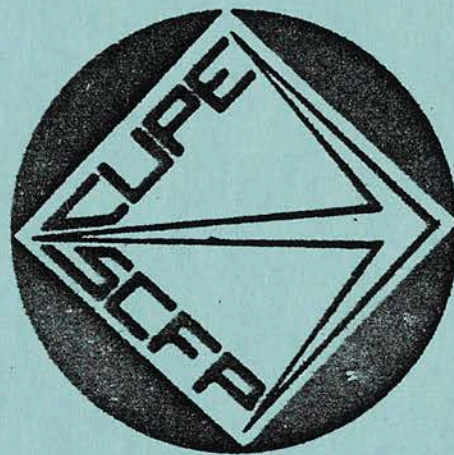


1977

**British Columbia
University Conference**



Research Department,
Canadian Union of Public Employees,
October, 1977.

BRITISH COLUMBIA
UNIVERSITY CONFERENCE

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Research Department,
Canadian Union of Public Employees,
October, 1977.

CARETAKERS BASE RATES IN MAJOR SCHOOL BOARDS
ON MAXIMUM, 1976-1978

School Board	1976	1977	1978
<u>British Columbia</u>			
Vancouver	\$6.45 (a)	--	--
Burnaby	6.11 (a)	--	--
Surrey	6.24 (a)	\$6.66 (a)	--
Victoria	5.94 (a)	--	--
<u>Alberta</u>			
Edmonton	5.66	6.00	--
Edmonton RC	5.61	5.94	--
Calgary	5.81	6.15	--
Calgary RC	5.94	--	--
<u>Saskatchewan</u>			
Regina	5.33	5.74	--
Regina RC	4.92	5.29	--
Saskatoon	5.04	5.44	--
Saskatoon RC	5.70	5.71	--
<u>Manitoba</u>			
Winnipeg	5.59	6.02	--
<u>Ontario</u>			
Ottawa	5.14	5.51	--
Ottawa RC	4.77 (a)	5.31	--
London	5.99	6.39	--
London RC	5.80	6.23	--
Hamilton	5.93	5.93	--
Windsor	5.95 (a)	--	--
Windsor RC	6.21 (a)	6.91 (a)	\$7.11 (a)
Metro Toronto RC	5.65	5.65	--
Toronto	5.63	6.16	--
East York	5.95	6.41	--
Scarborough	5.61	6.07	--
North York	5.62	6.06	--
Etobicoke	5.66	6.12	--
York	5.66	6.12	--
Durham	6.03	6.37	--
Durham RC	5.73	5.73	--
Peel	5.64	5.64	--
Dufferin-Peel RC	5.64	5.64	--
Lincoln County	5.65	6.04	--
Lincoln County RC	4.65	5.05	--
Niagara South	5.30	5.70	--
Waterloo	5.70	5.70	--
Waterloo RC	5.05	--	--
Sudbury	5.50	5.50	--
Lakehead	4.50	--	--
Lakehead RC	5.17	--	--
<u>Quebec</u>			
Province Wide	5.15 (a)	5.46 (a)	5.79 (a)
<u>Maritimes</u>			
New Brunswick Province Wide	4.33	--	--
Halifax	5.02	--	--
PEI Province-Wide	3.89	--	--
St. John's RC	4.68	--	--

(a) Plus COLA

Note: If more than one Caretaker classification exists, the rate for the lowest category is cited.

WAGE RATES FOR PERMANENT LABOURERS IN
PUBLIC WORKS IN METROPOLITAN CITIES IN CANADA

2.

<u>Municipality</u>	<u>Population</u>	<u>Labour Rate</u>		
		<u>1976</u>	<u>1977</u>	<u>1978</u>
Vancouver, B.C.	422,278	\$6.11	\$6.47	
Surrey, B.C.	96,651	6.23	6.63	
Victoria, B.C.	60,897	5.94(a)		
Winnipeg, Man.	534,685	5.21	5.64	
Edmonton, Alta.	434,116	6.11	6.60	
Calgary, Alta.	400,154	5.60	6.05	
Regina, Sask.	137,759	5.65		
Saskatoon, Sask.	125,079	5.73	6.18	
<u>Ontario - Cities</u>				
Toronto	685,333	5.62	6.07	
Hamilton	311,886	5.62	6.09	
Ottawa	302,124	5.53		
London	243,928	5.36	5.79	
Mississauga	234,975	5.42	5.83	
Windsor	198,569	5.78(b)		
Kitchener	130,228	5.34	5.77	
St. Catherines	120,398	5.31	5.75	
Thunder Bay	108,571	5.83(c)	6.35(c)	
Oshawa	102,876	5.38	6.20(d)	6.48(d)
<u>Ontario Regional Municipalities</u>				
Toronto, Metro	2,152,269	5.62	6.07	
Ottawa-Carleton	506,592	5.53		
Hamilton-Wentworth	408,466	5.62	6.09	
Niagara	358,663	5.52		
Waterloo	286,281	5.34	5.76	
Durham	234,465	5.51	5.92	
York	195,141	5.51		
Sudbury	166,121	5.07	5.53	
Haldimand-Norfolk	85,840	4.86		
Montreal, Quebec	1,197,753	5.30		
Quebec, Quebec	182,418	5.30	6.01	
Halifax, N.S.	121,086	5.00		
Saint John, N.B.	89,039	5.45		
St. John's, Nfld.	88,102	4.90		

- (a) Plus COLA, not included in wage rates; Jan. 1/76 to Mar. 31/76-9¢ per hour; Apr. 1/76 to June 30/76-6¢ per hour; July 1/76 to Sept. 30/76-12¢ per hour; Jan. 10/76 to Dec. 31/76-3¢ per hour.
- (b) COLA Formula: 1¢ per hour for each .5 increase in CPI over base figures of 189.9. At Dec. 1976 COLA = 28¢ per hour.
- (c) COLA Formula: 1% increase in wages for 1% increase in CPI after 6% increase over Dec./76 CPI.
- (d) COLA Formula: 1¢ per hour for each .5 increase in CPI (1961=100); paid quarterly.

Research Department,
CUPE, September, 1977.

