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Working Paper No. 54

A Note on the Returns to Human Capital in the Eighties: Evidence from Twelve Countries,

Wilhelm Lorenz and Joachim Wagner

July 1990

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A note on returns to human capital in the eighties: Evidence from twelve countries

by

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(July, 1990)

Abstract: Based on identically specified human capital earnings functions of the Mincer-type, we report estimates of the rates of return to human capital (i.e. schooling and experience) for full time working male employees in twelve countries. The results are compared across countries and over time from the beginning to the end of the eighties.

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1. Introduction

It is a truism, that "(i)n all economies of which we have knowledge, people with more education earn on average higher incomes than people with less education, at least if the people being compared are of the same age." (Blaug 1970, 1) Human capital earnings functions of the type proposed by Mincer (1974) with the natural logaritm of earnings as endogenous variable and years of schooling, years of experience, and years of experince squared as exogenous variables are a standard tool in econometric studies of the rates of return to schooling and experience. Willis (1986, 526) labeled this function "one of the great success stories of modern labor economics. It has been used in hundreds of studies using data from vitually every historical period and country for which suitable data exist."

Though earnings functions are very popular, there seem to be only a few attempts to compare the resulting estimates of rates of return across countries. Besides the authoritative surveys by Psacharopoulos (1973, 1975, 1981, 1985) the pioneering study by Carnoy (1967) for Chile, Columbia, Mexico, and Venezuela, the collection of some results for the US, India, and Mexico in the textbook by Blaug (1970, 224), and the comparison of age-earnings-profiles for Japan, Sweden, and the US by Klevmarken (1982) are to be mentioned. Recently, Psacharopoulos (1989) presented an attempt to compare rates of return across countries and over time. All these studies suffer from a number of short-comings because the comparisons are based on results collected from earnings functions with different specifications, using data for different years and from differently defined samples. To quote an expert: "International comparisons are notourisly known for non-comparability between classifications, definitions, number of years of schooling and the like." (Psacharopoulos 1975, 162)

One study we are aware of that tries to overcome, at least partly, the short-comings mentioned is Hagenaars (1986). She estimated earnings functions for men and women, based on surveys conducted in 1979 with nearly identical questionnaires in eight European countries. The focus of her study, however, is on poverty. Therefore, the dependent variable is defined as after-tax monetary income, including asset income, holiday allowances, bonuses, and other extra income, which is a concept not so well suited for an investigation on the returns to schooling in a human capital framework. Furthermore, the way the schooling variable is defined by transformation via a "normalization" procedure assuming normality of the distribution of education is rather unusual and leads to results which cannot be interpreted easily. The way this schooling variable enters the earnings functions differs considerably between countries and, therefore, straightforward comparisons of the rates of return are impossible (cf. Hagenaars 1986, 195 for a few remarks). In two recent studies we are aware of Blanchflower and Oswald (1990) and Blachflower and Freeman (1990) compared extended Mincer-type earnings equations for West Germany, Austria, Australia, USA, Great Britain, Hungary, and Switzerland estimated from ISSP-data (see appendix). In both studies the regressions are pooled over time (1985-1987) and in comparison to the pure Mincer-

type specification extended by dummy variables for gender, part time work, family- and union-status. In our study, where we concentrate on the pure Mincer-type specification, we are able to widen the country set by Canada (1981), Israel (1979), Italy (1987), the Netherlands (1983), and Poland (1986). In addition we include data for Germany (1981), Australia (1981/82) and the USA (1979) from the LIS data base (see apendix). With altogether fifteen data sets, including two non capitalist countries, we can present a basis for estimating returns to human capital in the eighties.

As Kathy Abraham (1989) remarked recently, "(a)lthough comparative research is potentially quite illuminating, it is all too rare. An important reason for the paucity of comparative research is the difficulty that researchers typically experience in obtaining comparable cross-national data." In an earlier study (Wagner/Lorenz 1988a) we presented a first attempt of an international comparison of the rates of return to human capital based on comparable micro data for five countries (Australia, Canada, FRG, Israel, Netherlands; time period 1979 to 1983) which are part of the Luxembourg Income Study (LIS) data base. In this paper we augment our earlier research in three ways:

- first, from the LIS data base the USA and Poland are included as the sixth and seventh country;

- second, the schooling variable is calculated as usual by taking the years needed on average to get the degree of education reported in the questionnaire (instead of coding dummy variables for medium and high education as in our earlier study);

- third, and most important, we used internationally comparable micro data for 1987/88 from Australia, Austria, FRG, Great Britain, Hungary, Italy, Switzerland, and the USA, too, which are based on the International Social Survey Programme "Social Inequality ISSP 1987".

