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The Effect of Britain's Anti-Discriminatory Legislation on Relative Pay and Employment: Further Evidence

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Working Paper No. 39

In a recent paper in the ECONOMIC JOURNAL, Zabalza and Tzannatos (1985) [ZT]]] state that "anti-discriminatory legislation has had a positive and significant effect on both relative earnings and relative employment of women" (p. 693). This conclusion is based on the evidence they present of an upward shift in the relative (female/male) demand for labour function following the passage of anti-discrimination legislation [ADL] in the 1970s. They identify a decline in employer discrimination as the source of this increase in demand.

The purpose of this paper is to reexamine the effects of ADL on the labour market. It will be shown that the conclusions reached by ZT need to be significantly modified in the light of a number of considerations not adequately dealt with in their study. It is shown that rather than viewing the increase in relative earnings following the passage of ADL as evidence of a decline in discrimination, it is more plausible to regard the years following the introduction of the new legislation as a period of gradual and incomplete labour market adjustment to an exogenous wage shock.

The paper is organized as follows. Section I looks at the changes in the structure of relative wages and employment in the 1970s. Section II examines the employer discrimination model as a framework for analysing the female labour market and explores the robustness of the econometric results presented by ZT. In Section III an alternative model is proposed and tested. It is shown that while ADL increased the relative female wage, this occurred at the cost of a significant deterioration in relative female employment prospects. Section IV extends the tests of these alternative models using some cross-section data for manufacturing industry.

I. THE FACTS[1]

Over the period 1950-1973 there was very little variation in the ratio of female to male wage rates. The highest value recorded was 0.6028 in 1951, the lowest 0.5764 in 1968. Between 1973 and 1977, however, the ratio rose from 0.5982 to 0.6696. Clearly, by historical standards this was an enormous rise, whose magnitude should be kept in mind when studying how the labour market adjusted to it. Data for individual industries reveal that a marked rise in relative female wages occurred in all sectors (see Table A1).

In assessing trends in relative employment it is very important to avoid confusing the effects of changes in the sectoral distribution of employment with changes in relative female employment in individual sectors. In Table 1 the ratio of female to male employment is shown for the the whole economy and for the following sectors: the Public Sector;[2] Manufacturing Industry; Distributive Trades; Insurance, Banking and Finance; and Miscellaneous Services. (These cover the whole economy except for Agriculture and Construction, where female employment is not significant.) While the relative employment of women increased between 1970 and 1975 in the economy as a whole, outside the Public Sector it declined in all sectors (except Miscellaneous Services).[3] Moreover, in 12 of the 17 industries in Manufacturing for which data are available the relative number of females employed was lower in 1975 than in 1970 (see Table A1).

Thus the rise in relative female employment in the economy as a whole was due to two factors, namely, the sharp increase in relative female employment in the public sector and the decline in the share of male intensive sectors (such as Manufacturing) in total employment. Outside the public sector, the relative employment of women declined

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[1] Definitions and data sources are the same as in ZT.

[2] This is defined by ZT as those sectors in which the central or local government is the main employer.

[3] It is necessary to use numbers rather than hours worked at this level of disaggregation. This tends to understate the decline in relative female employment because the growth in part-time working has been mainly among women.

between 1970 and 1975 in all the main branches of economic activity, but this is masked in the aggregate data by the shift in activity towards the more female-intensive sectors. The simultaneous increase in relative wages and employment in the private sector cited by ZT as prima facie evidence of an upward shift in the relative demand for labour is not evident in the disaggregate data for the private sector. The importance of this basic fact is that a decline in relative employment accompanying a rise in relative wages is consistent with an increase in demand only if the supply curve shifted in by more than the demand curve shifted out. It is difficult to believe that this occurred during the 1970s in view of the rise in relative female unemployment over the period (see Section III, below).

