

***Labor's Share
in Developing Countries
in the Era of Globalization***

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Structure of the presentation

- Aim,
- Stylised facts, literature
- A model of distribution
- Results of the empirical estimation
- Conclusion

Background of this paper

- Neoliberalism & globalization
- new imperialism
 - class agenda of the international capitalists
 - answer to the crisis of the Golden Age
- Increased exploitation of labor in the north/west & south/east

Aim of the paper

- Effect of neoliberalism & globalization on labor's share in developing countries
 - Argentina, Brazil, Chile, Mexico, Indonesia, Korea, Malaysia, Philippines, Thailand, and Turkey
- Post-80s: Lower growth, higher volatility in almost all cases
- Lower wage share in most cases
 - Higher volatility in some cases
 - Further worsening in the '90s in many cases
- The currency crises in the 1990s-2000s
 - not neutral with respect to classes
 - persistent post-crisis (2-3 years) fall in wage share
 - higher fall in wage share than in output

Figure 1: Wage/Value added in Manufacturing Industry, %
(1970-2003)

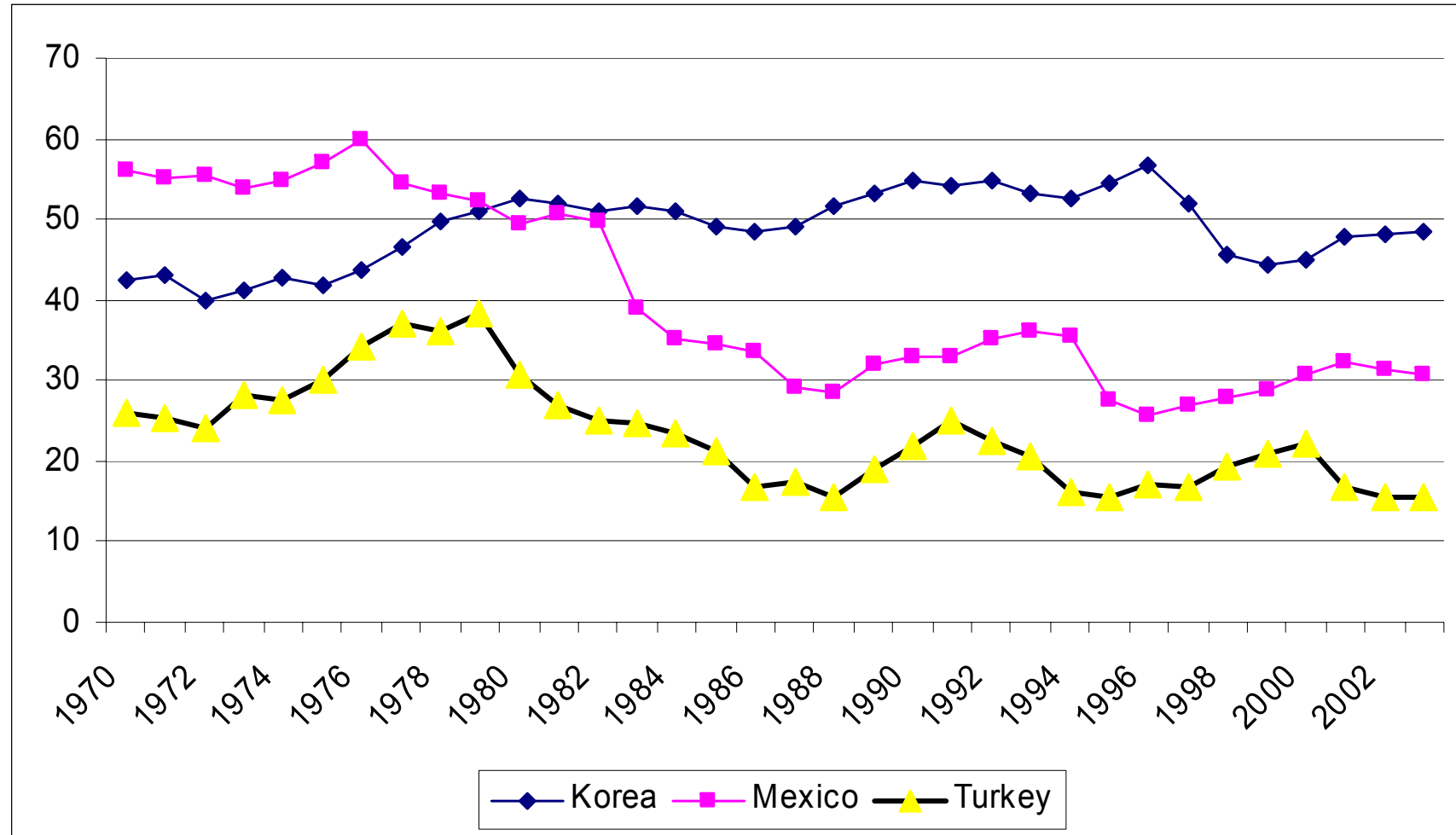


Table 3: The sources of the change in the wage share during a crisis
Annual % change in

	Exchange rate (local currency/\$)	Real exchange rate (local currency/\$)	Real value added	Wage share (Wage bill / value added)	Real wage per worker (deflated by CPI)	Employment	Productivity (Real value employe
Korea							
1998	47.32	37.02	-7.90	-12.58	-2.10	-13.74	6.78
1999	-15.17	-15.86	21.77	-2.48	4.92	2.24	19.1
2000	-4.87	-6.97	16.98	1.45	5.65	6.80	9.50
Mexico							
1982	130.07	44.77	-2.74	-1.60	-3.16	-2.04	-0.70
1983	112.93	5.53	-7.84	-21.74	-22.46	-7.13	-0.70
1984	39.75	-15.58	5.01	-9.63	-6.15	2.07	2.80
1995	90.20	40.89	-4.94	-22.25	-13.07	-5.31	0.30
1996	18.38	-11.90	10.83	-7.07	-8.62	6.88	3.70
1997	4.20	-13.62	9.94	4.89	-0.52	8.79	1.00
Turkey							
1980	144.67	16.41	-6.21	-19.76	-38.50	1.17	-7.20