Based on identically specified human capital earnings functions of the Mincer-type we report estimates of the rates of return to human capital (i.e. schooling and experience) for full time working male employees in twelve countries.

The rest of the paper is organized as follows: in section 2 we discuss the model and describe the samples. In section 3 we present our empirical results. Section 4 summarizes our findings and gives hints for future research.

2. Model specification and samples

Following Mincer (1974) the human capital earnings function is specified as

$$(1) \qquad \ln(y) = b_0 + b_1 s + b_2 e + b_3 e^2,$$

where ln(y)=nat. log of earnings, s=years of schooling, and e=years of experience. As usual the schooling variable is calculated by taking the years needed on

average to get the degree reported in the questionnaire, and experience is calculated as age minus schooling minus six, beause the years of experience are not available in all data sets. Often, the model given in (1) is extended by control variables for, e.g., tenure, firm size, and hometime (i.e. years out of the labor force), but these information is missing in some of the data sets. Taking them into consideration is only possible by excluding some of the countries. For details as regards the data, see appendix.

The earnings functions are estimated by ordinary least squares (OLS). As is shown in our earlier work (cf. Wagner 1988, Wagner/Lorenz 1988b) the null hypotheses of normally distributed errors and no outliers are very often rejected for earnings functions of this type. It is well known that the OLS estimates may be very sensitive to a rather small number of extreme cases or 'outliers' (cf. Wagner 1989). Most of these outliers are located at the upper or lower end of the wage distribution (think, e.g., of a Ph.D. who has no adequate job and is working as a taxi driver, or of a baseball star who earns a lot of money without even having completed primary school). To test whether the results depend on the inclusion of such cases or not (for which, as should be kept in mind, the human capital theory is not adequate anyway), we alternatively estimated models including HIGHDUM and LOWDUM dummy variables for the highest and the lowest two percent of the wage distribution:

$$(2) \quad \ln(y) = b_0 + b_1 s + b_2 e + b_3 e^2 + b_4 \text{HIGHDUM} + b_5 \text{LOWDUM}$$

The samples are restricted to male full time employees. Even if a wider sample specification by including women and part time employees and the respective dummy variables pretends better fits by pushing up the coefficient of determination (cf. e.g. the results of Blanchflower/Oswald 1990 and Blanchflower/Freeman 1990), in our opinion the process of wage determination for women cannot be explained adequately by an earnings equation like (2). Because of (anticipated) family obligations individual decisions of investment in human capital of women are more complex than that of men. Therefore, the explanation of women's earnings requires information about their labor force participation (i.e. "home time"). In the case of women potential experience (age minus schooling minus 6) can only be seen as an unreliable proxy for 'training on the job', whereas in the case of men one can expect potential and actual experience to be highly correlated.

3. Empirical results

Tables 1 and 2 show the OLS-estimated earnings functions. Because in all data sets the variables HIGHDUM and LOWDUM are of high significance indicatig outliers at both ends of the income distributions, we concentrate in the following discussion on the results of the specification given in (2) (for results for the unmodified Mincer functions and mean values of the variables see tables 1.1, 1.2, 2.1, and 2.2 in the appendix).