WAGE RATES IN MAJOR BRITISH COLUMBIA COLLECTIVE AGREEMENTS

<u>Employer</u>	<u>Union</u>	<u>Term Date</u>	<u>Maximum Caretaker Rate</u>		
			<u>1976</u>	<u>1977</u>	<u>1978</u>
Forest Ind. Rel. Ltd.	IWA	30-6-77	\$6.89	\$6.89	--
B.C. Forest Products	PPWG	30-6-77	6.89	6.89	--
B.C. Hospitals	HEU	31-12-77	5.89	6.27	--
B.C. Telephone	FTWBC	31-12-76	6.54	--	--
B.C. Hydro	IBEW	31-3-77	8.02	--	--
B.C.I.T.	BCGEU	31-7-77	6.23	6.98	--
U.B.C.	CUPE	31-3-78	6.18	6.44	\$6.44

Research Department,
Canadian Union of Public Employees,
September, 1977

WAGE RATES IN MAJOR BRITISH COLUMBIA COLLECTIVE AGREEMENTS

Employer	Term Date	Labourer Hourly Rate		
		1976	1977	1978
Forest Industrial Relations Ltd.	14-6-77	\$6.89	\$ -	\$ -
Pulp and Paper Industrial Relations Bureau	30-6-77	6.89	7.01	-
British Columbia Government	31-7-77	6.62	7.11	-
British Columbia Hospitals	31-12-77	6.26	-	-
British Columbia Telephone	31-12-76	6.54	-	-
British Columbia Hydro	31-3-77	8.02	-	-
University of British Columbia	31-3-78	6.74	7.13	-

Note: wage rates effective at December 31st of each year or termination date, if prior to December 31.

Research Department,
Canadian Union of Public Employees,
September, 1977.

PERCENTAGE ANNUAL AVERAGE WAGE CHANGES IN BASE RATES IN MAJOR COLLECTIVE AGREEMENTS

	<u>Non-Commercial</u>		<u>Non-Manufacturing</u>		<u>All Industries</u>	
	<u>1 Year</u> <u>Agreements</u>	<u>2 Year</u> <u>Agreements</u>	<u>1 Year</u> <u>Agreements</u>	<u>2 Year</u> <u>Agreements</u>	<u>1 Year</u> <u>Agreements</u>	<u>2 Year</u> <u>Agreements</u>
<u>3rd Quarter 1976</u>						
All Settlements	10.9	10.9	10.6	9.1	10.4	9.2
Settlements with COLA	6.8	--	8.3	9.4	8.3	9.2
Settlements W/O COLA	11.2	10.9	10.9	8.9	10.6	9.2
<u>4th Quarter 1976</u>						
All Settlements	8.9	8.0	9.1	7.6	9.1	7.9
Settlements with COLA	8.9	4.4	8.8	7.8	8.8	7.8
Settlements W/O COLA	8.9	8.1	9.1	7.5	9.1	7.9
<u>1st Quarter 1977</u>						
All Settlements	8.8	8.7	8.8	9.2	8.5	9.1
Settlements with COLA	7.7	8.9	7.5	8.9	7.0	8.9
Settlements W/O COLA	9.0	8.2	8.9	9.5	8.7	9.3
<u>2nd Quarter 1977</u>						
All Settlements	8.8	5.5	8.8	6.5	8.7	6.3
Settlements with COLA	5.2	2.3	7.9	5.3	7.8	4.1
Settlements W/O COLA	8.9	6.0	8.9	6.7	8.7	7.1
<u>Last Four Quarters</u>						
All Settlements	9.3	8.3	9.2	8.4	9.1	8.3
Settlements with COLA	7.1	8.3	8.0	8.6	7.7	8.2
Settlements W/O COLA	9.4	8.3	9.3	8.2	9.2	8.4

Source: "Wage Developments Resulting From Major Collective Bargaining Settlements", Second Quarter, 1977, Labour Data, Labour Canada. Agreements covering 500 or more employees, excluding Construction.

TABLE I B.C. WAGE SETTLEMENTS BY QUARTER
JULY 1st 1976 TO JUNE 30th 1977

	<u>Number of Contracts</u>	<u>Employees Covered</u>	<u>Average Annual Increase</u>	
			<u>Percentage</u>	<u>Cents Per-Hour</u>
<u>3rd QUARTER, 1976³</u>				
Contract Average*	55	27,877	10.3	62
Skilled Classes			9.6	67
Unskilled Classes			11.4	58
<u>4th QUARTER, 1976³</u>				
Contract Average*	79	60,192	10.5	80
Skilled Classes			10.4	80
Unskilled Classes			10.4	63
<u>1st QUARTER, 1977²</u>				
Contract Average*	60	30,977	7.4	46
Skilled Classes			7.0	56
Unskilled Classes			7.4	35
<u>2nd QUARTER, 1977¹</u>				
Contract Average*	77	33,419	6.1	55
Skilled Classes			5.8	57
Unskilled Classes			5.9	43
<u>AVERAGE LAST 4 QUARTERS</u>				
Contract Average*	271	152,465	8.9	64
Skilled Classes			8.5	68
Unskilled Classes			8.8	49

* As represented by the arithmetic average of the modal skilled and modal unskilled pay rates.

¹ Preliminary

² Revised

³ Final

Note: Annual increases appear lower as they have been calculated using an average of skilled and unskilled wage rates rather than using base rates only.

Source: Labour Research Bulletin, British Columbia Ministry of Labour, May, 1977.

Research Department,
CUPE, September, 1977.

TABLE 2

B.C. WAGE SETTLEMENTS BY INDUSTRY
JULY 1st 1976 TO JUNE 30th 1977

Industry	Number of Contracts	Employees Covered	Contract Average		Skilled		Unskilled			
			Annual Increase %	First Year Increase ¢/Hr	Annual Increase %	First Year Increase ¢/Hr	Annual Increase %	First Year Increase ¢/Hr		
ALL INDUSTRIES	271	152,465	8.9	64	9.4	66	9.1	70	8.8	49
MANUFACTURING	89	24,853	9.6	63	9.9	63	8.9	66	11.0	60
Food & Bev	30	10,239	10.0	58	10.1	58	9.0	59	11.8	57
Wood Prod	5	6,029	12.0	83	12.3	81	10.7	83	14.4	82
Metals	9	1,730	7.9	54	7.8	53	7.9	61	7.7	47
Machinery et al*	26	4,590	6.7	51	7.1	53	7.0	57	6.8	46
Misc. Mfg.	19	2,265	8.7	59	9.3	62	8.5	68	9.7	56
CONSTRUCTION	54	52,944	8.3	80	8.3	80	8.0	80	8.6	74
TRADE & SERVICE	98	62,808	9.4	55	10.5	59	10.4	67	8.1	36
Trade	9	1,421	6.4	39	6.7	40	6.6	45	6.4	34
Education	29	5,818	8.1	62	8.1	62	7.8	67	8.9	53
Municipal Serv.	16	2,421	7.1	49	7.1	49	6.8	54	7.7	45
Misc. Service	44	53,148	9.7	55	11.0	60	10.9	68	8.1	34
OTHER INDUSTRIES	30	11,860	7.2	48	7.9	52	7.7	56	7.3	44
Mining	15	7,625	6.1	44	6.6	47	10.5	50	6.5	42
Transportation	14	4,019	9.2	57	10.4	62	5.4	71	9.1	48
Commun. & Utilities	1	216	5.5	46	5.5	46	7.7	52	5.5	39

* Machinery, Transportation Equipment & Electrical Products

Note: Annual increases appear lower as they have been calculated using an average of skilled and unskilled wage rates, rather than using base wage rates only.

