INVESTMENT SUBSIDIES AND WAGES IN CAPITAL GOODS INDUSTRIES: TO THE WORKERS GO THE SPOILS?

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Goods Industries: To the Workers Go the Spoils?
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ABSTRACT

This paper looks at the impact of investment tax subsidies on the labor market for capital goods workers using data from the 1979-88 Current Population Survey. The results show that investment subsidies drive up the wages of workers who produce capital goods relative to other manufacturing workers. A 10% investment tax credit, for example, raises the relative wage of capital goods workers by 2.5%-3.0% on average and up to around 10%, depending on the workers' characteristics. The evidence is consistent with an existing literature on the cyclicality of manufacturing wages as is the evidence that the wage increases are largest for workers with low education, workers with less tenure, and workers in non-management occupations. The evidence is also consistent with the literature on rent-sharing in profitable industries as are the results indicating the importance of unions for the wage increases. Either way, the evidence of rising wages is an important part of the upward sloping supply of capital goods identified in previous work and means that much of the benefit of investment subsidies is passed to capital suppliers and their employees.

Austan Goolsbee
Graduate School of Business
University of Chicago
1101 East 58th Street
Chicago, IL 60637
and NBER
goolsbee@gsb.uchicago.edu

I. Introduction

The importance of investment for the business cycle and for economic growth has led policymakers to subsidize it repeatedly four decades. Recent work, however, has shown that a significant portion of these large government subsidies for investment are passed through to capital suppliers in the form of higher prices, limiting their effectiveness (Goolsbee, 1996, 1998). This evidence generally supports the notion of decreasing returns to scale and a rising supply curve among capital suppliers (see discussions in Mussa, 1977, Chirinko, 1993, or Romer, 1996) but can be consistent with increasing markups by firms with market power (Goolsbee, 1996). An important question remains, however, about the source of the rising costs.

This paper shows that a significant share of the price increases going to capital suppliers is due to higher wages for capital goods production workers. A 10% investment tax credit (ITC) for example, raises the wage of capital goods workers by 2.5-3.0% relative to other manufacturing workers with the same observables. The results are even larger for younger and less educated workers. The results indicate that in the short-run, the industry labor supply curve is not flat.

The paper uses wage data from the Merged Outgoing Rotation Group (MORG) of the Current Population Survey from 1979-1988. The results clearly indicate that the demand stimulated by investment subsidies increases the wages of production workers in capital goods industries, consistent with decreasing returns to scale in these industries or, perhaps, of risk sharing. By examining how the wage change varies by the characteristics of the worker, such as education, experience, and occupation, the paper is able to verify that production workers are the primary beneficiaries and that the relative gains are greatest for young and lower educated workers. Unionized workers also have larger gains.

The results are in the spirit of existing work on the cyclicality of manufacturing wages such as Bils (1985), Blank (1990), or Barsky, Solon, and Parker (1994) because, for the capital goods producers, investment subsidies essentially generate demand shocks in microcosm which resemble the effect of the business cycle on manufacturing more generally.[1] A potential alternative explanation of the wage increases centering on stories of rent sharing in imperfectly competitive industries such as Krueger and Summers (1988), Katz and Summers (1989), or Hildreth and Oswald (1997) cannot be rejected given the data and the importance of unionization may lend at least some support. Since the results also show that the wage increases are larger for younger and less educated workers who are not traditionally thought of as "insiders," this may suggest against the rent-sharing story. The evidence is entirely consistent, however, with work such as Heckman and Sedlacek (1985), or Barsky, Solon, and Parker (1994) emphasizing that economic fluctuations may have the greatest effect on younger and more marginal workers, at least for manufacturing.

The paper is divided into five sections. Section II lays out a brief summary of the CPS data and the identification strategy. Section III presents the basic results that wages rise for capital goods workers and at the magnitude of the responses. Section IV then explores the incidence among workers of different types--focusing especially on the impact on workers of different educations, occupations, and tenure and on the role of unions in raising wages. The paper concludes in Section V with perspective on how the results can change the conventional view of the nature of investment subsidies and gives suggestions for further research.