Table 1: Earnings Functions for Full Time Working Males (Age: 15 - 65); LIS data base;
Endogenous Variable: nat. log of yearly gross wage/salary

Exogenous Variable \ Country \ Year of Data		Germany 1981	Canada 1981	Israel 1979	Nether-lands 1983	Australia 1981/82	USA 1979	Poland 1986
Schooling	$\hat{\beta}$	0.062	0.042	0.057	0.066	0.050	0.058	0.024
	|t|	16.08	19.65	17.21	31.59	18.51	27.76	14.61
Pot. Experience	$\hat{\beta}$	0.028	0.025	0.029	0.035	0.025	0.028	0.021
	|t|	7.67	14.41	6.90	13.38	18.51	15.80	11.30
$(\text{Pot. Experience})^2$	$\hat{\beta}$	-0.000537	-0.000460	-0.000456	-0.000493	-0.000452	-0.000432	-0.000360
	|t|	7.37	11.92	5.98	10.03	15.46	11.63	9.67
High Income Dummy (Upper 2%)	$\hat{\beta}$	0.771	0.876	0.951	0.684	0.809	0.850	1.022
	|t|	13.39	24.06	11.29	15.34	26.57	23.31	32.33
Low Income Dummy (Lower 2%)	$\hat{\beta}$	-1.610	-1.930	-1.098	-1.222	-2.304	-2.541	-1.043
	|t|	28.72	50.48	13.38	27.98	75.68	62.17	32.89
Constant	$\hat{\beta}$	9.540	9.197	9.159	9.590	8.807	8.657	12.149
	|t|	143.10	258.69	136.54	232.24	309.63	274.75	409.94
$\overline{R^2}$		0.514	0.462	0.408	0.566	0.539	0.505	0.346
N of cases		1359	4642	1132	1888	7071	6037	5040

Note: $\hat{\beta}$ = estimated regression coefficient; |t| = absolute t-value

Table 2: Earnings Functions for Full Time Working Males (Age: 15 - 65); ISSP data;
Endogenous Variable: nat. log of yearly/monthly net/gross wage/salary

Exogenous Variable \ Country \ Year of Data		Germany 1987	Italy 1987	Great Britain 1987	Austria 1987	Australia 1987	USA 1987	Switzer-land 1987	Hungary 1987
Schooling	$\hat{\beta}$	0.040	0.028	0.055	0.039	0.084	0.066	0.072	0.039
	|t|	7.01	2.14	6.21	5.13	6.26	6.89	11.77	9.69
Pot. Experience	$\hat{\beta}$	0.035	0.010	0.041	0.039	0.040	0.046	0.056	0.034
	|t|	5.437	0.83	6.90	6.77	5.76	6.56	9.59	8.44
$(\text{Pot. Experience})^2$	$\hat{\beta}$	-0.000518	-0.000267	-0.000766	-0.000669	-0.000531	-0.000640	-0.000688	-0.000586
	|t|	4.21	0.734	5.49	5.38	3.97	4.48	6.77	7.14
High Income Dummy (Upper 2%)	$\hat{\beta}$	0.881	1.876	0.554	0.780	1.239	0.721	0.879	0.933
	|t|	7.16	7.814	6.38	4.89	6.32	4.83	3.954	6.35
Low Income Dummy (Lower 2%)	$\hat{\beta}$	-0.738	-1.155	-0.966	-0.909	-1.713	-2.568	-1.195	-0.846
	|t|	6.087	50.48	6.03	7.86	11.42	14.77	3.12	8.36
Constant	$\hat{\beta}$	6.939	12.720	8.114	8.736	8.776	8.570	6.605	8.058
	|t|	68.76	69.59	60.72	87.84	50.24	52.83	59.93	121.61
$\overline{R^2}$		0.475	0.276	0.447	0.513	0.427	0.553	0.489	0.294
N of cases		219	197	259	229	368	339	304	775

Note: $\hat{\beta}$ = estimated regression coefficient; |t| = absolute t-value

A first remarkable result can be seen in the fact that despite of the country and the year of the data all variables show the expected impact on earnings and are - with the exception of Italy - of plausible magnitude. The particularity of this result stems from the inclusion of the two East European countries. As well as for Poland (1986) as for Hungary (1987) the predictions of positive returns from schooling and inversely u-shaped experience earnings profiles from human capital theory proof to be true. However, for both socialist countries (at that time) the rate of return to schooling seems to be lower and the age earnings profiles a bit flatter than for the western countries on average.