Source: Labour Research Bulletin, British Columbia Ministry of Labour, May, 1977.

FACULTY
TOTAL COMPENSATION PACKAGE INCREASES
IN
WESTERN AND PRAIRIE UNIVERSITIES, 1977-78

<u>University</u>	<u>Scale</u>	<u>Career Development</u>	<u>Percentage Increase</u>				<u>Fringe Benefits</u>	<u>TOTAL COMPENSATION</u>
			<u>Merit</u>	<u>Sabbatical</u>	<u>Anomoly Fund</u>			
British Columbia	7.5%	-	1.0%	-	1.0%	-	9.5% (1)	
Simon Fraser	6.3	3.51	-	-	-	0.17	9.98	
Victoria	6.29	2.76	0.48	0.51	-	-	10.04	
Alberta	Pending Arbitration						n/a	
Calgary	6.5	-	3.1	-	-	-	9.6	
Lethbridge	5.38	-	2.6	-	-	2.12	10.1	
Sask & Regina	In negotiations						n/a	
Manitoba	In negotiations						n/a	
Winnipeg	9.3	-	3.84	-	-	-	13.14	
Brandon	7.6	1.0	-	-	-	-	8.6	

(1) A.I.B. Approved

Source: Canadian Association of University Teachers

Non-Teaching Staff
UNIVERSITIES AND COLLEGES

A Comparison of Non-Teaching Staff Total Compensation
and Employer Contributions to Welfare Plans
in Universities & Colleges by Rank Order

<u>Province/Region</u>	<u>Annual Total Compensation</u>	<u>Rank Order</u>	<u>Annual Employer Contributions to Welfare Plans</u>	<u>Rank Order</u>
Quebec	\$8,921.	1	\$556.	2
Ontario	8,494.	2	654.	1
Saskatchewan	7,563.	3	457.	3
British Columbia	7,473.	4	385.	4
Manitoba	6,898.	5	280.	7
Alberta	6,853.	6	376.	5
Atlantic Region	5,905.	7	288.	6
Canada, average	\$7,934.		\$514.	

Differential Between Employer Contributions to
Welfare Plans for Non-Teaching and Teaching Staff in
Universities and Colleges

<u>Province/Region</u>	<u>Annual Average Employer Contribution to Welfare Plan</u>		<u>Differential of Teaching Over Non-Teaching Staff</u>
	<u>Non-Teaching</u>	<u>Teaching (a)</u>	
British Columbia	\$385.	\$1,197.	\$ + 812.
Alberta	376.	1,430.	+1,054.
Saskatchewan	457.	1,298.	+841.
Manitoba	280.	970.	+690.
Ontario	654.	1,426.	+772.
Quebec	556.	1,170.	+614.
Atlantic Region	288.	881.	+593.
Canada, average	\$514.	\$1,256.	+\$742.

(a) Full-time

Source: Tabulated from Labour Costs in Education, 1974. Statistics Canada, #72-616

LABOUR COSTS IN EDUCATION

A Comparison of Average Annual Employer Contributions to
Welfare Plans in Schools and Universities, by Type of Personnel

<u>Province</u>	<u>Non-Teaching</u>		<u>Teaching (a)</u>		<u>Differential</u>	
	<u>Schools</u>	<u>Universities</u>	<u>Schools</u>	<u>Universities</u>	<u>Non-Teaching</u> <u>Universities Over Schools</u>	<u>Teaching</u> <u>Universities Over Schools</u>
British Columbia	\$429.	\$385.	\$875.	\$1,197.	\$ - 44.	\$ + 322.
Alberta	334.	376.	1,843.	1,430.	+ 42.	- 413.
Saskatchewan	262.	457.	850.	1,298.	+ 195.	+ 448.
Manitoba	323.	280.	842.	970.	- 43.	+ 128.
Ontario	497.	654.	979.	1,426.	+ 157.	+ 447.
Quebec	511.	556.	924.	1,170.	+ 45.	+ 246.
Atlantic Region	208.	288.	323.	881.	+ 80.	+ 558.
Canada, average	\$440.	\$514.	\$954.	\$1,256.	+ 74.	\$+302.

Source: Tabulated from Labour Costs in Education, 1974. Statistics Canada, #72-616

FREQUENCY OF EMPLOYEE BENEFITS, BY
RANK ORDER 1975 - 76

Rank Order	Employee Benefit	Organizations Providing Each Type of Employee Benefit	
		#	%
1	C/QPP	155	100.0%
1	U.I.C.	155	100.0
1	W.C.B.	155	100.0
1	Vacations	155	100.0
1	Holidays	155	100.0
1	Group Life Insurance	155	100.0
2	Pension Plans	148	95.5
2	Bereavement & Jury Duty	148	95.5
3	Hospital, Surgical & Medical	145	93.6
4	Education Allowance	138	89.0
5	Non-Occupational Sickness	137	88.4
6	Coffee Breaks & Jury Duty	131	84.5
7	Severance & Termination Pay	109	70.3
8	Safety Clothing & Equipment	108	69.7
9	Transportation & Parking	105	67.7
10	Medical Supplies & Services	102	65.8
11	Service Awards	99	63.9
12	Uniform & Laundry	93	60.0
13	Recreational Articles	86	55.5
14	Relocation Allowances	75	48.4
15	Suggestion Awards	66	42.6
16	Cafeteria Subsidies	65	41.9
17	Real Estate Assistance	62	40.0
18	Company Discounts	54	34.8
19	Industrial Injury Benefits	52	33.6
20	Dental Insurance	45	29.0
21	Bonus Plans	44	28.4
22	Christmas Gifts	42	27.1
23	Survivors Benefits	33	21.3
24	Other Paid Time Off	33	21.3
25	Free Meals	29	18.7
26	Other	21	13.6
27	Profit-Sharing Plan	19	28.4
28	Free Lodging	12	7.7
	Total in Survey	155	100.0%

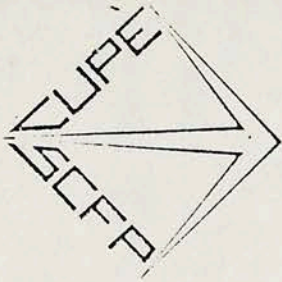
Source: Thorne Riddell Associates Ltd., "Employee Benefit Costs in Canada, 1975/76" Table 4.