II. THE ZT MODEL AND RESULTS

The theoretical framework used by ZT is the Becker model of employer discrimination. In this model, it is assumed that employers have an aversion to hiring members of certain population groups (minorities), which they indulge at the expense of some of their monopoly profits. This type of discrimination results in members of the minority being paid less than majority workers with the same productivity. The cost minimization condition for the discriminating employer is:

$$(1) \qquad MP_{min} / MP_{maj} = W_{min} (1+d) / W_{maj}$$

where MP refers to marginal productivity, W to wages, the subscripts to the minority and majority, respectively, and d is the discrimination coefficient. The model predicts that discrimination will be higher the greater the degree of monopoly in a sector and that competitive forces will tend to reduce it over time. However, as Sloane (1984) points out, empirical tests of these hypotheses, mostly in studies of black/white wage differentials in the USA, have yielded "mixed results" (p. 97).

The relevance to the female labour market of theories of discrimination based on an exogenous prejudice on the the part of employers has been questioned. Becker (1971, p. 62) suggests that the most important discrimination against women in the labour force is their exclusion from the higher paid occupations, and crowding into lower paid occupations, in accordance with Edgeworth's (1922) hypothesis. Chiplin and Sloane (1976) refer to a general "dissatisfaction with taste-based theories" of sex discrimination (p. 73). Block and Walker (1985) claim that the pressure for equal pay is based on a faulty analysis of the origins of female/male wage differentials and if successful would lead to increased unemployment among lower-paid women workers.

Despite the lack of consensus on the appropriate theoretical framework to apply to sex differentials in earnings, ZT assume that the employer discrimination model applies to the British female labour market and concentrate on showing that the discrimination coefficient was reduced by the introduction of legislation in the 1970s. A fall in the discrimination coefficient would cause the relative demand for labour curve to shift outwards. They test the hypothesis that such a shift occurred using the following general model:

$$(2) \quad W_f / W_m = d(E_f / E_m , D)$$

$$(3) \quad E_f / E_m = s(W_f / W_m)$$

where W and E refer to wages and employment, the subscripts to females and males, respectively, and D is a set of dummy (intercept shift) variables that measure the effects of ADL. The expectation is that $d_1 < 0$, $d_2 > 0$ (where these are the relevant partial derivatives).

Because of the assumed flexibility of relative wages, this is an equilibirium model of the labour market. There is no unemployment. In Britain between 1970 and 1975, however, the female unemployment rate in the economy as a whole rose from 0.9% to 1.6% and the male rate from 3.3% to 4.9%, and the ratio of female to male unemployment rose

from 0.273 to 0.327. The rise in relative female unemployment in Manufacturing was more pronounced, from 0.400 to 0.579. Between 1975 and 1980 these ratios rose even more markedly, reaching 0.667 in the whole economy and 1.036 in Manufacturing. This is evidence of an increasing degree of labour market disequibrium during the period under study and an additional reason for questioning the validity of modelling the female/male labour market in the equilibirum framework of the employer discrimination model.[4]

ZT estimate only the demand function. The actual specification estimated is:

$$(2') \quad \ln (W_f / W_m) = a_0 + a_1 \ln(FH/MH) + a_2 \ln I + a_3 T + a_4 D + a_5 IP + u$$

where FH refers to hours worked by females, MH hours worked by males, I is an index of the structure (female intensity) of employment, designed to compensate for the use of aggregate data, T is a linear trend, D is a set of dummy variables to measure the effects of the implementation of ADL over the years 1971-75, IP is an incomes policy dummy variable, and u is a random error. A vacancy variable (V) was included in some specifications but its contribution was not statistically significant. The endogeneity of the employment variable was handled by using an Instrumental Variables procedure, with income (Y), male unemployment (U) and fertility (FI) as instruments.

In the original Becker model, the supply of both types of workers is fixed in the short run and relative wages adjust to clear the labour market. This is why wages are the left-hand-side variable in (2). In the cross-section (inter-state or inter-industry) framework used in most empirical applications of this model, it may be plausible to assume that relative wages adjust to changes in relative supply, but ADL led to an exogenous change in relative wages to which the quantity of labour supplied and demanded had to adjust, and it is less clear that employer discrimination model is appropriate in this situation.