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[1] A review of the real wage cyclicality literature can be found in Abraham and Haltiwanger (1995).

II. Data and Identification Strategy

The basic data come from the MORG of the CPS, a monthly survey of about 60,000 households. Each household is interviewed for four months, ignored for eight months and then interviewed again for four months. The BLS collects weekly earnings from respondents in months 4 and 8 and merges them into the Annual Earnings File. The advantage of the MORG for the purposes here is the large sample size (about 60,000 male workers and 20,000 in manufacturing). This gives enough observations of capital goods workers to identify comparative effects on their wages relative to others.

The paper uses standard demographic variables kept by the CPS including race, marital status, experience (defined as age minus education minus 6), highest grade attained, as well as variables for occupation, industry and union status. The CPS changed the industry and occupation categories in 1983 but comparisons are easily made using the tables in Feenberg (1995). The paper looks for wage increases in capital goods industries when investment tax subsidies drive up the demand for these sectors' output. As a comparison group the paper will use, for the most part, other basic and low-tech manufacturing workers as defined in Katz and Murphy (1992) but who do not make capital goods.[2] The paper will show, however, that the basic results do not change when using all other workers as a comparison group.

The paper estimates variants on the following equation for men aged 24-65 working full time (30+ hours per week):

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[2] Basic manufacturing in Katz and Murphy includes primary metals, fabricated metals, machinery, electrical equipment, automobile, and other transportation equipment (excluding aircraft), tobacco, paper, printing, rubber, and miscellaneous manufacturing. Low tech manufacturing includes lumber, furniture, stone, clay, glass, food, textiles, apparel, and leather industries.

$$\ln(w_{it}) = \alpha + \beta_1 CAPITAL_i * CE_{it} + \beta_2 CAPITAL_i + \Gamma' Z + \Delta' T + \varepsilon_{it}$$

where w_{it} is the real wage of individual i in year t (note this is a cross-section not a panel so each individual is not re-observed), Z is a vector of individual demographic variables, T is a vector of year dummies, CAPITAL is a dummy equal to one if the individual works in a capital goods producing industry and CAPITAL*CE is the interaction of the capital goods dummy with the average tax term of the cost of capital for equipment in year t.[3]

This specification controls for demographics and aggregate year effects and then, through the interaction term, asks whether capital goods workers see their real wages rise relative to other manufacturing workers with the same demographics in the same year when taxes subsidize the purchase of capital goods. A negative coefficient on the CAPITAL*CE term implies that lowering the tax cost of equipment (e.g., through an investment tax credit) raises real wages of capital goods workers. This is basically an issue of short-run incidence of an investment subsidy in the asset market incidence tradition of Feldstein (1977) or Poterba (1984) but looking at short run asset price responses for the labor market.

Since a scarcity of production labor might reasonably apply differently to various types of workers, the paper also explores interactions of the CAPITAL*CE term (abbreviated CAPCE) with variables like education, experience, and union status. If production workers are, in the short-run, part of more localized labor markets than are white collar workers, there could be differential effects of investment subsidies on wages by occupation. Similarly, if demand shocks affect younger and more marginal workers disproportionally, this might appear as differential effects on wages by experience. An important role for union status may relate to the rent sharing

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[3] I would like to thank Dale Jorgenson for providing the tax data. The tax term is defined CE = (1 - ITC - tz)/(1-t) where t is the corporate tax rate and z is the present value of

hypothesis or the reflect the selection of workers into unions.

