage coordination scores and the adjusted bargaining coverage for all observations is 0.34. Combining them thus introduces conceptual sophistication, and increases information content and variation over time, since it corrects for the relatively low variation in the stand-alone coordination index (Kenworthy 2006).

The monetary non-accommodation index NAI is constructed in a parallel way, also combining an institutional and a behavioural variable. Ideally, the nearest to a direct measure would be the deviation of the interest rate from a Taylor-rule (TR) based interest rate (which is considered neutral with regard to accommodation, since it gives equal weights to output and inflation). However, this measure is probably impossible to construct: we would need detailed information on the forward-looking TR for individual central banks for

every individual interest rate decision, regardless of whether the central bank adopted TR in its own inflation-targeting regime (which most did not for the period under consideration). I therefore rely on the method developed by Iversen (1999), and refined by Johnston (2011), which also combines a relatively stable regime variable, the index of central bank independence developed by Cukierman (2002), and a continuous behavioural variable, the nominal effective exchange rate (NEER), expressed as a normalised and standardised (between 0 and 1) three-year static average of the annual growth rate of the nominal effective exchange rate. The first of these two is intuitively easy to grasp: all other things equal, the more independent a central bank, the less accommodating it will be. The second is an indication of the credibility of the central bank in terms of inflation fighting in the eyes of financial markets: if the NEER appreciates, the central bank is deemed to credibly pre-empt inflationary pressures and is rewarded with a higher interest rate by financial markets, which in turn leads to an appreciated currency. Attributing a 50% weight to both indicators in the composite term again corrects for the main weakness of each one of them individually: the Cukierman index corrects for possibly excessive exchange rate volatility that is either not related to the anti-inflationary credentials of a central bank, or an exchange rate overshoot, while the NEER corrects for the relative coarseness of the Cukierman index (not every conservative central bank is always equally conservative, and central banks can be conservative without being independent).

Since the basic argument of the paper is that conservative central bank policies interact with different wage bargaining regimes to produce different effects, the central bank variable enters the analysis as a year-on-year difference in 'non-accommodation' (a higher or lower score on the NAI index), while CWB is captured in a level variable, expressing the strength of the wage-bargaining regime. All these variables were rescaled to the same 0-1 range (but alternative scales were used in the robustness checks), and the wage share variable was lagged one year with regard to the NAI and CWB indices. Formally, the first difference in the wage share is regressed on the first difference in the non-accommodation index, the lag of the index of coordination, an interaction term which involves the first difference in the non-accommodation index and the lag of the index of coordination, and a set of controls:

$$WS_{i,t} - WS_{i,t-1} = \alpha + \beta_1*(NAI_{i,t} - NAI_{i,t-1}) + \beta_2*IC_{i,t-1} + (NAI_{i,t} - NAI_{i,t-1}) + \beta_3*IC_{t-1} + \sum \lambda_j CONTROLS_{i,j,t} + \varepsilon_i$$

In this formula there are i countries across t periods; $WS_t - WS_{t-1}$ is the first difference in the wage share; $(NAI_t - NAI_{t-1})$ is the first difference in the non-accommodation index, constructed as explained above; IC_{t-1} is the index of wage coordination, lagged once, constructed as explained above; $(NAI_t - NAI_{t-1})*IC_{t-1}$ is the interaction between the first difference in the NAI and IC lagged once; $\sum \lambda_j CONTROLS_{i,j,t}$ is a vector of j controls across our i countries in t periods (these include three-year averages of annual changes in the unemployment rate, in the degree of trade openness, in the GDP growth rate, in net union density, and annual changes in the share of cabinet seats for Left parties).

All key dependent and independent variables were entered as three-year (static, not moving) averages, starting with 1973-75 and ending with 1997-99. Since wage contracts in CMEs usually cover two or three years, an annual measure would be misleading. A three-year average incorporates at least one, possibly two of these wage-bargaining cycles, and is therefore able to capture a trend while minimizing the effect of single-point deviations from that trend. The period is bracketed at the end by a logical consideration following from the argument here: when the Euro was introduced, both monetary policy and the NEER were fixed across all member-states, thus significantly reducing variation in one of the key independent variables.