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[4] These figures are for registred unemployment. The picture revealed by survey data on unemployment is different, but such information is available only since 1973: see Joshi et al. 1985, Table 5. The male unemployment rate used by ZT as one of the instruments in their regression is the registered rate.

The wage variable used is relative hourly earnings. This does not reflect the effect of national insurance contributions on the relative cost of hiring female and male labour. The introduction of an earnings-related contribution in 1975, applicable to earnings above a threshhold that has been raised from £11 in 1975 to £34 in 1984 (much faster than the growth of hourly earnings), has been cited as an important factor in the growth of part-time female employment (Disney and Szyszczak, 1984; Robinson, 1985). The model estimated by ZT ignores this possibility.

ZT present the results obtained when four dummy variables are included to capture the cumulative effect of the legislation. These are D71, D72, D74 and D75, each of which takes a value of 0 up to 1970 (1971 etc.) and a value of 1 afterwards. This specification was found "after some experimentation" to fit the data best (p. 686). The omission of a dummy variable, D73, taking a value of 1 from 1973 onwards, is not discussed. It is difficult to understand why the cumulative impact of the legislation should have been interrupted in 1973. Moreover, it is difficult to believe that the labour market would by 1975 have fully adjusted to the Equal Pay Act, passed in 1970 and entering into force at the end of 1975. Yet the model used by ZT assumes that the movement from a pre- to a post-ADL equilibirum was complete by 1975.

Table 2 contains the results obtained when equation 2 was reestimated altered only by the inclusion of the dummy variable D73. Results are also shown for Manufacturing, for which it is possible to obtain the relative numbers in employment (F/M).[5] These results are less satisfactory than those reported by ZT. The coefficient of D73 is not significant and its inclusion reduces the significance of the other dummy variables designed to capture the effects of the new legislation. However, the magnitude and significance of D74 and D75 are not greatly affected and neither is the magnitude of the total effect over the period 1971-75. More important is the reduction in the significance of the employment variable, which is not significant at the 10 per cent level in any of

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[5] The same wage variable is used for all sectors in ZT (see p. 691).

the equations in Table 2. By comparing equation 4 with equations 1, 2 and 3 it is clear that on statistical grounds the justification for including the employment variable in these equations is weak, and becomes weaker the more the data are disaggregated.[6] The trend variable is included in these equations to measure inter alia the effect of changes in relative productivities over time. The consistently negative coefficients obtained, which in in the equations used by ZT are highly significant, suggest that the relative productivity of women has declined by about a third of a per cent a year over the period 1950-80. This interpretation is difficult to accept in view of the narrowing gap between female and male educational attainment since 1960 (see Joshi et al., 1985, p. S154.) Alternatively, in the framework of the Becker model, the negative trend could be interpreted as evidence of a ceteris paribus tendency for discrimination to increase due, for example, to an increase in the level of monopoly profits in the economy. However, this explanation is also implausible.

Thus the case for applying the employer discrimination model to the British female labour market is not convincing. While it is clear that the passage of ADL raised the relative wages of women workers, this need not be accepted as evidence of the existence of employer discrimination prior to the legislation or of a reduction in the degree of discrimination subsequent to its passage.