COST OF EMPLOYEE BENEFIT PROGRAMS, BY
RANK ORDER AS A PERCENTAGE OF GROSS
ANNUAL PAYROLL AND DOLLARS PER EMPLOYEE PER YEAR

12.

<u>Sector</u>	<u>Rank Order</u>	<u>Percentage of Gross Annual Payroll</u>	<u>Dollars per Employee Per Year</u>
All Industries		31.1%	\$3,849
<hr/>			
Manufacturing Sector		32.1%	\$3,871
<hr/>			
Chemical & Allied Products	1	36.5%	\$4,694
Machinery & Transport Equipment	2	35.5	4,072
Food, Beverage, Tobacco	3	34.1	4,581
Pulp, Paper	4	33.7	4,231
Printing, Publishing	5	33.2	3,139
Other Manufacturing	6	32.7	3,656
Petroleum, Pipeline	7	31.7	5,348
Electrical Equipment	8	30.9	3,828
Primary Metals	9	27.3	3,240
Textile Mill Products	10	25.7	1,931
<hr/>			
Non-Manufacturing Sector		30.2%	\$3,831
<hr/>			
Mining	11	37.8%	\$5,865
Utilities	2	33.5	4,776
Municipalities	3	32.6	3,848
Transportation	4	32.1	4,321
Trade	5	31.5	3,022
Education	6	31.4	4,388
Finance & Insurance	7	30.4	3,070
Provincial Government	8	28.49	3,447
Hospitals	9	27.1	3,115
Other Non-Manufacturing	10	26.1	3,051
Construction	11	21.5	3,219

Source: Thorne Riddell Associates Ltd., "Employee Benefit Costs in Canada, 1975/76."
Table 6.



May 31, 1977

TO: ALL MAJOR CUPE SCHOOL BOARD LOCALS AND STAFF REPRESENTATIVES SERVING THESE LOCALS

Re: A.I.B. Approval of Reduction in Hours of Work in Major School Boards During Summer Months

Greetings:

In recent years significant gains have been made in reducing the hours of work in the Education Sector, both in School Boards and in Universities across Canada.

Presently the following institutions in the Education Sector have negotiated less than a 40 hour week for manual employees.

Superior Hours of Work Provisions in Education Sector

Table with columns: Institution, Union, Standard Hours Daily, Standard Hours Weekly. Rows include Universities (University of British Columbia, Simon Fraser University, etc.) and Major School Boards (Vancouver, Surrey).

In addition numerous other school boards have introduced flexible and/or reduced hours for clerical staff.

...../2

This past May the A.I.B. approved a reduction in the hours of work during summer months for the manual employees at the Calgary Board of Education, CUPE Local 40 and the Calgary Roman Catholic Separate School District, CUPE Local 520.

The A.I.B. approved the reduction in hours of work in these Major School Boards based on the following contract clause:

Article 7.02

"During the months of July and August, 1977, the regular working hours for employees shall be thirty-seven and one-half (37½) hours per week, with eight and one-half (8½) hours, Monday to Thursday, inclusive, and three and one-half (3½) hours in the Friday forenoon."

The School Board in its submission to the A.I.B. in December 1976 argued, "We would submit that the cost reflected by using such an (A.I.B.) formula would not be at all appropriate...and would produce a serious inflated cost, for these reasons", and here we summarize:

- (1) Because 80% of all employees are on vacation during the summer and in the Employer's words, "There is not...the full impact, in terms of time lost, that is reflected in the A.I.B. calculation. "
- (2) Because "...the revised work week will result in four and one-half days, one work break will be eliminated and the consequent effect of the hours reduction is lessened."
- (3) There is a Joint Productivity Evaluation Committee to monitor this experiment, to insure that there is no increase in costs, and furthermore,
- (4) It is understood between the parties that the reduced hours of work arrangement during the summer months is not to result in increased staffing hours.

On reconsideration the A.I.B. ACCEPTED and APPROVED the Employer's position for a reduction in summer hours to 37½ hours per week.

While this of course does not introduce a full 37½ hour week on a yearly basis this nevertheless represents an important breakthrough in the reduction of hours of work, especially considering the present legislative climate.

- 3 -

THEREFORE, WE WOULD STRONGLY URGE ALL MAJOR CUPE SCHOOL BOARD LOCALS TO SERIOUSLY CONSIDER PUTTING FORWARD IN THEIR NEXT ROUND OF NEGOTIATIONS A BARGAINING PROPOSAL FOR A REDUCTION IN HOURS OF WORK TO 37½ HOURS PER WEEK.

Attached please note the pertinent background information.

If we can provide any additional material(s) concerning the reduction in the hours of work in the Education Sector please do not hesitate to let me know.

Fraternally,

Richard Deaton/pcc pb

Richard Deaton,
Acting Director of Research.

rd/pb
Encl.

opeiu 491

The Calgary Board of Education and CUPE Local 40 have agreed to implement a reduced work week as per the following:

Calgary
November 27, 1976

We, the undersigned negotiators hereby recommend the following LETTER OF INTENT:

WHEREAS

Clause 7.02 is to read:

"During the months of July and August, 1977, the regular working hours for employees shall be thirty-seven and one-half (37½) hours per week, with eight and one-half (8½) hours, Monday to Thursday, inclusive, and three and one-half (3½) hours in the Friday forenoon."

it is declared between the parties that the aforesaid clause is only recommended and agreed to due to the condition precedent that the parties have previously agreed that in keeping with the spirit and intent of the Anti-Inflation Act of Canada, such change is not a change in compensation, but an experiment to test improvement in productivity. To monitor such productivity and the costs thereof during the experimental period, each party shall name three members to a joint EVALUATION COMMITTEE, one of which three members shall be named a joint chairperson of such Committee.

By December 31, 1977, this Committee shall report on the success or failure of such experiment in terms of productivity and cost and the said report shall be the basis of future negotiation between the parties concerning any new Collective Agreement.

Original signed by G.E. Holmes
Secretary-Treasurer
Calgary Board of Education

Original signed by D.W. Stuart
President - Local 40
CUPE

Original signed by G.A. Balfour
Manager, Personnel Services Department
Calgary Board of Education

Original signed by C. Kitchen
Chief Shop Steward
Local 40, CUPE

Original signed by W.B. Gill
Negotiator

Original signed by James W. Jordan
National Representative
CUPE

April 21, 1977

Mr. J.W. Jordan
 National Representative
 Canadian Union of Public Employees
 916 - 1st Avenue N.E.
 Calgary, Alberta
 T2E 0C5

Dear Mr. Jordan

This letter is in reply to your recently submitted documentation regarding the Calgary School District #19 and CUPE Local 40 settlement.