Table 2 summarizes the key descriptive statistics of these variables. The sample consists of twenty advanced capitalist countries, most of which were OECD members during the period under

TABLE 2. Variable Summary

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Wage share	178	69.68178	6.671182	48.463	90.464
Central Bank Index	180	0.3984	0.1739053	0.09	0.873
Harmonised Composite Index	180	0.4920778	0.1369472	0	1
Non-Accomodation Index	180	0.4452556	0.1185205	0.139	0.685
Wage coordination index	178	0.5763146	0.3219488	0	1
Bargaining coverage	171	0.6269006	0.2621844	0	1
Index of coordination	171	0.601655	0.2397456	0	0.984
Unemployment rate	180	6.905783	4.220048	0.11	23.095
Union density	179	43.51843	20.02646	8.333	100
GDP growth	180	2.766939	1.62675	-3.432	9.545
Left Cabinets	179	34.97223	35.56332	0	100
Openess	180	60.53688	28.14094	15.61	157.741
Public sector Employment	153	24.58097	5.26176	13.304	35.547
Manufacturing sector Employment	153	23.4868	4.691493	13.765	34.439
Long term Interest rate	138	8.977152	3.072597	1.888	16.604

consideration: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, US. Greece is omitted due to the data availability and data quality problems that are perennially associated with that country: for some of the key independent variables, over three-quarters of the observations were missing. Luxemburg is excluded because of its size and exceptional economic structure. Missing data, which occurred more in the 1970s than afterwards, were interpolated: while this is not optimal, the regime nature of many variables minimizes measurement errors associated with imputed values.

The argument developed earlier in this paper predicts that the negative effect on the wage share will be highest when the value of the NAI increases against the background of a high level of CWB. The hypothesis that I will test here is therefore that the effect of the interaction term CWB*NAI on the wage share is significantly more negative than any individual effect of CWB or NAI. If that is the case then, regardless of the marginal effect of either coordinated wage bargaining or conservatism of monetary policy (which both have been reported to have negative effects on the wage share), the wage share will fall considerably more if both conditions are present.

The controls that I introduce follow two types of arguments made in the literature: on the one hand those related to macro-economic policy and economic structure and, on the other, variables that address political-institutional dimensions. The economic controls include the ratio of trade over GDP (intended to capture 'globalization'), the unemployment rate (the bargaining power of wage earners), GDP growth, and employment in the public sector and in manufacturing (where each have opposite propensities with regard to wage moderation), and the long-term real interest rate (which would have a positive effect on the capital share and therefore a negative effect on the wage share). The political-institutional variables, in turn, cover an indicator of trade union strength (union density in this case) and Left cabinet seats. Both of these are, in contemporary political-economic theory, considered as key indicators for the power resources approach at the basis of the neo-Marxian approaches.

Logic suggests running the regression as a random effects model with panel corrected standard errors, and tests confirmed that this was an adequate choice. Heteroskedasticity and auto-correlation tests argued against rejecting the null hypotheses of the absence of either, and other tests suggested that the data are cross-sectionally related. Combined these three test results therefore argue in favour of using panel-corrected standard errors. In addition, Hausmann tests suggested that the model should be estimated with random effects. A random effects model is, given the hypothesis in this paper, also the

logically correct model for the regression: since the argument of the paper is built on institutional variation across country cases, filtering out individual country effects would defeat the purpose. (Running the model with fixed effects as a check had no substantive effect on the sign, significance and size of the relevant coefficients.)

The results for the regression model above, with the three-year average of the first differences in the wage share, lagged one-year, as the dependent variable, and NAI and CWB, as well as the interaction term between the two, lagged one year, are reported in table 3. These results are very interesting. Not only does the CWB*NAI interaction term perform as predicted (a considerably larger negative effect than when either CWB or NAI are introduced on their own), but in addition, the NAI on its own has only a small, and statistically insignificant negative effect in some of the model specifications. The wage bargaining regime, as captured in the level of the CWB index, always produces a significant negative effect (of the same order of magnitude). This effect is, however, overshadowed by the considerably larger effect of the interaction term of wage bargaining regime (CWB) and central bank conservatism (NAI).