III. AN ALTERNATIVE DISEQUILIBRIUM SPECIFICATION.

An alternative to the employer discrimination model, and one that appears more relevant to developments in Britain during the 1970s, would regard the rise in the relative wage in the 1970s as an exogenous shock to which the labour market adjusted slowly. In the absence of a break in the relationship between unemployment and wages following the

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[6] This is also the verdict reached if the demand function is is estimated for the years before 1971. The following estimates were obtained of the coefficient of the relative employment variable when equations 1, 2 and 3 in Table 2 were estimated for the period 1950-1970 (t statistic in parentheses): -0.239 (2.07) for the whole economy, -0.207 (1.13) for the private sector and 0.024 (0.11) for manufacturing industry.

introduction of ADL, relative unemployment would be expected to rise sharply during the 1970s. A general model of this type could be specified as follows:

(4) $W_f / W_m = W(T, IP, D)$

(5) $U_f / U_m = U(W_f / W_m , D)$

where U is the unemployment rate, and the model's predictions are that $U_1 > 0$ and $U_2 = 0$. The specification of this equation should allow for lags in the effect of wages on unemployment.

Equation (4) has already been estimated (see equation 4 in Table 2). As was pointed out in Section II, the exogenous wage specification is somewhat superior on statistical grounds to the relative demand for labour specification. On the strength of this finding, relative wages can be treated as exogenous and the unemployment equation estimated by Ordinary Least Squares. The equation estimated is:

(5') $\ln (U_f / U_m) = b_0 + b_1 + b_1 \ln(W_f / W_m) + b_2 T + b_3 D + b_4 KW + u$

where, in addition to the variables already defined, KW is a dummy variable equal to 1 in 1952 to allow for the upsurge in female unemployment in the textile industry in that year.[7] This equation was estimated using relative unemployment rates for the whole economy and for Manufacturing as dependent variables. The results are shown in Table 3. They conform with the the model's predictions and are very satisfactory by the usual statistical criteria. The association between relative wages and relative unemployment is quite strong in both the unlagged and lagged specifications. There is significant positive auto-correlation in the unlagged specification, however, which is not present in the distributed lag specification. The F-test for the inclusion of the set of ADL dummy variables is not significant (comparing equation 1a with 3a, 2a with 4a, 1b with 3b and 2b with 4b, respectively). The negative coefficient of the trend variable when the ADL dummies are

[7] The results are not at all sensitive to the inclusion of KW.

excluded is consistent with a secular rise in the relative productivity of female labour. These results are more favourable to the disequilibrium model of the labour market than the results shown in Table 2 are to the employer discrimination model.

The conclusion that ADL led to a widening of unemployment differentials is similar to that reported by Landes (1968) in his study of fair employment legislation in the United States. He states that "fair employment laws are associated with a widening of non-white-white unemployment differentials" (p. 527) and "the increase in the ratio of non-white to white male wages was made partly at the expense of greater unemployment differentials between non-whites and whites" (p. 545). In the same vein, Gilman (1966) attributed the smaller unemployment differentials (between blacks and whites) in the South than in the non-South to the possibility that "the differences between equilibrium and actual wage ratios are smaller there than in the non-South" (p. 1093). Block and Walker argue that equal pay in Canada would act like an "artificial boost in the minimum wage payable to women" which would in some cases be "tantamount to pricing them out of the market" (p. 71).

IV. INTER-INDUSTRY RESULTS

The employer discrimination model has usually been tested in an inter-industry framework. For this reason, it is particularly interesting to explore the effects of ADL on relative wages and employment at the industry level. It is possible to obtain data on female and male earnings, employment and unemployment for 10 industries in Manufacturing for 1970 and 1975.[8] Using these data, the following equations have been estimated:

$$(6) \quad \ln (W_f / W_m)_{it} = a + b \ln (F/M)_{it} + c\ D75 + \sum_i d_i\ IND_i + u$$

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[8] The wage variable is the ratio of female to male hourly earnings of manual workers, the employment variable is the ratio of female to male numbers employed, and the unemployment variable is the ratio of the female to male unemployment rates.The data are shown in Table A1.

$$(7) \quad \ln (U_f / U_m)_{it} = a' + b' \ln (W_f / W_m)_{it} + c' D75 + \Sigma d_i' IND_i + u$$

where, in addition to the variables already defined, IND is a set of industry dummy variables, which is included to reflect industry-specific non-wage factors affecting the sex composition of employment. D75 is a dummy variable equal to 1 for observations relating to 1975 and 0 for those relating to 1970. This variable is included to measure the cumulative effects of ADL. Equation (6) is a relative demand for labour function, formulated in accordance with the employer discrimination hypothesis. Equation (7) measures the effect of relative wages on relative unemployment, in accordance with the disequilibrium model formulated above.