We have studied your submission and on the basis of the information provided by the School District and the Union, the Board has decided it can accept the compensation increases for this employee group for the first and second guideline years.

Thank you for your co-operation and participation in the Anti-Inflation Program.

Yours...sincerely

Barbara Johns
 Public Administration Division
 Compensation Branch

COMMUNICATIONS SECTION
 TELETYPE UNIT
 TELEPHONE UNIT
 MAIL ROOM
 RECEPTION UNIT

TELETYPE UNIT
 TELEPHONE UNIT
 MAIL ROOM
 RECEPTION UNIT

CANADA CONSUMER PRICE INDEX ALL ITEMS

	C.P.I. 1971 100	Percent Change Since December '75	Percent Change Since December '76	Percent Change Over Previous Month	Percent Change Over Same Month Previous Year
<u>1975</u>					
December	144.3				
<u>1976</u>					
January	145.1	0.6		0.6	9.6
February	145.5	0.8		0.3	9.1
March	146.2	1.3		0.5	9.0
April	146.8	1.7		0.4	8.9
May	148.0	2.6		0.8	8.9
June	148.7	3.0		0.5	7.8
July	149.3	3.5		0.4	6.8
August	150.0	4.0		0.5	6.2
September	150.7	4.4		0.5	6.5
October	151.7	5.1		0.7	6.2
November	152.2	5.5		0.3	5.6
December	152.7	5.8		0.3	5.8

<u>1977</u>					
January	154.0	6.7	0.9	0.9	6.1
February	155.4	7.7	1.8	0.9	6.8
March	157.0	8.8	2.8	1.0	7.4
April	157.9	9.4	3.4	0.6	7.6
May	159.2	10.3	4.3	0.8	7.6
June	160.3	11.1	5.0	0.7	7.8
July	161.8	12.1	6.0	0.9	8.4
August					
September					
October					
November					
December					

CONSUMER PRICE INDEX - REGIONAL CITIES

<u>Regional City</u>	<u>July C.P.I. 1971 = 100</u>	<u>Percent Change Since December 1975 / 1976</u>		<u>Percent Change Over Previous Month</u>	<u>Percent Change Over Same Month Previous Year</u>
St. John's	167.6	12.3%	5.8%	1.2%	8.4%
Halifax	157.5	11.7	6.2	0.5	8.1
Saint John	159.9	11.1	5.2	0.6	7.7
Quebec City	157.8	12.6	6.2	0.8	9.4
Montreal	159.1	12.1	6.2	1.4	8.9
Ottawa	159.0	12.1	6.1	0.7	8.8
Toronto	158.3	12.0	6.0	0.7	8.0
Thunder Bay	161.4	12.9	6.7	1.1	8.3
Winnipeg	161.9	12.0	5.5	0.6	8.2
Saskatoon	157.5	12.3	5.6	0.4	8.6
Regina	159.4	14.4	6.1	0.6	9.9
Edmonton	160.2	13.0	6.0	0.7	9.1
Calgary	158.8	12.5	5.9	0.6	8.8
Vancouver	162.4	13.6	4.6	0.7	7.1

Research Department,
Canadian Union of Public Employees,
September, 1977

LABOUR RESEARCH

Supplement No.1

January, 1977

STATISTICAL SELF - DEFENSE

Some years ago a humorous and informative little book for laymen was written by Darrell Huff entitled How to Lie with Statistics (Norton and Co., N.Y. \$3.00 paperback and can be ordered through most bookstores). This book is "must" reading for all workers and trade union negotiators who are bombarded daily with statistical material flowing from the media,

HOW AIB LIED WITH STATISTICS

As organized labour moved towards its National Day of Protest on October 1 against the Federal Government's wage control program, a \$1.1 million advertising blitz was launched by the Liberal Government using workers' hard-earned tax

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government sources, and presented by the Employer at the bargaining table. Workers and negotiators have always known that employers lied with statistics. This delightful little book tells us how and ways in which to spot "cooked" figures.

dollars and some tricky and downright dishonest statistical techniques to make it appear that wage and "price" controls were good for Canada's working people.

The Anti-Inflation Board's (AIB) ads are excellent examples of how to lie with statistics. Workers can learn a lot about the techniques of statistical manipulation from these concrete examples.

The recent AIB advertising blitzkrieg is also an opportunity to learn how the government lies with statistics in order to protect the interests of the business community. Let's look at some of the techniques used by the government.

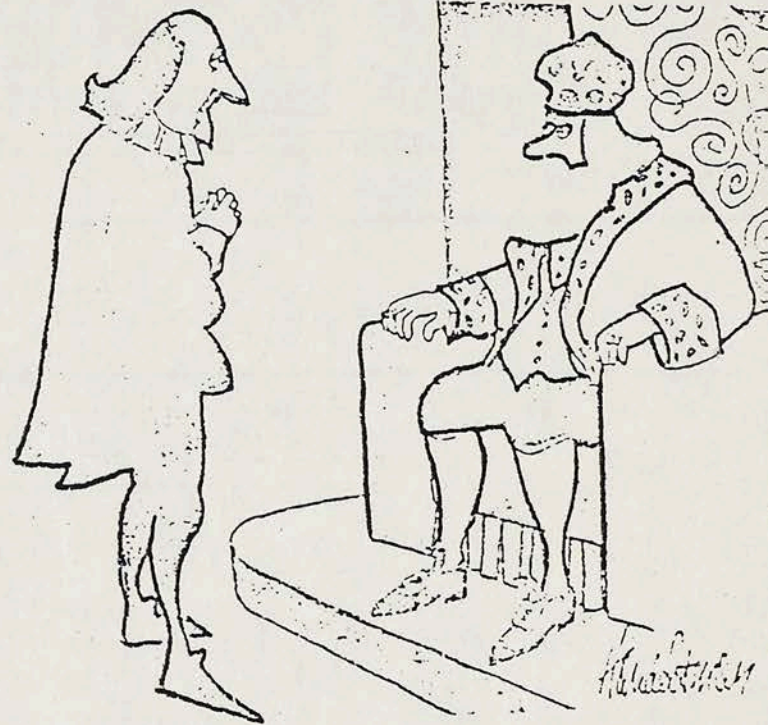
The AIB ads used two gimmicks to distort statistical data: first, they used uneven periods of time in its before and after comparison of the effects of controls on income; second, the ads used different size scales on graphs to give you the false impression of how much real incomes are growing.

The AIB ads compare a nine-month period ending just before controls were imposed last October 1975 and a three-month period ending in May 1976.