III. Basic Incidence: Subsidies and Workers' Wages

A. The Basic Wage Evidence

Column (1) of Table I lays out the basic specification to test whether the relative wage of capital goods workers rises when tax policy subsidizes capital goods. It includes year dummies, experience, experience squared, marital status, a race dummy, and years of schooling as control variables. The key variable of interest is CAPCE, the interaction term of the capital goods dummy and the tax term of the cost of capital. A negative coefficient on this term implies that increases in the tax price of investment goods lower the wage of capital goods workers relative to non-capital goods workers with the same observables. The regression also includes a capital goods sector dummy, allowing a wage premium for being in the capital goods sector generally.

As hypothesized, the CAPCE term is significant and negative. The t-statistic on the interaction term is almost 5 and the magnitude indicates that at the mean corporate tax rate, a 10% ITC, for example, would increase the wage of capital goods workers relative to other manufacturing workers by 2.4%. Similarly, the Tax Reform Act of 1986 (TRA86), by removing the ITC and reduced the corporate tax rate from .46 to .34, increased the tax cost of capital. According to the results in (1), this caused an immediate 1.8% reduction in the relative wage of capital goods workers. The other coefficients in the specification indicate that capital goods workers in general have a 19% wage premium over other manufacturing workers with the same observables and that the demographic variables enter with the expected signs and magnitudes.

Column (2) expands the comparison group from other basic and low-skill manufacturing

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depreciation allowances.

workers to all full time working males. The coefficient shows that the relative wage impact of tax subsidies is basically identical whether it is relative to manufacturing or to other workers. There is still a significant effect of sizable magnitude.

B. Further Wage Evidence

If accurate, these results clearly indicate that investment subsidies do increase the wages of capital goods workers. Specifications (3), (4) and (5) control for possible spurious correlation between relative wages and the tax term. It is important to note that the results are clearly not refuted the normal endogeneity critique that tax subsidies are passed only when the economy is doing badly. First, this argument works the wrong way since high subsidies should be correlated with *lower* wages with this conventional story. Second, these results include year dummies hence an alternative explanation requires something correlated with tax subsidies and with the wages of capital goods workers but not with the wages of other comparable manufacturing workers.

Since capital goods and other durables are more cyclical, if their wages are also more cyclical and if policy makers set tax subsidies cyclically, this might create the spurious relationship between tax subsidies and the relative wage of capital goods workers. Note that, again, this explanation works the opposite way. For this explanation to bias the coefficients, either policy makers would have to pass subsidies at business cycle peaks or else non-durables would have to be *more* cyclical than durables.

Nevertheless, in column (3) I include in the specification two additional interaction terms. One allows the GDP growth rate to have a differential effect on wages in capital goods industries relative to others (because of greater cyclicality) which would not be controlled by the year dummies. The other allows for a time trend in the relative wage of capital goods workers.

The results with these controls, if anything, show the downward bias of the basic specification. In (3), a 10% ITC increases the relative wage of capital goods workers by 3.0% rather than 2.4%, though the difference is not significant.

In columns (4) and (5) I divide the sample into two periods 1979-82 and 1983-88, a natural break point in the survey because in 1983 the MORG began collecting several new variables and changed the benchmark occupation and industry codes. This break also gives a clean way to show that a spurious trend has not caused the results. The variation in the tax variable is exactly the opposite in the two samples: in the first sample, the tax cost is high early on and then falls toward the end and vice versa in the second. If caused by a spurious trend, the tax term coefficient should have opposite signs in these two sub-samples. In fact, in both (4) and (5) wages rise significantly. The earlier sample has a larger coefficient but is not significantly different.

Finally, column (6) repeats the specification of (1) but includes lagged interaction terms in order to look at the time pattern of wage increases. The entire wage increase takes place in the period of the tax term change. The lagged coefficients are insignificant and very close to zero. The sum of the coefficients indicates that by two years later, one cannot reject the hypothesis that prices have fallen back to their original level albeit only because the standard errors become large. Previous work has shown exactly the same pattern for prices, however, and the long run noise may simply result from the frequent changing of tax policy by the government (averaging about every 2.5 years in this sample. In other words, if the public knows that every subsidy is temporary and they adjust prices until the policy switches and then they return to the old price, this will appear in the regressions as very small and insignificant coefficients on the lag terms because everything happens contemporaneously leaving the long-term effect unidentified. It is

possible, though, as in the tests of Hildreth and Oswald (1997), that rent-sharing is at work which would imply that wage increases should not fall over time.