The estimates obtained for these equations are shown in Table 4. As was the case for the time series data, the relative demand function is not satisfactorily estimated. Although the employment variable has the expected negative sign, it is not significant at the 5% level. In this equation, however, the coefficient of the D75 variable has the expected positive sign and is significant, reflecting the marked increase in relative wages between 1970 and 1975. In the light of these results, the relevance of the employer discrimination model to the female labour market remains moot and the hypothesis that the level of discrimination (whatever its nature) was not affected by the passage of ADL cannot be rejected. The hypothesis that the relative wages variable is exogenous can be maintained, however, justifying the application of Ordinary Least Squares in the estimation of equation (7). The results obtained for equation (7) are favourable to the disequilibrium model. Higher relative wages are associated with higher relative unemployment and there is no significant change in this association between 1970 and 1975. These findings reinforce the conclusions reached on the basis of the analysis of the time series data.

IV. CONCLUSION

In this paper the effects of recent British anti-discriminatory legislation on women's earnings, employment and unemployment have been reexamined. It has been shown that in addition to the basic issue of whether the employer discrimination model is the appropriate one to apply in an analysis of sex discrimination in the labour market, the strong positive effects attributed to this legislation by ZT may be questioned on four empirical grounds: (1) the wage variable used does not allow for the possible effects of changes in national insurance contribution thresholds on the demand for part-time labour, (2) the basic conclusion in the article depends on simultaneous increases in relative employment and wages that is not evident when the data are disaggregated; (3) their results are based on non-robust estimates of the relative demand for labour function; and (4) they ignore the dramatic rise in the relative unemployment rate of females that followed the passage of the legislation.

An alternative model, which does not take the employer discrimination hypothesis as its point of departure, is more consistent with the evidence. According to this model, relative wages have changed mainly as a result of exogenous (policy) forces. The relative earnings of women rose sharply between 1970 and 1975, but the ability of the labour market to absorb the relative supply of women seeking employment decreased significantly. On the basis of the evidence, it is not possible to attribute the historically low relative earnings of women to employer discrimination nor to reject the hypothesis that there was no reduction in discrimination following the introduction of anti-discriminatory legislation.

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Table 1: Relative (female/male) employment by sector in 1970 and 1975.

	1970	1975
Public sector*	0.701	0.836
Distributive Trades	1.304	1.264
Insurance/ Banking/Financial Services	1.108	1.054
Miscellaneous Services	1.239	1.320
Manufacturing Industry	0.452	0.421
Whole Economy	0.620	0.678

* Mining, Transport, Utilities, Professional and Scientific Services, and Public Administration.

Note: Relative employment refers to the number of females employment divided by the number of males (F/M).
For sources and definitions, see ZT.

Table 2: Estimates of the Relative Demand Function (1950-1980)

Dependent variable ln(relative hourly earnings) Mean = -0.499

	Whole Economy	Private Sector	Manu-facturing	
Equation No.	(1)	(2)	(3)	(4)
Explanatory Variables				
Constant	-0.2529 (0.89)	-0.4546 (2.71)	-0.724 (2.4)	-0.378 (2.2)
ln(FH/MH) or ln(FH/MH)* ln (F/M)**	-0.2363 (1.48)	-0.2065 (0.97)	-0.283 (0.83)	
ln(I) or ln(I*)	0.3647 (1.17)	0.1876 (1.21)		0.1237 (0.74)
T	-0.0038 (1.97)	-0.0032 (1.73)	0.0034 (1.61)	-0.0014 (4.02)
D71	0.0216 (1.81)	0.0216 (1.60)	-0.0021 (0.14)	-0.0116 (1.11)
D72	0.0111 (0.92)	0.015 (1.25)	0.0020 (0.14)	0.0109 (0.80)
D73	-0.0001 (0.005)	-0.0028 (0.16)	-0.020 (1.04)	-0.0146 (0.95)
D74	0.0556 (3.54)	0.0505 (3.55)	0.0540 (2.72)	0.0448 (2.91)
D75	0.0874 (7.44)	0.0883 (7.65)	0.0770 (4.53)	0.0830 (6.80)
IP	0.0153 (1.80)	0.0151 (1.52)	0.021 (2.54)	0.022 (2.91)
DW	2.26	2.29	1.70	1.70
Standard error of the regression	0.0082	0.0079	0.0101	0.0093