Based on this unequal comparison, that is using different benchmark periods, the AIB claims real incomes--the amount left after discounting for inflation--have improved under controls. But the picture is different when equal periods, based on similar or comparable benchmark periods are used.

Using figures supplied by the Federal Department of Finance, it turns out that real incomes have increased less if equal three month periods are compared. It turns out that real incomes in the March-May period of 1975 over 1974, compared with the same period for 1976 over 1975, have increased less than the government calculates using the unequal method shown in the AIB ads.

The ads state that real incomes grew by only 3% in the first nine months of 1975, then compare this with a 3.6% increase in the March-May (1976) period this year. But, if the comparable three month period last year is measured, then real income was only up 3.3%



"I'm really upset that the people don't believe me anymore. Perhaps I should use a different facial expression when I lie to them."

The second technique used by the AIB ads to distort the statistical evidence is sneaky and subtle--a real classic in statistical manipulation--namely, using misleading graphic representation. This is done by drawing the part of the chart showing a 3.6% real income growth after controls on a larger scale than the 3% real increase section in the before the controls period chart. You have to look hard but the graph for real income growth after controls were imposed is disproportionately wider and higher.

As Huff says in his book referred to earlier, ". . . whoever the guilty party may be in [statistical manipulation], it is hard to grant him the status of blundering innocent." At the bargaining table when it comes to statistical manipulation of data the real question is who benefits, who loses? The boss or the workers?

Primer of Statistics For Trade Unionists

In order to help workers and negotiators defend themselves from statistical overkill and fallout coming from the media, government and from the Employer at the bargaining table, presented here is a primer of how to lie with statistics--and how to defend yourself. This Labour Research Supplement contains examples of statistical abuses, tricks and gimmicks to watch out for.

CARD-STACKING - GENERAL

Card stacking is the general name for statistical manipulation. Card stacking can be conscious and deliberate or unintentional and unconscious. Misleading people by the use of statistical material is sometimes called "statisticulation".

BIASED SAMPLE - GETTING THE ANSWER YOU WANT

The technique of using a biased sample means that there is a selective use of data, or the selection of favourable data which proves what you want it to prove--and all other unfavourable data is disregarded. The consciously biased sample is really a sampling error because the smaller the sample, the greater the likelihood of distortion of the data. If the sample is large enough and selected properly, it will represent the whole situation. The statistical results based on a sampling study are no better than the sample it was based on. Theoretically, in order to avoid a biased sample would require a representative random sample. Always ask how large the sample was, how representative, and was the data comparable? Examples: We all know of instances when an Employer has conveniently excluded other higher paying Employers in the community to create a downward bias in the average community wage figures. Similarly, the AIB claimed that negotiated settlements in bargaining units of over 500 people or more far exceeded the inflation rate. But settlements in bargaining units of 500 or more workers represent only 25% of all bargaining units and only 10%-10% of all workers in the labour force (depending on the number of settlements in a given year). In order to ascertain how all workers and wage rates kept up with inflation would require a look at the Industrial Composite Average Weekly

REPORTING AND METHODOLOGICAL INCONSISTENCIES

Reporting inconsistencies can be conscious or unconscious. A change in the way in which statistical data is compiled and reported may affect their validity. As statistical reporting becomes more refined the figures change. A good case in point is medical statistics, where reported cases of a disease are not always the same thing as more cases of the disease. It's just that the number of cases are reported more carefully. For example, if a new diagnostic test is introduced for a particular disease statistics might be produced which show the incidence had increased dramatically. This is not necessarily the case, since the incidence may not have risen at all, but we are simply more capable of more accurately detecting its presence. (Also see Averages and Non-Comparable data below).

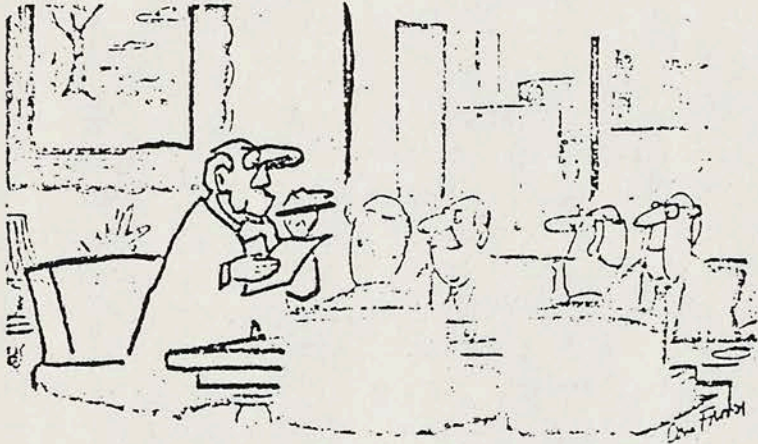
MISREPRESENTATION OF THE FACTS

Misrepresentation of the facts, regardless of what other name is used, is blatant statistical manipulation. A common example is consumer credit which is normally charged at a rate of 1% per month. But 1% per month is 12% per year--but they don't tell you that. Or take for example the 2% productivity figure used by the AIB to justify keeping your wages down. Statistics Canada, a government agency, states clearly: "real domestic product of commercial industries per man-hour increased at an annual rate of 4.3% for the years 1946-72". Quite a difference.

INCOMPLETE DATA OR INFORMATION

In order for any statistical calculation to be meaningful, the way in which it was derived must be identifiable. For example, is the wage increase or consumer credit payment calculated on a simple or compound interest basis? On what basis are profits calculated? As a percentage of sales or as return on investment. In looking at an

Employer's financial statement which method of depreciation was used?



Drawing by Dana Friedman. © 1978 The New Yorker Magazine, Inc.

"To close on an upbeat note, I'm happy to report we received 22 percent more in kickbacks than we paid out in bribes."

A classic example of incomplete data is the presentation of tradesmen's salaries. Suppose an electrician's rate is \$9.00 per hour which means calculated on 40 hours per week (2080 hours per year), it is \$18,720 per year (excluding overtime and fringes). Right? Wrong. The majority of construction tradesmen only work 6 months a year which means his annual salary is only \$9,360 and his actual hourly rate for time worked is only \$4.50. (Also see Extrapolation below)

OPEN ENDED INFORMATION

This is a variation on the incomplete information technique. It allows for misrepresentation of data based on ambiguity. For example, a newspaper headline screams: "Workers Get 24% Wage Increase". That's great except that doesn't tell you what the duration of the contract is--1, 2, or 3 years. And that omission makes a big difference--like 24% in a 1 year contract or 8% per year over a 3 year agreement. That information is usually buried in the last paragraph of the newspaper story.