C. Hours Worked and the Composition Bias

The results presented show a new side to the incidence of investment tax subsidies, namely the benefit to capital producing workers but compositional issues may, in fact, bias downward the wage estimates presented. Some of the papers on real wage cyclicality have identified a similar downward bias in estimates of real wage cyclicality from composition issues.[4] In booms, the lower wage, more marginal workers have a disproportionate increase in hours. Since the results presented similarly test for the effects of demand fluctuations on the real wage, the same composition problem may exist. In other words, capital goods industries may hire more marginal workers during subsidy periods when they need workers and this will push down the average wage.

The most effective way around this is to use panel data and examine what happens to the wages of particular individuals rather than the aggregate. In the macro literature doing this has often significantly increased the estimated cyclicality (see the discussion in Abraham and Haltiwanger, 1995). Unfortunately, most existing panel data sets are not large enough to identify the relative wage effects of tax subsidies on this small subset of manufacturing workers. The data used here on individuals are clearly preferable to aggregate data since they contain observable characteristics of the workers, but insofar as unobservables for the workers change in different parts of the cycle (i.e., vary with the tax subsidy) the results will be biased toward zero.

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[4]See, for example, the results of Solon, Barsky & Parker (1994) or the results for manufacturing wages in Heckman and Sedlacek (1985).

High subsidies will correspond to a larger number of observations of "bad" workers with the same observables and therefore a lower average wage.

At least part of the composition problem clearly does exist for capital goods industries. The table below presents two simple regressions for capital goods industries using an aggregate panel data set for 85 separate capital goods industries from the NBER productivity database. The first column regresses the log of total production hours on the cost of capital and other control variables. It shows that production hours for capital good industries do fall significantly if an investment subsidy is repealed. The second column shows the same regression but for log hours per worker. Although total hours fall, the average hours per worker actually rise.

TABLE: AGGREGATE REGRESSIONS FOR CAPITAL GOODS INDUSTRIES

	(1) Ln(Total Production Hours)	(2) Ln (Hours Per Worker)
Cost of Capital	-.249 (.083)	.218 (.033)
Control Variables	unemployment rate, time, time squared	unemployment rate, time, time squared
n	85	85
R^2	.94	.97

Notes: The dependent variable in each regression is listed above each column. Each regression includes the control variables listed and fixed effects for the 85 different four digit SIC code industries. These are annual regressions from 1958-1988.

This same pattern exists in the individual level CPS data, as well, where 5.4% of total hours among capital goods workers come from people working fewer than 40 hours per week during years with above average costs of capital. In years with lower than average costs of capital (subsidy years), 7.1% of total hours worked come from people working less than 40 hours. Table II illustrates this more formally. The first column gives a probit of whether an

individual works 40 or more hours per week. The coefficient indicates that in periods of low capital taxation, the probability of working 40 or more hours per week falls. Column (2) repeats the probit but only for workers with more than 20 years of experience. This group should not suffer from nearly as much composition bias since it comprises fairly stable workers. The coefficient indicates that among these workers, there is perverse tendency in hours. Though insignificant, the coefficient indicates that cutting investment taxes raises the probability of 40+ hour weeks for capital goods manufacturers.

Without panel data, correcting the downward bias of the composition problem is difficult. It is relevant, however, and likely means that actual wages for individual capital goods workers rise even more than estimated in the regressions here and that its impact on different types of workers, particularly marginal workers may be large.