Most of the controls introduced in the model have relatively small predictable effects, but even larger effects do not change the basic logic: the main coefficients remain relatively stable across all controls. Unemployment and globalization (trade with emerging economies) have the predictable (negative) effects on the wage share. GDP growth has an, at first glance surprising, negative effect. However, since the wage share is a proportion of GDP (which is the denominator), growth of GDP would, all other things equal, always have a mechanical negative effect on the wage share, even (or better, perhaps: especially) if wages are stable. Interestingly, the standard political explanations fare very poorly in this analysis. The two key variables for the power resources school, union strength, measured as union density, and Left party strength, not only produce tiny marginal effects, but are never significant. Controlling for employment in the manufacturing or public sector (not reported here) has no effect on sign, size or significance level of the variables in the basic model. And the long-term real interest rate (not reported here) fares particularly poorly: a rise in the real interest rate has a significant positive effect on the wage share rather than the negative one expected in the monetarist argument.

Robustness checks had very few, and usually small, effects on the whole, but where they did, it has to be borne in mind that the alternative operationalizations were often inferior to the indicators used here, both conceptually and in terms of precision of measurement. In any case, most of these changed very little about the key coefficients (although sometimes variables would lose their significance). A complete sensitivity analysis, in which individual countries and periods were systematically dropped from the initial data set, did not produce any noticeable effects on the results either: again, in a small number of cases variables would lose their significance.

These results leave little doubt that the negative effect on the wage share is exclusively felt when central banks adopt conservative policies against the background of strong trade unions in a coordinated wage bargaining setting. In the absence of one of these conditions, it turns out, the negative effect on the wage share is considerably smaller or possibly even non-existent. While the lagged structure of the model suggests the direction of causality – the institutional variables have the effect and not the other way around – this statistical analysis tells us little about the mechanism at the basis of these effects. To examine that, I introduce two case study analyses in the next two sections. I will start with a comparison of Germany and the UK, and continue with the high-inflation countries that prepared for entry into EMU during the 1990s.

COMPARING DIFFERENT REGIMES IN GERMANY AND THE UK

Germany is an advanced capitalist economy that in many ways has epitomized the strong labour institutions setting from the

TABLE 3. Regression Results for Wage Share, Wage Bargaining Regime and Monetary Policy, OECD 1973-99

Dependent variable: First difference in wage share

Column	I	II	III	IV	V
Lagged dependent variable	0.0284	0.0303	0.0274	0.0253	0.0799
Non-accomodation index (first difference)	-4.4372***	-1.1043	-0.9521	-0.9516	-0.9444
Index of Coordination (lagged)	-1.8086***	-1.7197***	-1.7224***	-1.7393***	-1.4214***
Non-accomodation index (first difference)*Index of Coordination (lagged)		-5.7374*	-6.0821*	-6.0299*	-6.9541**
Unemployment rate (first difference)	-0.4105***	-0.4049***	-0.4045***	-0.4026***	-0.3517***
GDP growth	-0.8833***	-0.8795***	-0.8769***	-0.8739***	-0.7381***
Left Cabinet share (first difference)			-0.002	-0.002	-0.0024
Union density (first difference)				0.0083	-0.0007
Openness (first difference)					-0.1015***
trend	0.0457	0.0489	0.049	0.0486	0.1111*
Constant	2.3284***	2.2533***	2.2481***	2.2632***	1.5676***
Observations	132	132	132	132	132
R-squared	0.3911	0.3942	0.3952	0.3953	0.4457

Legend:* p<.1; ** p<.05; *** p<.01

mid-1970s through the 1990s. Trade unions controlled wage-setting both directly through their strong position in the formal wage-setting institutions, which ensured high bargaining coverage, and their equally strong position in companies and workplaces, which backed up the wage arrangements. Germany has consistently scored very high on any measure of wage coordination, bargaining coverage and overall union strength for most of the 1970s, 80s and 90s. The UK stands for the opposite socio-economic model: since the collapse of central income policies in the

late 1970s and the Thatcherite attack on the trade unions, the country has witnessed a collapse of union strength and a massive decentralization of wage bargaining (in almost the entire private sector; less so in the public sector). By the late 1980s, the UK's wage coordination score (Kenworthy 2006) had fallen the most among the advanced capitalist countries, to the lowest point, shared with the USA. Given these different evolutions of the labour market and wage setting, how are we to make sense, then, of the relative stability of the wage share in the UK and the dramatic fall of over 10% in Germany since the 1970s?