1981	46.27	7.10	10.33	-11.88	11.05	1.42	8.78
1982	46.16	11.71	6.36	-7.19	-2.17	3.76	2.50
1994	169.55	30.68	-5.60	-22.22	-14.14	-4.27	-1.30
1995	54.84	-17.69	11.80	-3.31	-0.15	4.08	7.40
1996	77.57	-1.54	7.50	9.98	-5.14	6.82	0.60
2001	96.03	26.96	-8.05	-24.27	-27.60	-2.94	-5.20
2002	22.98	-15.17	8.20	-5.51	-11.39	0.61	7.50
2003	0.42	-19.85	8.44	-5.23	-10.08	1.82	6.50

Note: The real wage is deflated by CPI, whereas productivity is calculated based on real value added deflated by PPI. Thus the difference in the % change in the wage share and the % change in the real wage-% change in productivity is the differences in inflation rates in CPI and PPI.

Source: Own calculations based on OECD STAN for Mexico and Korea, and Annual Survey of Employment, Payments, Production and Tendencies in Manufacturing Industry for Turkey.

Source for the exchange rate and CPI is World Bank World Development Indicators. Real exchange rate is deflated by CPI.

Literature

- A lot on liberalization + openness vs. macro performance
- but little on labor & distribution between classes
 - More on individual income distribution, poverty
 - Eg. Dollar and Kraay 04
 - Critique: eg. Dağdeviren, Hoeven, Weeks 01, Cornia 04
 - wage inequality
 - eg. Feenstra & Hanson, 97; Harrison & Hanson, 99
 - Class
 - Rodrik 98, Harrison 02, Diwan 01, Lee & Jayadev 05
- Difference of this paper
 - includes the developments since mid 1990s
 - focus on “emerging” developing countries
 - attention to cross-country heterogeneity
 - Time series properties

A Model of Distribution

- Conflicting claims model, open economy (Arestis 86, Rowthorn 77)
- Wage bargaining: Labor market, macro, expectations, indexation

$$w_t = b_0 + b_1 e_t - b_1 n_t + b_2 macro + p_t^e + prod_t^e$$

- Price (p) setting by firms (Sylos-Labini, 79)
 - imported inputs → pass through effect of depreciation (x)

$$p_t = m + \Phi ws_t + i_1 x_t + i_2 x_{t-1}$$

- Labor demand (e): function of output and labor costs(?)