THE MEANINGLESS STATISTIC

The meaningless statistic is one which is contrived and deliberately confusing. The meaningless statistic usually takes the form of improper identification of units of measurement or is presented in such a manner that the way in which it was calculated cannot be identified. Example: An Employer claims that the average wage rate in the bargaining unit is \$6.00 per hour. When pressed by the Union to reveal how this figure was derived, it showed the boss adding one regular hour at \$4.00 to one time and a half overtime hour at \$6.00 to one double time hour at \$8.00 for an average hourly rate of \$6.00. It would be hard to find an instance of a figure with less meaning.

THE DANGLING NUMBER

The dangling statistic is one which is taken out of context and is left to stand by itself to deliberately create a misleading impression. Example: A few years ago a corporation ran a full page ad which said: "XYZ CO. EXAMPLE OF PEOPLES CAPITALISM--OVER 3,000 SHAREHOLDERS OWN AVERAGE OF 660 SHARES EACH". This information by itself was true. What the ad neglected to mention was that there were 2 million outstanding shares in the company with 3 people holding 75% of the stock and the three thousand people referred to in the ad held only one-fourth of the shares among themselves. In fact, according to Census data the top 1% of all income earners in Canada own 42% of all stock while the bottom 50% of income earners own less than 10% of all outstanding shares of stock.

THE AMBIGUOUS QUALIFIER

The ambiguous statement is thrown in when presenting statistical material in order to maintain the pretense of being honest. For example, a housing developer states that "Our homes are so low priced that 75% of all families can have them available within their income". In the first instance this means 25% of all families cannot afford the price of this home and second, the statement is ambiguously qualified to the extent that the homes are only "available", not necessarily bought by the other 75% of the families.

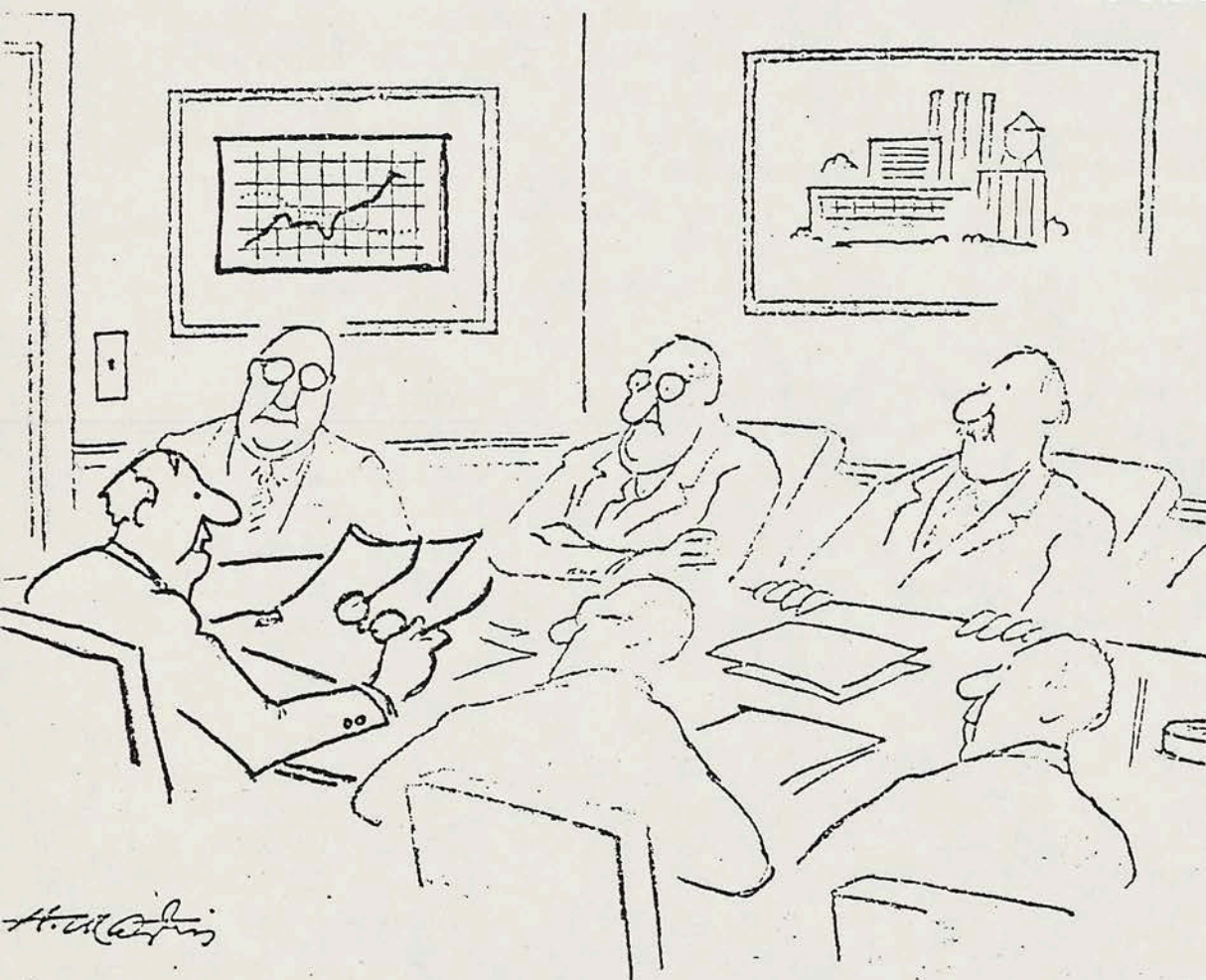
PACKAGING THE FIGURES DIFFERENTLY

There are many ways of expressing any figure. The trick is to use the method that works best for the purpose at hand and hope that few who read it will recognize how inaccurately or inadequately it reflects the situation. Examples: In a corporation's financial statement the same facts can be expressed differently calling it a 1% return on sales, a 15% return on investment, an increase in profits of 40% compared with an earlier 10 year period, a \$10 million profit, or a percentage decrease from last year.

APPLES AND ORANGES - NON-COMPARABLE DATA

One of the most common tricks in manipulating or interpreting statistical data stems from the use of non-comparable data. That is mixing the units of measurement--mixing apples and oranges. In order for there to be any validity in statistical reporting and the interpretation of data, there must be methodological consistency, that is the data must be presented in similar units of measurement over the same time period. Some common examples of statistical abuse, error and confusion as a result of using non-comparable data are

- Units of measurement shifted, i.e., comparisons of weekly or hourly salary between groups with different hours of work.
- Confusing straight-time salary with total compensation which includes overtime and fringes.
- Shifting the base year--that is measuring the same units, but over a different time period as in the AIB ads above.
- Confusing simple and compound interest.
- Annualized year over year averages or yearly month over month increases which are used to express increases in the Consumer Price Index (CPI) which record the price increases in goods and services.