Table 2 continued

Notes:
(1) Equations 1, 2 and 3 are two-stage least squares estimates using as additional instruments a fertility index, male unemployment and non-labour income.
(2) Figures in parentheses are absolute t statistics.
(3) * Indicates variables defined for the private sector.
(4) ** Indicates variable defined for manufacturing industry.
(5) As the dependent variable does not vary by sector, equation 4 is not sector-specific.

Table 3: Regression equations for relative unemployment rates, 1950-1980.

(Dependent variable $\ln(U_f / U_m)$, mean = -0.2244)

	Equation Number			
	1	2	3	4
	a. Dependent variable refers to whole economy (mean = -0.57)			
Explanatory Variables				
Constant	3.566	2.227	2.743	1.252
	(5.60)	(5.07)	(1.09)	(0.91)
ln (Wf/Wm)	6.495	4.073	4.946	2.142
	(5.73)	(5.37)	(1.00)	(0.79)
T	-0.058	-0.027	-0.053	-0.032
	(8.75)	(4.12)	(4.41)	(3.42)
KW	0.519	0.555	0.561	0.560
	(1.95)	(3.78)	(2.01)	(3.68)
D71			-0.242	0.011
			(0.84)	(0.07)
D72			0.063	0.073
			(0.17)	(0.37)
D73			0.064	0.019
			(0.18)	(0.09)
D74			-0.241	-0.226
			(0.63)	(1.10)
D75			0.477	0.436
			(0.85)	(1.41)
Lagged Dependent Variable		0.584		0.569
		(6.80)		(6.13)
DW	0.516		0.71	
Durbin H		0.231		0.02
Standard error of the estimate	0.249	0.134	0.259	0.139

Table 3 continued

b. Dependent variable relates to manufacturing
(mean = -0.22)

Explanatory Variables				
Constant	3.525 (5.22)	1.648 (2.92)	1.671 (0.64)	-0.165 (0.01)
ln (Wf/Wm)	6.029 (5.04)	3.034 (3.22)	2.509 (0.48)	-0.284 (0.08)
T	-0.476 (6.80)	-0.015 (1.91)	-0.045 (3.56)	-0.021 (1.93)
KW	0.639 (2.27)	0.970 (5.12)	0.694 (2.41)	0.963 (4.77)
D71			-0.313 (1.05)	-0.056 (0.28)
D72			0.066 (0.17)	0.100 (0.40)
D73			0.114 (0.30)	0.074 (0.30)
D74			-0.080 (0.20)	-0.096 (0.37)
D75			0.612 (1.05)	0.509 (1.31)
Lagged Dependent Variable		0.648 (6.01)		0.612 (5.02)
DW	0.543		0.66	
Durbin H		-0.075		0.40
Standard error of the estimate	0.263	0.163	0.268	0.174

Note:
Absolute t statistics are in parentheses.

Table 4: Pooled 1970 and 1975 Cross-section Regression Results.