IV. Differential Incidence Among Workers: Demographics & Unions

A. Incidence Among Workers: Occupation, Education and Experience

Columns (1) and (2) of Table III divide the sample by occupation into workers paid by the hour and workers not paid by the hour (results were similar using blue collar and white collar workers). The coefficient for hourly workers is over 50% larger than for non-hourly workers as one might expect if production labor is the short-run scarce factor. Columns (3) and (4) look at the impact of tax subsidies on workers of different education levels. Column (3) interacts the CAPCEterm with a dummy equal to one if the worker has 12 or less years of schooling (<=H.S.) to determine whether workers with high school educations or less in capital goods industries benefit more from a tax subsidy for investment than does a capital goods worker with more than 12 years of schooling. The results illustrate extreme differences for the two groups. Capital

goods workers with high school or less see wages rise by more than 5% relative to other comparable workers after a 10% ITC. Capital goods workers with more than a high school degree see no significant increase in their wages at all. The marginal workers benefit most.

Column (4) looks at the role of schooling but uses the years of schooling rather than a dummy variable and the results remain the same. Tax subsidies increase the relative wage of lower education capital goods workers by more than higher education ones. A worker with an eighth grade education gets a 9% bump in his relative wage from the 10% ITC. This falls by well over a full percentage point for each extra year of schooling until, for 14+ years of schooling, there is no significant wage effect at all.

Column (5) shows the relationship by experience rather than education. The results, again, show wide differences between types of workers. This specification interacts the CAPCE tax term variable with years of experience and with years of experience squared. Here, workers with less experience see large increases in relative wages while the more experienced do not, though the relationship is not linear. The following table lists the estimated impact of a 10% ITC on relative wages of capital goods workers at various experience levels. The large wage increases are concentrated among workers with less than 10 years of experience.

Worker Experience	Relative Wage Change
0 years	9.8%
5 years	7.0%
10 years	4.6%
20 years	1.2%
30 years	-.2%
40 years	-.1%

Source: Author's calculations.

Finally, column (6) of Table III combines the education and tenure regressions and shows that the impact of each variable on the wage effect remains the same. The results consistently show a large wage gain for low education, low skill, marginal workers in capital goods industries relative to comparable workers in other manufacturing industries. A capital goods worker with

only a 10th grade education and 10 years of experience finds his wages rising 9.6% relative to a comparable manufacturing worker when a 10% ITC is enacted. The same worker with a 12th grade education has a relative wage increase of 5.8% and if the 12th grade worker had 20 years experience instead of 10, the relative wage gain would be 1.8%. With 30 years experience, there would be no wage increase at all.

This evidence seems to support the conventional evidence that demand conditions have the biggest impact on younger, more marginal workers. Second, in the short run we know that production labor operates in a more regional market than does college labor. The within sector standard deviation of wages across states, for example, is much higher for low skill workers than for high skill workers and at least since Sjaastad (1962) labor economists have known that high education and high skill workers more rapidly migrate in response to regional economic shocks than are lower education workers. The evidence on the role of education to the shocks created by investment policy may also be picking up this effect. At the same time, this component of the evidence is less supportive of rent sharing theories which are based on the bargaining power of "insiders" since here the biggest beneficiaries to the extra rents seem to be the most marginal.

B. Incidence Among Workers: Rent-Sharing and the Role of Unions

The evidence presented on the effect of investment subsidies on wages supports the idea of a neoclassical supply curve with increasing marginal costs for production labor in the short run but also the idea that profitable industries share rents with workers. It is worth examining the role of rent-sharing more directly since a casual look at the data shows capital goods industries to have high concentration ratios, make differentiated products and face a stable set of competitors year after year--many of the attributes which might characterize an industry where

there is market power and/or profitability. It would be natural for the rent-sharing literature such as Krueger and Summers (1988), Katz and Summers (1989), Blanchflower, Oswald and Sanfey (1996), or Hildreth and Oswald (1997), to predict that policies which create booms in profitable industries (like investment subsidies) would lead wages to rise.