The UK intuitively provides the benchmark model. In a textbook neo-classical labour market, a stable wage share is a situation in which growth rates of wages keep pace with productivity growth rates. The UK's highly decentralised and deregulated labour market approximates this textbook model: if wages rise too fast, either prices rise (and real wages fall) or workers price themselves out of the market, and wages adjust downwards (or all of the above). As long as wages rise at or below the level of productivity, prices will, all other things equal, not rise. Workers thus have, in this situation, a strong incentive to keep wage growth in check, with the inadvertent effect that the wage share remains stable. Germany is the odd one out for most standard economists, since the wage share has fallen there – and it is the odd one out for most political economists, because it does so while having strong trade unions (especially during the 1980s and 1990s) and high levels of inter-industry wage coordination.

The key mechanism to understand the evolution of the wage share in Germany is related to the interaction between the independent Bundesbank (until 1998) and the leading trade unions (Hall 1994; Hall & Franzese 1998). The lead trade union in wage negotiations during the 1980s and 1990s was the engineering union IG Metall: its wage settlements were formally and informally treated as the target wage rates for the rest of the economy. This pattern bargaining arrangement led to a high degree of coordination of wage rates throughout the economy, both within and between sectors. From the 1970s through the 1990s, wage settlements in the engineering sector virtually always led the wage bargaining rounds, and subsequent wage settlements in the other export sectors (especially in chemical engineering and textiles), as well as much of the sheltered sectors, were consistently within several tenths of percentage points of the IG Metall settlement (data from the WSI Tarif-Archiv).

When considering wage demands, IG Metall faced one crucial constraint: the Bundesbank's last-mover position in the implicit signalling game between central bank and union. Since IG Metall is the wage leader in pattern bargaining, the Bundesbank would rapidly punish a settlement in the engineering sector that it considered inflationary. The union, well aware of this, thus set wages within a range considered commensurate with the Bundesbank's low inflation target. Conversely, since an inflationary settlement outside the export sector would invoke the same reaction by the Bundesbank (think of domestic inflation as the weighted average of inflation in the exposed and sheltered sectors in an economy), the export unions need to be vigilant about those effects, else their wage moderation efforts may be entirely eliminated by the wage results in the sector, inflation ensues, and the Bundesbank responds accordingly with an interest rate hike. The exposed sector, typified here by the export-oriented engineering sector that leads wage bargaining, thus faces a strong incentive to impose wage moderation on other sectors in the economy, through some form of wage coordination. The export sector labour union's wage rate, below productivity, thus becomes the economy-wide wage rate, with the aggregate effect that the wage share falls.

If this analysis is correct, it raises an additional question: why do central banks in Germany and the UK, both relatively conservative, inflation-targeting monetary authorities for much of the period under consideration, adopt such different stances toward wage setting? In an analysis that addresses not just wage-bargaining but more broadly different *aggregate demand management regimes*, Soskice (2007) argues that it is precisely the combination

of power and structure of the strong trade unions in Germany that has forced the Bundesbank to toe a very strict disinflationary line by issuing credible threats and responding vigorously in the case of inflationary wage settlements. A wage bargaining system with a handful of strong trade unions permanently faces the risk of defection by at least one of them – and, because of its collective action problem dynamics, therefore in principle by all (Calmfors & Driffill 1988). The German set-up, with a small number of trade unions is exactly in this situation, and the central bank acts as a brake on these potentially inflationary dynamics. The relative strength of the individual trade unions, in other words, sets in motion the mechanisms through which the central bank imposes strict limits on nominal wage growth through wage coordination around a low-inflation wage target. Absent this pressure from the trade unions, as is the case in the UK, where many more and, most importantly, much weaker trade unions are *not* engaged in wage coordination – which implies that wage settlements in one sector do not have the pilot function that IG Metall's would have – the central bank either sees no need to target particular wage settlements, or is simply unable to do so, as it cannot gauge the aggregate effects of such an action. In that situation, the central bank may target a multitude of other indicators, including aggregate wage evolution, but without entering into the signalling game that characterized Germany under the Bundesbank.