The only country which is disturbing the homogenous picture of results is Italy. The experience variables turned out to be insignificant. Surprisingly, in the case of the pure Mincer type specification the coefficient of the experience variable shows the wrong sign (see table 2.1 in the appendix). One can only speculate wether this is due to the data set, i.e. a sampling error, or to the enormous degree of the Italian underground economy. The fact that earnings functions are even valid in socialist countries supports Willis' labeling of this function as 'a great success story.' (Willis 1986, 526)

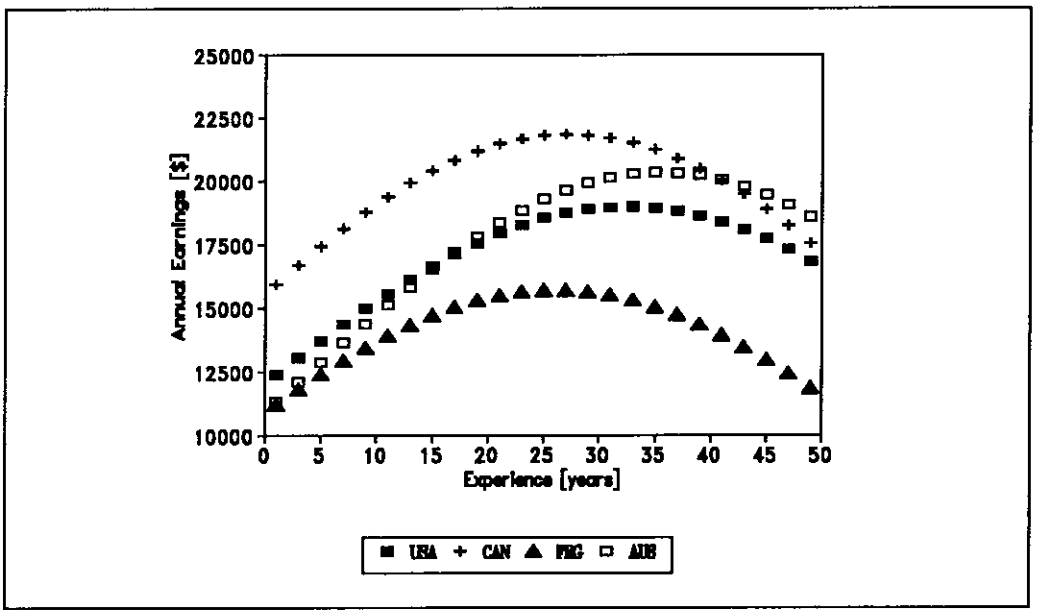
Following human capital theory it can be expected that post-school investments in human capital are highest at the beginning of the working career and diminish when people get older. In combination with a depreciation effect on accumulated human capital this leads to the hypothesis that observable earnings are rising at the beginning of the working career and falling at its end (cf. Addison/Siebert 1979, 122-130). From equation (2) it is possible to calculate the peak of individual earnings over the life cycle. The years of experience, after which earnings are highest are given by $-b_2/2b_3$. The results are summarized in table 3. Figures 1 and 2 which show some selected earnings-experience-profiles convey a more illustrative impression. As a rule of thumb it can be said that observable earnings, which have to be distinguished carefully from earnings capacity, rise over the first two thirds of labor force participation and fall during the last third.

Table 3: Highest individual earnings are reached after ... years of experience

Country	LIS data base	ISSP data
Austria		29
Australia	28	38
Canada	27	
Germany	26	34
Great Britain		37
Hungary		29
Italy		18*
Israel	32	
Netherlands	35	
Poland	29	
Switzerland		41
USA	32	36