One interesting piece of evidence on the issue comes from Ronald King's (1994) political history of investment subsidies. Historically, support for capital subsidies has come from an alliance including business owners but also the unions from capital goods producing industries. If a significant part of the wage increases documented are associated with unions, the rent-sharing story may have some merit, though it is important to question whether any union effects are simply the result of unobserved worker differences.

Beginning in 1983, the MORG keeps track of union status for each survey respondent. The specification in column (1) of Table IV uses this union status and interacts it with the CAPCE tax term. Technically, of course, unions could still cause the wage increases presented in the results above without showing a clear relative wage increase among unionized workers because unionization is endogenous and also because all capital goods workers' wages may rise in response to union bargaining. These specifications do give an interesting point of comparison, however.

The estimates show a clear and significant role for unions in the wage responsiveness for capital goods workers. A 10% ITC raises the relative wage of capital goods workers by 2.1 percentage points but by 1/3 more, 2.8 percentage points, for unionized capital goods workers. For a union worker, 25% of his wage increase comes from union status. The union effect on wages becomes even clearer using only blue collar workers as in column (2). Here the 10% ITC raises wages for non-unionized blue collar workers by 2.1 percentage points relative to

comparable workers. Union member capital goods workers see relative wages rise by 3.5 percentage points. Here, an even larger share of the wage increase for a union member comes from his union status. The evidence suggests that at least some of the wage increase may come from rent-sharing, though the effects are significant and large even without the union effect. The selection of workers into unions is unlikely to be causing this effect.[5]

Next, column (3) of Table IV explores the idea that unions compress the skill differential and that this might explain the differential incidence of investment subsidies by education of the workers--unions force the company to share rents only with non-college graduate type workers. The regression interacts the union status dummy with the tax term and with the tax term school interaction but the importance of education remains.

A non-union capital goods worker with a 9th grade education receives a 7.8% increase in his relative wage. If he had 14 years of education he would receive an increase of .2%. Second, union members receive larger increases than non-union members--an extra 2.5 percentage points as a level effect--and the magnitude of the education impact dies out more rapidly as education increases for unionized workers, as hypothesized--the coefficient on the interaction of the tax term with years of schooling and unionization is positive and significant at the 10% level but the magnitude of this impact is quite small. When the loss due to added years of schooling for union members is balanced against the unionized level effect the role of years of schooling seems quite similar for union and non-union capital goods workers, as seen in the table below.

[5] The competitive explanation for union pay differentials is the selection of higher productivity workers into unions. In the results here, outside of unions it is workers which have the least experience which benefit most. The wage growth of unions is despite this countervailing effect.

Years of Schooling	Relative Wage Increase	
	Union	Non-Union
8 years	10.8%	9.3%
10 years	7.5%	6.3%
12 years	4.2%	3.2%
14 years	0.8%	0.2%

Source: Author's calculations

The evidence for a skill compression effect in the tax term coefficient is weak, even weaker when the regressions are restricted to blue-collar workers as in column (4).

V: Conclusion

This paper has used data on the wages of capital goods workers to show that the incidence of investment tax subsidies does not go entirely to investors as usually assumed. Specifically, there appear to be rising costs or rent sharing that drive up relative wages of capital goods workers when demand for capital goods increases, generally supportive of an existing literature on wage cyclicality. A 10% ITC raises the relative wage of all capital goods workers between 2.5% and 3.5%. Relative wages rise more for workers with low education and little experience consistent with the view that these factors also influence mobility where low-skill production workers work in much more of a local market in the short run--potentially a source of upward sloping supply. Workers with less than a high school degree receive relative wage increases close to 9%. College attenders do not see relative wage increases at all. Relative wages also rise significantly more for capital goods workers who are union members. About 40% of the relative wage increase for a blue collar union worker comes from unionization but unions do not appear to change, in any important way, the role of education in the wage response to the tax term.