The next section analyzes a political-economic dynamic that sheds a complementary light on the point developed thus far. The evolution of the average wage share across all prospective EMU members that had not been members of the core DM-bloc prior to 1992 offers an interesting perspective on the effects of interactions between central banks and wage setting systems. Since all these countries imposed disinflation through conservative central banks ('monetary conservatism' effectively was embedded in the nominal targets of the Maastricht convergence criteria: low inflation, and stable exchange and interest rates), and since many relied on coordinated incomes policies involving trade unions and employers to do so (Hassel 2006; Pochet 2000), two core institutional elements at the basis of the argument in this paper suddenly emerged in these economies.

THE WAGE SHARE IN THE 'PERIPHERAL' WEST-EUROPEAN ECONOMIES UNDER 'MAASTRICHT'

Several of the economies that joined EMU in 1999 had signed the Maastricht Treaty in 1991, without being a member of the core DM-bloc in the 1980s: Italy, Spain, Portugal, Ireland, and Finland. These countries had been members of the Exchange Rate Mechanism (ERM) at the basis of the European Monetary System, but occasionally pursued large devaluations much later than the early starts (Austria, the Netherlands, Denmark, and Belgium in particular). In addition, their inflation rates were significantly higher than those of the DM-bloc countries at the start of the Maastricht process in 1992.

Almost all of them went through often quite dramatic domestic policy adjustments after the ratification of the Maastricht Treaty to be among the first countries to adopt the Euro in 1999. The Maastricht criteria imposed low inflation on prospective EMU member-states, which would allow them to stabilize exchange rates and interest rates against the low target values imposed by the Maastricht norms. Many of them thus immediately adjusted two crucial elements of their macro-economic regime: they instituted inflation-averse, conservative, central banks alongside the introduction of some form of coordinated incomes policies (with or without social pacts; Herrmann 2005; Hancké & Rhodes 2005). A comparison between the evolution of their average wage share with that of the others therefore ought to help us assess the argument in this paper that the combination of (more) coordinated wage setting and conservative central banks leads to a significant fall in the wage share.

The fall in the wage share during the period associated with the Maastricht regime (1992-99) was, as can be inferred from Table 4, considerably sharper in the countries that had disinflation imposed upon them as a result of the adoption of the

TABLE 4. Evolution of Wage Share in Four EMU 'Latecomers' and the DM-Bloc, 1992-99

Ireland	-10.4%
Italy	-9.3%
Portugal	-4.3%
Spain	-3.6%
Unweighted average	-6.9%
Unweighted average DM-bloc 1992-99	-2.7%

Maastricht Treaty: the (unweighted) average decline of the wage share in Italy, Spain, Ireland, and Portugal is -6.4% versus -2.7% for the others (Germany, France, The Netherlands, Belgium, Austria and Denmark – the latter preparing for but ultimately not entering EMU). Let us examine the dynamics in each of the cases.

The almost 10% drop in Italy is the sharpest drop in that country over the past three decades, and is almost entirely attributable to the 1993 Social Pact. The pact, agreed in light of the (Maastricht-imposed) need to bring down inflation structurally was explicitly designed to contain wage inflation by setting a wage floor of past inflation and a hard wage ceiling of productivity. Italian trade unions and employers responded by setting up a system of central coordination of wage bargaining, which negotiated the wage floor and gave strong guidelines to industrial sectors about the add-on at the sector level. At the same time, the central bank was made independent and pursued a clear disinflationary strategy – with the implicit promise of low interest rates if wage inflation was kept in check through wage coordination and, conversely, retaliation if inflation rose. The effect was that inflation (measured as the consumer price index) in Italy fell rapidly, from 6.45% in 1990 to 4% in 1996 (Source: OECD).

Ireland's sharp drop of over 10% during the Maastricht period appears against the background of an almost equally large fall in the wage share in the 1980s of roughly 10%. To a large extent this evolution of the wage share was, as Baccaro and Simoni (2007) demonstrate, by design: in 1987 the labour unions agreed to change the reference wage for the economy as a whole from the highly productive multinational sector to the less productive domestic exposed sector, and impose central wage discipline around this wage target. With this organized shift towards a significantly lower wage target, wage inflation fell rapidly. Joining the ERM in the mid-1980s provided the second necessary element in the set-up, since it introduced a conservative monetary policy that imposed wage disinflation (although, as Hodson 2003 demonstrates, in the permanently overheating Irish economy the nominal exchange rate remained a relatively important policy tool even with high levels of wage coordination). From the second half of the 1980s, therefore, the wage share in Ireland fell dramatically (almost 14 percentage points between 1987 and 1999).