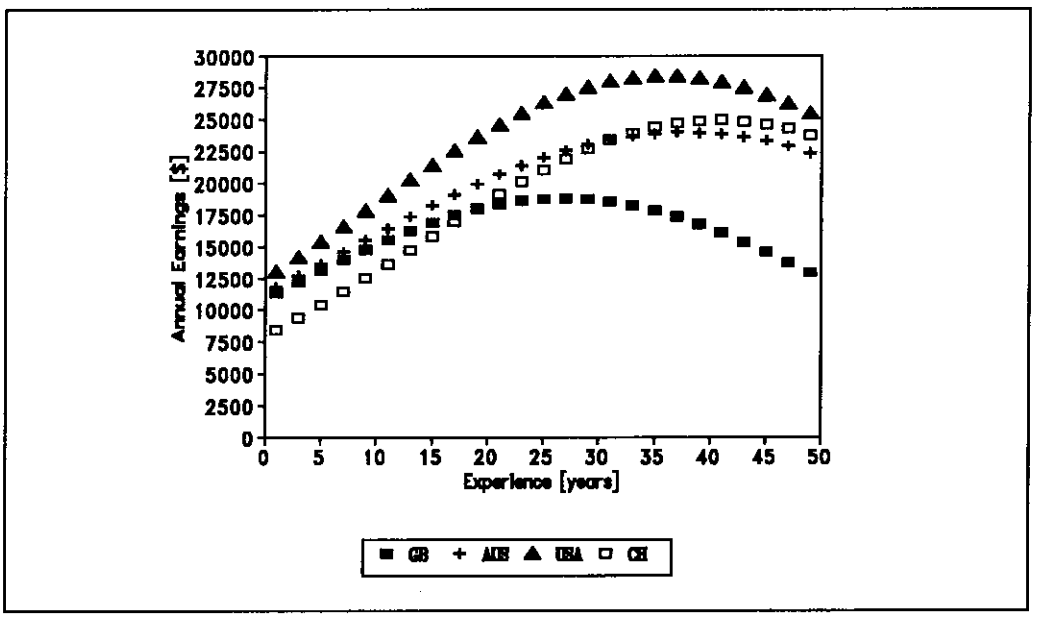
*Note: Result is based on insignificant coefficients.

Figure 1: Selected Age-Earnings-Profiles; LIS data base



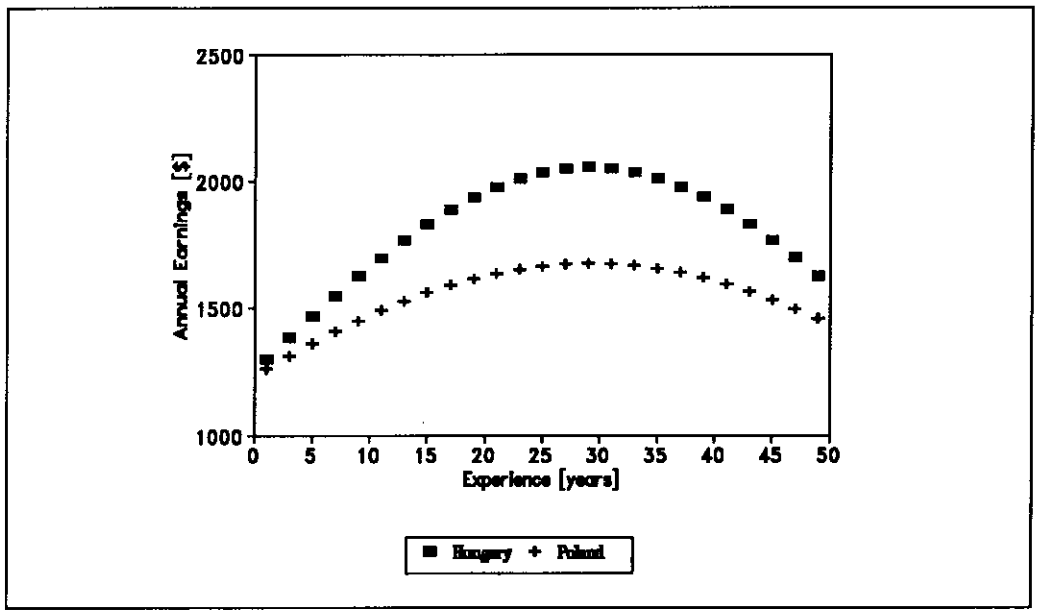
Note: The calculations are based on the values given in table 1 and table 1.2 (appendix).

Figure 2: Selected Age-Earnings-Profiles; ISSP data



Note: The calculations are based on the values given in table 2 and table 2.2 (appendix).

Figure 3: Age-Earnings-Profiles for Non-Capitalist Countries; LIS Data Base & ISSP data



Note: The calculations are based on the values given in tables 1 & 2 and tables 1.2 & 2.2 (appendix).