$$e_t = e_0 + e_1 y_t + e_2 y_{t-1} - e_3 ws_t - e_4 ws_{t-1}$$

- Productivity (prod): pro-cyclical function of output

$$prod_t = (1 + \delta)y_t - e_t$$

- Effects of neoliberal globalization: intensified conflict?
 - Global: International trade & FDI (↑fall back option of capital)
 - Domestic: Government's expenditures (↓fall back option of labor)

- Reduced form for the wage share (ws) to be estimated

$$ws_t = w_t - p_t - prod_t$$

Specification of the equation

Dependent variable:

percentage change in the wage share in manufacturing

Explanatory variables:

Basic model (wage bargaining + conflict inflation)

growth of manufacturing value added t & $t-1$

nominal depreciation t & $t-1$

lagged wage share

Macro variables

$d(\text{export/value added in manufacturing})_{t-1}$ & $t-2$

$d(\text{import/value added in manufacturing})_{t-1}$ & $t-2$

$d(\text{FDI/GDP})_{t-1}$ & $t-2$

$d(\text{government final consumption expenditure/GDP})_t$

Econometric methodology

1. Separate estimations for 10 countries
 - Seemingly Unrelated Regression (SUR)
 - cross-country heterogeneity
 - correlation of the country specific residuals across countries captures common shocks; e.g. the Asian crisis.
 - Joint significance of the lagged variables
 - Disadvantage: short time series – macro vars not simulatenously in eqn.
2. Pooled regression: cross country+time
 - The data on distribution ☹️
 - confidential secrets of states?
 - Manufacturing data only, UN+OECD+WDI+EIU

Table 2a: The basic model (1972-2003)

Included observations: 32

Total system(balanced) observations 320

	ARGENTINA		BRAZIL		CHILE		MEXICO		TURKEY	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
constant	-3.460	0.168	-0.577	0.720	-0.105	0.971	-1.551	0.416	5.780	0.274
growth t	0.465	0.039	-0.185	0.267	-0.482	0.077	0.209	0.411	-0.539	0.146
growth t-1	0.723	0.002	0.219	0.156	0.513	0.053	0.376	0.113	0.303	0.383
dwt-1	-0.045	0.701	0.069	0.619	-0.394	0.020	0.280	0.075	0.393	0.013
nominal depreciation t	-0.003	0.101	0.000	0.886	-0.069	0.001	-0.102	0.002	-0.216	0.000
nominal depreciation t-1	0.008	0.000	-0.001	0.653	0.068	0.000	0.044	0.206	0.112	0.096
R2	0.239		0.057		0.351		0.467		0.257	
	INDONESIA		KOREA		MALAYSIA		PHILIPPINES		THAILAND	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
constant	11.029	0.000	-0.483	0.708	0.281	0.859	-5.544	0.370	3.187	0.189
growth t	-0.172	0.363	0.157	0.095	-0.284	0.002	0.682	0.411	-0.333	0.081
growth t-1	-0.581	0.002	0.047	0.595	0.177	0.081	0.303	0.644	0.317	0.069
dwt-1	-0.144	0.291	0.126	0.310	0.065	0.628	-0.121	0.273	-0.036	0.807
nominal depreciation t	-0.132	0.000	-0.172	0.002	0.045	0.576	0.128	0.578	-0.200	0.141
nominal depreciation t-1	-0.065	0.048	-0.082	0.186	-0.042	0.622	0.433	0.099	-0.032	0.803
R2	0.503		0.501		0.365		-0.015		0.086	