	Dependent variable $\ln(W_f / W_m)$ (mean = -0.459)	Dependent variable $\ln (U_f / U_m)$ (mean = -0.784)
Intercept	-0.840	1.31
	(6.3)	(2.5)
ln(F/M) or $\ln (W_f/W_m)$	-0.362	3.516
	(1.86)	(4.00)
Food/drink/tobacco	0.212	-0.587
	(2.92)	(5.2)
Chemicals	-0.608	-0.148
	(1.31)	(1.8)
Mechanical Engineering	-0.247	-0.343
	(1.4)	(3.0)
Electrical Engineering	0.181	-0.244
	(3.3)	(2.1)
Other Metal Goods	-0.525	-0.413
	(0.1)	(4.3)
Textiles	0.325	-0.625
	(2.8)	(4.66)
Clothing/ Footwear	0.761	-0.523
	(2.2)	(4.0)
Bricks etc.	-0.075	-0.792
	(0.7)	(6.0)
Paper & Printing	0.030	-0.305
	(0.6)	(3.4)
D75	0.126	-0.168
	(8.2)	(1.3)
Standard error of the estimate	0.028	0.083

Notes: (1) Figures in parentheses are absolute t statistics.
(2) The industry dummy variables represent intercept shifts relative to "Other Manufacturing"
(3) With 20 observations, there are 8 degrees of freedom and the critical value for the t statistic is 2.306 (two-tailed test, 95 per cent confidence level).

Table A1. Data Appendix.

	Relative (F/M) Unemployment Rates	
	Manufacturing	Whole economy
1950	0.92	0.76
1951	0.89	1.00
1952	2.60	1.875
1953	1.25	1.00
1954	1.22	1.00
1955	1.625	1.22
1956	1.33	1.00
1957	1.10	0.85
1958	1.20	0.81
1959	0.94	0.71
1960	1.00	0.73
1961	0.90	0.69
1962	0.875	0.70
1963	0.895	0.58
1964	0.83	0.56
1965	0.89	0.50
1966	0.67	0.43
1967	0.61	0.41
1968	0.41	0.30
1969	0.38	0.28
1970	0.40	0.27
1971	0.385	0.27
1972	0.405	0.29
1973	0.44	0.30
1974	0.41	0.25
1975	0.58	0.33
1976	0.72	0.48
1977	0.80	0.56
1978	0.89	0.60
1979	0.95	0.64
1980	1.04	0.67

Data on relative employment (E), wages (W) and unemployment (U) by industry (IND) for 1970 and 1975 (D75).

E	W	U	IND	D75
0.737	0.591	0.357	3	0
0.665	0.707	0.469	3	1
0.419	0.560	0.421	5	0
0.402	0.637	0.548	5	1
0.204	0.595	0.444	7	0
0.187	0.707	0.629	7	1
0.643	0.610	0.474	9	0
0.619	0.696	0.742	9	1
0.458	0.576	0.357	12	0
0.398	0.679	0.526	12	1
0.904	0.639	0.433	13	0
0.849	0.698	0.451	13	1
2.821	0.625	0.417	15	0
3.090	0.708	0.558	15	1
0.287	0.640	0.333	16	0
0.299	0.692	0.409	16	1
0.627	0.507	0.233	18	0
0.583	0.637	0.510	18	1
0.508	0.555	0.467	19	0
0.484	0.633	0.630	19	1

D75 = 1 for 1975, 0 for 1970

The Industry codes are:
3 = Food, drink & tobacco
5 = Chemicals and allied industries
7 = Mechanical engineering
9 = Electrical engineering
12 = Other metal goods
13 = Textiles
15 = Clothing & Footwear
16 = Bricks, etc.
18 = Paper/printing
19 = Other manufacturing.

These are the only industries for which all variables are available for 1970 and 1975. The relative employment variable is also available for the following industries:

	1970	1975
Coal/Petroleum Products	0.140	0.127
Metal Manufacturing	0.137	0.125
Instrument Engineering	0.598	0.567
Shipbuilding	0.073	0.074
Vehicles	0.150	0.142

Leather	0.743	0.779
Timber Goods	0.233	0.241

Note: Sources and definitions as in ZT.