Because of the negative coefficient of the variable (experience)^2 throughout all estimated earnings functions we found decreasing returns to schooling for all countries. From the specification of the experience variable ("age minus schooling minus 6) it is clear that - holding age constant - the positive effect on earnings form increasing the amount of schooling has to be corrected by the resulting negative effect on earnings from the corresponding loss in experience (cf. Helberger 1988, 165). Let d be the difference in years between schooling s_1 and s_2 (i.e. $s_2=s_1+d$ and $e_2=e_1-d$). Then

$$(3) \qquad 1+g = \frac{\exp(b_0 + b_1 s_2 + b_2 e_2 + b_3 e_2^2)}{\exp(b_0 + b_1 s_1 + b_2 e_1 + b_3 e_1^2)}$$

$$= \exp(\ b_1(s_2-s_1) + b_2(e_2-e_1) + b_3(e_2^2-e_1^2)\ )$$

$$= \exp(\ b_1 d - b_2 d + b_3(e_2^2-e_1^2)\ )$$

and the rate of return to schooling corrected for the loss in experience is given by $r^* = (1+g)^{1/d}-1$. Since d enters equation (3) via $(e_2^2-e_1^2)$ in quadratic form $\partial^2 r^*/\partial d^2 < 0$ provided that $b_3 < 0$.[1]

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1 This result can also be proofed by substituting the experience variable e in equation (1) by (age-s-6); it follows that $\partial^2(\ln y)/\partial s^2=2b_3$.

As an example we computed the corrected rate of return to schooling for Great Britain from table 2. As can be seen from table 4 the rate of return diminishes with the amount of schooling and earnings differences are rising during the working life *ceteris paribus*.

Table 4: Corrected rate of return to schooling; Great Britain; ISSP data.

at age	Rate of return per year when schooling rises from/to years			
	6/9	9/12	12/15	15/18
25	0.032	0.027	0.023	0.018
30	0.040	0.035	0.031	0.026
35	0.048	0.043	0.038	0.034
40	0.056	0.051	0.046	0.042
45	0.064	0.059	0.055	0.050
50	0.072	0.068	0.063	0.058
55	0.081	0.076	0.071	0.069
60	0.089	0.084	0.079	0.074
65	0.097	0.092	0.087	0.082

A final point on age-earnings profiles worth to be mentioned is that in all estimations shown in tables 1 and 2 the coefficient of the schooling variable is higher than the coefficient of the experience variable. So even at the beginning of the working career individuals with less schooling will have a lower income when they are compared with individuals of the same age and more schooling. This is because in none of the twelve countries returns from training on the job (i.e. experience) will offset returns from schooling.

In the final step in our international comparison of the rates of return to human capital investments we employ a test statistic on the equality of regression coefficients from independent samples (cf. Hübler 1984, 5). The test statistic is given by

$$(4) \qquad \frac{\hat{\beta}_i - \hat{\beta}_j}{\sqrt{[\hat{\sigma}^2_{\hat{\beta}_i} + \hat{\sigma}^2_{\hat{\beta}_j}]}} \sim N(0,1)$$

In the upper triangle in table 5 we present the results for the coefficient of the schooling variable. A '+'-sign indicates that the hypothesis of equal coeeficients could not be rejected.

Table 5: Test on equality of regression coefficients
('-' = hypothesis rejected)

		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	LIS data														
(1)	Germany	-	+	+	-	-	-	+	-	+	-	+	+	+	-
(2)	Canada		-	-	-	-	-	+	+	+	+	-	-	-	+
(3)	Israel			-	+	+	-	-	-	+	-	+	+	-	-
(4)	Netherlands				-	-	-	-	-	+	-	+	+	+	-
(5)	Australia					-	-	+	+	+	+	-	+	-	-
(6)	USA						-	-	-	+	-	+	+	-	-
(7)	Poland							-	+	-	+	-	-	-	-
	ISSP data														
(8)	Germany								+	+	+	-	-	-	+
(9)	Italy									+	+	-	-	-	+
(10)	Great Britain										+	+	+	+	+
(11)	Austria											-	-	-	+
(12)	Australia												+	+	-
(13)	USA													+	-
(14)	Switzerland														-
(15)	Hungary														

Note: Computation based on values given given in tables 1 and 2.