Mexico	Estimatin period: 1972-2003, for FDI 1973-2003						Included observations 32			
	The basic model		Recession		Government		Foreign trade		FDI	
	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.	Coeff.	Prob.
constant	-1,55	0,42	-4,27	0,21	-3,85	0,03	-1,01	0,60	0,43	0,83
growth t	0,21	0,41	0,35	0,45	0,19	0,39	0,19	0,45	0,24	0,37
growth t-1	0,38	0,11	0,57	0,03	0,39	0,07	0,38	0,11	0,11	0,68
dws t-1	0,28	0,07	0,25	0,13	0,28	0,04	0,16	0,30	0,07	0,66
depreciation t	-0,10	0,00	-0,08	0,02	-0,06	0,04	-0,10	0,00	-0,09	0,01
depreciation t-1	0,04	0,21	0,05	0,17	0,05	0,09	0,04	0,24	0,01	0,82
growth*recess	-	-	1,63	0,08	-	-	-	-	-	-
recession	-	-	7,31	0,11	-	-	-	-	-	-
d(gov. exp./GDP) t	-	-	-	-	5,45	0,00	-	-	-	-
d(EXP/VA) t-1	-	-	-	-	-	-	-0,06	0,27	-	-
d(EXP/VA) t-2	-	-	-	-	-	-	-0,13	0,00	-	-
d(IMP/VA) t-1	-	-	-	-	-	-	-0,01	0,82	-	-
d(IMP/VA) t-2	-	-	-	-	-	-	0,06	0,04	-	-
d(FDI/GDP) t-1	-	-	-	-	-	-	-	-	4,09	0,01
d(FDI/GDP) t-2	-	-	-	-	-	-	-	-	4,82	0,03
R2	0,47		0,55		0,64		0,47		0,53	12

Explaining the ↓ in the wage share

- Nominal depreciation: immediate - effect of the crisis
 - 6/10: Arg, Chile, Mex, Tur, Indo, Kor
- Contraction of output
 - Arg, Kor: Always pro-cyclical
 - Indo, Malay, Mex, Tur: pro-cyclical during a crisis
 - Indo, Malay, Tur: counter-cyclical during normal years
- Persistence of the decline
 - lagged effect from growth: Arg, Chile, Malay, Mex, Thai
 - past year's decline in the wage share: Mex, Tur
 - lag of nominal depreciation as in the single case of Indonesia.
- Extention: Growth endogenous (function of distribution)

Effects of globalization & fiscal policy

- negative bargaining pressures over labor
 - Exports/GDP: negative (homogenous), Imports: 0
 - FDI/GDP:
 - negative (joint significance of two lags) in 4/10 (Chile, Mex, Indo, the Phil),
 - + in 1 (Malay), no significant effect in 5
- negative effect of tight fiscal policies: 7/10
 - (Bra, Chile, Mex, Tur, Malay, Phil, Thai)
- Robust when growth is endogenous

Table 5: Pooled estimation (Estimation period: 1973-2003)

Estimation Method: Seemingly Unrelated Regression

Included observations: 31

Total system (unbalanced) observations 281

	Coefficient	Prob.
growth t	-0.153	0.089
growth*recession dummy	0.161	0.498
recession dummy	-5.012	0.004
growth t-1	0.232	0.000
nominal depreciation	-0.004	0.023
nominal depreciation t-1	0.005	0.001
d(government final consumption expenditure/GDP)	1.680	0.000
d(export/value added) t-1	-0.072	0.120
d(import/value added) t-1	0.019	0.598
d(FDI/GDP) t-1	-0.297	0.315
d(export/value added) t-2	-0.101	0.019
d(import/value added) t-2	0.027	0.423
d(FDI/GDP) t-2	-0.165	0.599
Fixed effects		
ARGENTINA	2.393	0.377
BRAZIL	-0.224	0.892
CHILE	0.283	0.890
MEXICO	-0.221	0.862
TURKEY	0.043	0.983
INDONESIA	0.056	0.977
KOREA	-0.124	0.929
MALAYSIA	0.565	0.664
PHILIPPINES	3.129	0.383
THAILAND	2.678	0.020
R2	0.136	
Wald tests	Probability of Chi-square test stat.	
growth+growth*recession dummy=0	0.969	
d(export/value added) t-1+d(export/value added) t-2 =0	0.006	
d(import/value added) t-1+d(import/value added) t-2 =0	0.350	
d(FDI/GDP) t-1+d(FDI/GDP) t-2 =0	0.312	

Note: Estimation Method is fixed effects panel data with error terms correlated across countries.

The dependent variable is the percentage change in the wage share in manufacturing (dws)

Conclusions

- Contraction of output decreases labor's share.
- Crises: long lasting effect.
- Nominal depreciation erodes labor's share
- Openness & liberalization have weakened the bargaining power of labor in the DCs.
- Exports: negative effect
- FDI: either negative or no significant effect.
- The nation states take side in the process of class struggle

The crisis of neoliberal globalization long term contradictions