The fall in the wage share in Spain and Portugal was considerably less pronounced than the average of this late-EMU group. In the case of Spain, however, this should be read against the introduction of disinflationary monetarist policies in that country under Felipe Gonzales' PSOE government in the 1980s (Boix 2002), when the wage share fell by close to six percentage points. The inability of the Spanish trade unions to negotiate an encompassing incomes policy in the 1990s against the background of monetary tightening helps understand why the fall in the wage share was, though by no means insignificant, less pronounced here than in Italy and Ireland during that period. The Portuguese situation is quite unique in that wage setting was led not by the export sector (which was too small) but by the public sector which, all other things equal,

would result in more inflationary wage settlements and a slower fall of the wage share.

In many ways, this group of countries offers the closest thing to a controlled experiment that political economists can hope for: it is an internally very diverse group, sharing only one characteristic – the imposition of a disinflationary regime by a central bank backed up by the hard sanction of non-entry into EMU. In response, many of these countries adopted an increase in wage coordination as a means of getting there. The fact that the outcomes in most individual countries as well as in the group as a whole follow the predicted pattern suggests that very few of the country-specific factors can explain the outcome of a dramatic drop in the wage share.

Combined, the case study-based analyses in this section and the static comparison of the wage share in Germany and the UK earlier shed some light on the mechanisms behind the fall in the wage share in countries with relatively strong wage setters in coordinated wage-bargaining systems. In addition, the internal variety within the group that entered the Maastricht period with high inflation rates suggest that many other factors that could have influenced the evolution of the wage share almost certainly only played a marginal role. On the whole, the central argument of this paper also seems to stand up quite well against the empirical evidence presented in this qualitative section. If unions do not set wages in a centrally coordinated manner, even when central banks have become more conservative, wage shares remain stable; however, when wage setting is coordinated, the wage share falls because conservative central banks impose wage moderation.

CONCLUSION

The basic argument of this paper can now quickly be summarized. The evolution of the wage share in the OECD between the 1970s and today has followed a deeply counter-intuitive pattern. In countries with weak labour unions, decentralized wage-setting systems and deregulated labour markets, the wage share has more or less remained stable since the 1970s. In countries with strong unions and highly coordinated wage bargaining systems, in contrast, the wage share has fallen quite dramatically over the last three decades of the previous century. The regression analysis earlier in this paper demonstrated convincingly that both central bank conservatism and wage coordination are necessary conditions for such a dramatic drop in the wage share. The explanation is that the strength of the trade unions forced the central bank(s) to impose a credible disinflationary system, precisely to contain the otherwise strong inflationary pressures in the system – and this has led to the collapse of the wage share. Strong trade unions are thus forced to internalize the low-inflation preferences of the central bank in their wage claims, set nominal wage rates below productivity rates as a result, and ensure low aggregate inflation by extending those non-inflationary wage rates to the rest of the economy. From a more orthodox position in economics, the problem is the reverse, but leads to the same argument: from that perspective the surprise is not why the wage share in a country like the UK has remained stable since the Thatcher years, but why the German collective bargaining system, with its strong trade unions, has not led to a steady rise in the wage share since the 1970s. Yet whichever way we approach the problem, the puzzle remains, and the argument in this paper helps resolve it: central banks disciplined organized labour by imposing disinflationary wage setting.

This paper can be seen as part of a growing literature that reassesses the politics of central banks in advanced capitalist economies. While much of that debate initially addressed points of a primarily technical nature, criticising overly restrictive monetary policies (see e.g. Allsopp & Arthis 2003; Allsopp 2004; Buiter 2006), the politics surrounding central banks have increasingly become the subject of analysis and debate as well. Mc Namara's (2002) critique of central bank independence can thus be seen alongside Iversen & Soskice's (2006) critique of the standard macro-economic models underlying central bank independence which de-politicise the role of monetary authorities, and Cusack's (2001) analysis of

the partisan nature of monetary policy as a way for political economists to come to terms with the new conventional wisdom in macro-economics. Taken as a whole, that debate suggests that conservative central banks have played a very important political-economic role in the last three decades, usually acting against the Left in government (even when Left-wing governments adopted more restrictive fiscal policies than the Right), disciplining trade unions, and thus presiding over a massive transfer of wealth from labour to capital. Central bank conservatism may have promised an implicit free lunch of low inflation growth (after the stagflationary 1970s and 1980s), but wage earners, it seems, have seen less of that meal than citizens who are not dependent on work for their livelihood.