At a first glance table 5 shows no clear structure. Even for the same countries (Germany and Australia) the hypothesis of equal regression coefficients has to be rejected. Note, however, that the samples are drawn in different years. Additionally, the samples may differ structurally in regard to, e.g., occupations or industry. Nevertheless, counting the '-'-signs for each country the rate of return to schooling in Poland is identified as an 'outlier'. This might have been expected for a non-capitalist economy in a sample essentially composed of western industrialized countries.

4. Summary

The results of our international comparison on the rates of return to investment in human capital can be summarized as follows:

1. The mean rate of return schooling computed from data sets for twelve countries from 1979 to 1986 is 5.2 percent. Its standard deviation is 1.7.

2. Age-Earnings-Profiles look extremely similar between countries and over time.

3. Implications of human capital theory turn out to be true even for non capitalist countries. In socialist countries the rate of return to schooling seems to be a bit below the rate of return in capitalist countries.

"To comprehend how different economies work, therefore, it is necessary to understand the workings of their distinct labour markets. This is where internationally comparable data on individuals are particularly valuable." To this

assertion of Blanchflower and Oswald (1990, 2) we want to add that the same, of course, would be true for data on firms. Some work in this direction is in progress already (cf. Autorengemeinschaft 1990).

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APPENDIX

1) The samples for Australia (1982/83), Canada (1981), the FRG (1981), Israel (1979), the Netherlands (1983), Poland (1986), and the USA (1979) are part of the Luxembourg Income Study (LIS) data bank (cf. Smeeding/Rainwater/Buhmann/Schmaus 1987 and Rainwater/Smeeding 1988). One central aim of LIS is to make comparable sets of micro data available for many countries and years to facilitate international comparisons. Use of LIS is open to all researchers; for details, contact LIS at CEPS, B.P. 65, L-7201 Walferdange, Luxembourg or send a note to SSLISBB at LUXCEP11 using BITNET. To facilitate replications of our results, listings of the SPSS^{X}-Jobs used are available on request. Datails as regards the specification of the schooling variable for the countries are documented in these jobs, too.

2) The samples for 1987 from Austria, Australia, the FRG, Great Britain, Hungary, Italy, Switzerland, and the USA are based on the International Social Survey Programme "Social Inequality ISSP 1987". These are public use data which can be obtained at low costs together with a detailed codebook from: Zentralarchiv für empirische Sozialforschung an der Universität Köln, Bachemer Str. 40, D-5000 Köln 41, FRG. Again, to facilitate replication and to document the details of the ways we constructed the schooling variables, listings of the SPSS-PC+-Jobs used are available on request.

Table 1.1: Earnings Functions for Full Time Working Males (Age: 15 - 65); LIS data base;
Endogenous Variable: nat. log of yearly gross wage/salary.
Unmodified Mincer-type earnings function.
Corresponding table in the text: table 1.

Exogenous Variable \ Country / Year of Data		Germany 1981	Canada 1981	Israel 1979	Netherlands 1983	Australia 1981/82	USA 1979	Poland 1986
Schooling	$\hat{\beta}$	0.070	0.052	0.064	0.074	0.064	0.073	0.0287
	|t|	14.16	18.79	17.49	29.18	24.66	26.99	14.40
Pot. Experience	$\hat{\beta}$	0.031	0.030	0.034	0.045	0.034	0.035	0.0285
	|t|	6.47	13.30	7.24	14.08	17.92	14.90	12.94
(Pot. Experience)^2	$\hat{\beta}$	-0.000607	-0.000539	-0.000534	-0.000667	-0.000582	-0.000547	-0.000502
	|t|	6.30	10.80	6.21	10.99	14.41	11.19	11.30
Constant	$\hat{\beta}$	9.399	8.996	9.004	9.378	8.508	8.365	12.017
	|t|	108.13	196.85	120.04	186.12	219.56	190.22	341.57
$\overline{R^2}$		0.146	0.095	0.246	0.330	0.118	0.140	0.065
N of cases		1359	4642	1132	1888	7071	6037	5040

Note: $\hat{\beta}$ = estimated regression coefficient
|t| = absolute t-value

Table 1.2: Mean Values of Variables used in Table 1 and Table 1.1; LIS data base;