The simple idea that wages rise when demand for goods increases in the short run can fundamentally change our view of investment tax subsidies. Policies intended to stimulate investment demand may, in fact, lead to large transfers to suppliers or producing workers with little increase in total investment. The propensity of policy makers in the U.S. to change investment tax policy every few years may do little to change the level of investment and much to give periodic windfalls to the manufacturers of investment goods and their workers.

TABLE I: BASIC INCIDENCE REGRESSIONS

	(1)	(2)	(3)	(4) 1979-82	(5) 1983-88	(6)
CAPCE	-.133	-.121	-.165	-.191	-.105	-.123
	(.027)	(.050)	(.033)	(.072)	(.035)	(.019)
CAPCE (-1)						-.025
						(.031)
CAPCE (-2)						.012
						(.044)
CAP * GDP %			.0014			
			(.0008)			
CAP * TIME			-.0012			
			(.0009)			
CAP	.192	.218	.220	.252	.163	.196
	(.028)	(.050)	(.031)	(.071)	(.037)	(.049)
SCHOOL	.071	.067	.071	.064	.077	.071
	(.002)	(.003)	(.002)	(.002)	(.002)	(.002)
Exp	.022	.027	.022	.021	.022	.022
	(.0003)	(.001)	(.0003)	(.0004)	(.0004)	(.0003)
Exp^2	-.0003	-.0004	-.0003	-.0003	-.0003	-.0003
	(.00001)	(.00001)	(.00001)	(.00001)	(.00001)	(.00001)
Married	.078	.125	.078	.076	.078	.078
	(.003)	(.002)	(.003)	(.004)	(.004)	(.003)
Race	-.116	-.137	-.117	-.111	-.122	-.117
	(.004)	(.003)	(.004)	(.006)	(.005)	(.004)
Year Dums.	Yes	Yes	Yes	Yes	Yes	Yes
n	190751	588580	190751	81304	109447	190751
R^2	.26	.20	.26	.25	.28	.26

Notes: The dependent variable in each regression is the log of the real wage of the worker. The standard errors are corrected for the fact that some of the variables vary only by year and not by individual within the year. The sample in each is 1979-1988 except in (4) and (5) where the sample is listed. CAP is the capital goods industry dummy. CAPCE is the capital goods dummy interacted with the tax cost of capital. SCHOOL is the highest grade attended. EXP is experience. Race is a dummy equal to 1 if the individual is non-white. Married is equal to 1 if the individual is married. GDP% is the GDP growth rate. Standard errors are in parentheses.

Table II: Probit for Working 40+ Hours per Week

	(1) all	(2) exp>20
CAPCE	.616 (.227)	-.074 (.327)
CAP	-.511 (.229)	.192 (.330)
SCHOOL	.027 (.002)	.023 (.002)
Exp	.006 (.001)	-.005 (.006)
Exp^2	-.0001 (.0002)	.00005 (.00010)
Married	.101 (.010)	.089 (.018)
Race	-.049 (.010)	-.029 (.002)
Year Dums.	Yes	Yes
n	190751	93676
Log Likelihood	-58313	-28119

Notes: Each column is a probit on whether the individual worked 40 or more hours per week. The sample in each is 1979-1988. Column (2) includes only workers with more than 20 years of experience. CAP is the capital goods industry dummy. CAPCE is the capital goods dummy interacted with the tax cost of capital. SCHOOL is the highest grade attended. EXP is experience. Race is a dummy equal to 1 if the individual is non-white. Married is equal to 1 if the individual is married. Standard errors are in parentheses.