APPENDIX

DEFINITIONS AND DATA SOURCES

Variable	Name	Missing observations	Description	Source
WS	Wage share as % of GDP	2	The annual labour income share is calculated for this database as total labour costs divided by nominal output. The term labour income share is used as the total labour costs measure relates to compensation of employees adjusted for the self employed	OECD statistics
HCI	Harmonised Composite Index	0	This is standardised and normalised index based on the three years static average of the annual growth rate in the nominal effective exchange rate. A nominal effective exchange rate is the exchange rate of the domestic currency vis-à-vis other currencies weighted by their share in either the country's international trade or payments	The nominal effective exchange rate is taken from the OECD statistics. The HCI is derived from own's calculations
CBI	Central Bank Independence	0	Cukierman independence index. The potential range of the index for legal centreal bank independence is from zero (minimal independence) to one (maximum independence).	Cuckierman (1992) and Polillo and Gullien(2005)
NAI	Non Accommodation Index	0	This is a simple average of the CBI and the HCI	Own calculations following Johnston (2011) and Iversen (1999)
WC	Wage Coordination Index	2	Coordination of wage bargaining 5 = economy-wide bargaining, based on a) enforceable agreements between the central organisations of unions and employers affecting the entire economy or entire private sector, or on b) government imposition of a wage schedule, freeze, or ceiling. 4 = mixed industry and economy-wide bargaining: a) central organisations negotiate non-enforceable central agreements (guidelines) and/or b) key unions and employers associations set pattern for the entire economy. 3 = industry bargaining with no or irregular pattern setting, limited involvement of central organizations and limited freedoms for company bargaining. 2 = mixed industry- and firm level bargaining, with weak enforceability of industry agreements 1 = none of the above, fragmented bargaining, mostly at company level Note this variable is transformed: normalised and standardised from 0 to 1.	ICTWS database (Visser 2009)
ABC	Adjusted Bargaining coverage	9	Employees covered by wage bargaining agreements as a proportion of all wage and salary earners in employmenet with the right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right. Note this variable is transformed: normalised and standardised from 0 to 1.	ICTWS database (Visser 2009)
IC	Index of Coordination	9	This is a simple average of the Wage coordination index (normalised and standardised from 0 to 1) and the adjusted bargaining coverage (normalised and standardised from 0 to 1)	Own calculations
ud	Union density	1	Union Density, net union membership as a proportion wage and salary earners in employment	ICTWS database (Visser 2009)
gdpgr	GDP growth rate	0	Growth rate of Gross domestic product (expenditure approach)	OECD statistics website
ur	Unemployment rate	0	Rate of Unemployment as % of Civilian Labour Force	Annual Labour Force Statistics database, OECD statistics
leftc	Left share of cabinet	1	Left party cabinet portfolios as a percent of all cabinet portfolios	Duane Swank: Electoral, Legislative, and Government Strength of Political Parties by Ideological Group in Capitalist Democracies, 1950-2006: A Database.
open	Openness	0	Trade-to-GDP-ratio (total trade). Current prices, current exchange rates	OECD statistics: Macro Trade Indicators
pub	Public sector employees as % total employees	NO, SWI, and NTH missing (27); values for 1970s extended from 1980s	Proxied by L, M, N divided by total employees in all industries	KLEMS database
man	Manufacturing employees as % of total employees	NO, SWI, and NTH missing (27); values for 1970s extended from 1980s	Proxied by D divided by total employees in all industries	KLEMS database

lir	Long run interest rate	42	Long term (in most cases 10 year) government bonds are the instrument whose yield is used as the representative ‘interest rate’ for this area. Generally the yield is calculated at the pre-tax level and before deductions for brokerage costs and commissions and is derived from the relationship between the present market value of the bond and that at maturity, taking into account also interest payments paid through to maturity.	OECD statistics

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