Variable \ Country / Year of Data	Germany 1981	Canada 1981	Israel 1979	Nether-lands 1983	Australia 1981/82	USA 1979	Poland 1986
Yearly Gross Wage/Salary (own currency)	40098	24219	28546	47765	17453	18981	341713
nat. log of yearly gross wage/salary	10.525	9.992	10.134	10.689	9.664	9.705	12.666
Schooling (years)	11.148	13.188	11.155	9.484	12.510	12.990	11.108
Pot. Experience (years)	24.320	18.963	23.377	23.155	20.169	20.849	21.845
$(\text{Pot. Experience})^2$ (years)	694.281	497.646	704.637	647.388	551.490	594.666	581.829
N. of Cases	1359	4642	1132	1888	7071	6037	5040
Purchasing Power Parity to US-Dollar (Private Consumption)	2.50	1.08	3.535*	2.47	0.99	0.98	199.57*

Notes: The purchasing power parities are taken form "OECD National Accounts Main Aggregates 1960-1983".
* Exchange rates from "United Nations Statistical Yearbook 1979/80".

Table 2.1: Earnings Functions for Full Time Working Males (Age: 15 - 65); ISSP data;
Endogenous Variable: nat. log of yearly/monthly net/gross wage/salary
Unmodified Mincer-type earnings function.
Corresponding table in the text: table 2.

Exogenous Variable \ Country / Year of Data	Germany 1987	Italy 1987	Great Britain 1987	Austria 1987	Australia 1987	USA 1987	Switzer-land 1987	Hungary 1987
Schooling $\hat{\beta}$	0.489	0.0228	0.068	0.054	0.106	0.098	0.0789	0.0434
$\lvert t \rvert$	7.338	1.481	6.99	6.326	6.56	8.09	12.19	10.10
Pot. Experience $\hat{\beta}$	0.036	-0.00550	0.055	0.051	0.043	0.058	0.0625	0.0377
$\lvert t \rvert$	4.71	0.382	7.52	7.92	5.22	6.33	10.11	8.78
$(\text{Pot. Experience})^2$ $\hat{\beta}$	-0.000506	-0.000061	-0.001017	-0.008463	-0.000565	-0.000794	-0.000782	-0.000661
$\lvert t \rvert$	3.467	0.143	6.55	5.99	3.49	4.25	7.16	7.59
Constant $\hat{\beta}$	6.820	12.809	7.827	8.433	8.470	7.949	6.443	7.973
$\lvert t \rvert$	57.461	59.769	55.50	76.88	40.51	38.83	55.30	113.685
$\bar{R}^2$	0.262	0.0037	0.278	0.334	0.159	0.235	0.0448	0.019
N of cases	219	197	259	229	368	339	304	775

Note: $\hat{\beta}$ = estimated regression coefficient
$\lvert t \rvert$ = absolute t-value

Table 2.2: Mean Values of Variables used in Table 2 and Table 2.1; ISSP data;

Variable \ Country / Year of Data	Germany 1987	Italy 1987	Great Britain 1987	Austria 1987	Australia 1987	USA 1987	Switzer-land 1987	Hungary 1987
Wage/Salary* (own currency)	2655.82	623223.35	10878.38	14331.88	29482.34	26197.64	4194.08	7810.65
nat. log of yearly gross wage/salary	7.83	13.11	9.19	9.50	10.17	9.99	8.22	8.87
Schooling (years)	10.19	10.72	11.83	9.72	10.31	13.56	11.02	11.31
Pot. Experience (years)	24.65	14.43	21.78	18.84	22.78	19.08	23.41	21.53
$(\text{Pot. Experience})^2$ (years)	749.61	323.64	631.69	503.19	660.58	503.336	701.73	613.699
N. of Cases	219	197	259	229	368	339	304	775
Purchasing Power Parity to US-Dollar (GDP)	2.47	1408	0.584	16.7	1.35	1.00	2.44	47.0**

Notes: The purchasing power parities are taken from "OECD National Accounts Main Aggregates".

* Germany - Monthly Income, Italy - Monthly Income, Great Britain - Annual Gross Income, Austria - Net monthly Income Australia - Annual gross income, USA - Annual gross income, Switzerland - Monthly Income, Hungary - Monthly gross income.

** Exchange Rate from "International Financial Statistics", IMF, Yearbook '89.