TABLE III: INCIDENCE AMONG WORKERS

	(1) Hourly	(2) Non-hourly	(3)		(4)	(5)
CAPCE	-.148	-.090	.105	-1.15	-.528	-1.90
	(.049)	(.054)	(.110)	(.472)	(.189)	(.840)
CAPCE * (<=H.S.)			-.383			
			(.170)			
CAP * (<=H.S.)			.420			
			(.166)			
CAPCE*SCHOOL				.081		.107
				(.037)		(.053)
CAP * SCHOOL				-.086		-.114
				(.037)		(.052)
CAPCE * EXP					.033	.033
					(.014)	(.013)
CAP * EXP					-.036	-.036
					(.014)	(.014)
CAPCE * EXP^2					-.0005	-.0004
					(.0003)	(.0003)
CAP * EXP^2					.0006	.0004
					(.0002)	(.0003)
CAP	.222	.148	-.068	1.27	.628	2.18
	(.049)	(.053)	(.109)	(.463)	(.193)	(.819)
SCHOOL	.043	.076	.062	.072	.071	.072
	(.001)	(.003)	(.002)	(.003)	(.002)	(.003)
EXP	.020	.026	.023	.022	.022	.023
	(.0008)	(.001)	(.0004)	(.0003)	(.0003)	(.0003)
EXP^2	-.0003	-.0003	-.0003	-.0003	-.0003	-.0003
	(.00001)	(.00002)	(.00001)	(.00001)	(.00001)	(.00001)
Married	.072	.050	.077	.078	.077	.078
	(.003)	(.005)	(.003)	(.003)	(.003)	(.003)
Race	-.115	-.109	-.121	-.117	-.117	-.116
	(.003)	(.058)	(.004)	(.004)	(.004)	(.004)
Year Dums.	Yes	Yes	Yes	Yes	Yes	Yes
n	126547	62892	190751	190751	190751	190751
R^2	.32	.39	.27	.26	.26	.26

Notes: The dependent variable in each regression is the log of the real wage of the worker. The standard errors are corrected for the fact that some of the variables vary only by year and not by individual within the year. The sample in each is 1979-1988. (<=H.S.) Is a dummy variable equal to 1 if the worker has 12 or fewer years of education. The other variables are defined in the notes to Table 1. The * symbol represents an interaction between the two listed variables. Standard errors are in parentheses.

TABLE IV: UNIONS AND THE INCIDENCE AMONG WORKERS

	(1)	(2) B. Collar	(3)	(4) B. Collar
CAPCE	-.116	-.119	-1.20	-.456
	(.038)	(.032)	(.336)	(.300)
CAPCE * UNION	-.041	-.075	-.137	-.102
	(.007)	(.005)	(.051)	(.041)
CAPCE * SCHOOL			.085	.029
			(.026)	(.023)
CAPCE*UNION*SCHOOL			.007	.002
			(.004)	(.003)
CAP * SCHOOL			-.094	-.032
			(.027)	(.025)
CAP	.190	.229	1.38	.616
	(.041)	(.035)	(.353)	(.324)
UNION	.581	.305	.593	.309
	(.026)	(.017)	(.031)	(.020)
UNION * SCHOOL	-.040	-.010	-.041	-.010
	(.002)	(.001)	(.003)	(.002)
SCHOOL	.088	.049	.089	.050
	(.002)	(.001)	(.003)	(.001)
Exp	.022	.019	.022	.019
	(.0005)	(.0003)	(.0005)	(.0004)
Exp^2	-.0003	-.0002	-.0003	-.0002
	(.00001)	(.00001)	(.00001)	(.00001)
Married	.076	.069	.076	.069
	(.004)	(.002)	(.004)	(.002)
Race	-.121	-.121	-.121	-.121
	(.004)	(.003)	(.004)	(.004)
Year Dums.	Yes	Yes	Yes	Yes
n	109447	72923	109447	72923
R^2	.30	.23	.30	.23

Notes: The dependent variable in each regression is the log of the real wage of the worker. The standard errors are corrected for the fact that some of the variables vary only by year and not by individual within the year. The sample in each is 1983-1988. UNION is a dummy variable equal to 1 if the worker is a member of a union. The other variables are defined in the notes to Table 1. The * symbol represents an interaction between the two listed variables. Standard errors are in parentheses.

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