"Now, depending on how we read these accounting figures, we have either an excess profit or an excess deficit."

Another example from a "Business Week" story in the mid-1950's gives us an idea of how some professions serve the business community. The story reads, "Accountants have decided that 'surplus' is a nasty word. They propose eliminating it from corporate balance sheets. The Committee on Accounting Procedure suggests:... use such descriptive terms as 'retained earnings' or 'appreciation of fixed assets'". So remember when you're given a statistical package, take the wrapping off.

- Changing depreciation accounting methods in corporate financial statements. There are at least 5 accepted depreciation methods used by accountants to write-off (amortize) used and worn-out (depreciated) equipment. The method used, especially if there is a change-over of accounting methods between financial reports, and if there is a shortened time period to write off equipment, will effect the level of profits reported by a corporation.

- Confusing gross pre-tax profits with net after-tax profits.
- Confusing type of percentage profits. For example, a few years back, General Motors reported an after-tax profit of 12.6% on sales; but for that same period GM's profit on investment was 44.8%.

CONFUSING AVERAGES

Perhaps the most abused statistical technique, especially when dealing with wage data in bargaining, is the use of averages. Note the plural--because there are different types of averages and each must be clearly identified so that there is comparable data. Different types of averages mean different things. All too often averages are based on the use of non-comparable data such as comparing "average" wage rates in large and small employers; union and non-union employers and male and female rates. Averages constructed in such a fashion are not only misleading and meaningless, they are based on the methodological error of using non-comparable data. There are four (4) different types of averages, each computed in a different way, having a different purpose and having a different meaning.



\$45,000



\$15,000



\$10,000



\$5,700



\$5,000



\$3,700



\$3,000



\$2,000

← ARITHMETICAL AVERAGE

(1) Simple or Arithmetic Average - the "mean" as it is sometimes called is the most common average. It is the addition of all the items in a numerical series divided by the total number of items in the series. Thus, the simple average gives each item (or wage rate) in the series equal weight, but will tend to have an upward bias because high and low figures (salaries) have equal weight. Example: There are 4 job classifications in a bargaining unit with the following salaries: $\$6 + \$5 + \$4 + \$3 = \$18/4 =$ simple average salary of \$4.50.

(2) Weighted Average - As pointed out above, an arithmetic (or simple) average gives equal weight to both high and low salaries. A weighted average takes into account the distribution ("weight") of how often a figure appears. Unless a weighted average was used, one would attach the same equal importance to a labour rate in a town with 30 labourers as a rate in a city with 3,000 workers; in this example the city with 3,000 workers has 100 times more weight. So for example, if the rate in the town with 30 employees is \$3.00 and the rate is \$4.00 in the city with 3,000, the simple average would be \$3.50, but if the weighting were taken into account, the weighted average would be $(30 \times \$3.00) + (3000 \times \$4.00)/3030 =$ \$3.99.

← MEDIAN (the one in the middle)
(12 above him, 12 below)

← MODE
(occurs most frequently)

Similarly, one could look at the average rate within a bargaining unit. For the purposes of illustration, assume four (4) classifications in the unit: 1 tradesman at \$9.00 per hour; 2 mechanics at \$6.00; 3 truck drivers at \$5.00 and 4 labourers at \$4.00 per hour. The simple average wage rate in the unit would be \$6.00, however a weighted average which takes into account the distribution of people in each job

-7-

classification would yield a much more accurate reflection of the "average" rate. In this case the weighted average rate is \$5.30 calculated as follows:

$$(1 \times \$9) + (2 \times \$6) + (3 \times \$5) + (4 \times \$4) = \$52/10 = \$5.20$$

(3) The median - is perhaps the most meaningful type of average because it is the mid-point in a numerical series, that is half the series is above and half is below this point. For example, if the median average salary in a bargaining unit is \$5.00 per hour, it means that half the people earn more than this amount and half earn less. When analyzing wage data (but not necessarily other types of statistical data) the median average will tend to be below the arithmetic average because the arithmetic average will tend to reflect the middle income salaries because of the equal weighting while the median average will reflect the mid-point in the salary grid which will be lower because there are more people in the lower salary ranges.

(4) The mode - is the number which occurs most frequently in a series. So remember the type of average used must be identified because each has a different meaning. When you read an announcement by an Employer that the average pay of its employees is so much, the figure may mean something and it may not. If the average is a median, you can learn something significant from it: half the employees make more than that; half make less. But if it is a mean (which it may very well be if its nature is unspecified) you may be getting nothing more revealing than the average of one \$90,000 income--the boss's--and the salaries of a group of underpaid workers. "Average annual salary of \$11,400" may conceal both the \$4,000 salaries and the owner's profits taken in the form of a whopping salary.

Averages can be used to hide corporate profits as well. For example, a newspaper a number of years ago reported Standard Oils (now Exxon's) record-breaking revenue and net profit of a million dollars a day in the following terms: "Possibly the directors may be thinking . . . of splitting the stock, for there may be a publicity advantage. . . if the profits per share do not look so large. . .". If profits were \$100 per share, after a 2 for 1 split, they would be recorded at \$50 per share.

WORK SHEET AND PROBLEM SET ON AVERAGES

In order to understand the difference between the four (4) different types of averages and the concepts behind them, let's work out a problem set.

Example and Information

There is a bargaining unit with a total of 100 people in three (3) job classifications with the following negotiated rates of pay:

<u># of People in Classification</u>	<u>Wage Rate</u>
20	Classification III \$7.00
30	Classification II \$6.00
<u>50</u>	Classification I \$4.00

Total in
Bargaining Unit-100

Questions:

Read the following questions, do the calculations and fill-in the blanks:

1. The simple or arithmetic average is the addition or summation of all the items (observations) in a numerical series, each item having an equal weight, divided by the total number of items (observations) in the series. Therefore, using the information above the simple average wage rate in the bargaining unit is:

= \$ _____
simple average rate

2. A weighted average takes into account the distribution or weight of how often an item (or observation) appears in a series. Thus, a weighted average wage rate is the summation of the number of people in each job classification times the wage rate in that classification plus the number of people in another classification times the wage rate divided by the total number of people in all classifications. Generally a weighted average can be computed by: $(\$A/hr. \times \# \text{ people in classification C}) + (\$B/hr \times \# \text{ people in classification D}) + \text{etc.} = \text{Total } \$ / \text{Total } \# \text{ of people.}$

Based on the information above the weighted average wage rate in the bargaining unit is:

= \$ _____
weighted average wage
rate

3. The median average is that figure (or wage rate) associated with the mid-point (half above and below) the total number of observations (or people) in a series. Therefore, based on the information above:

(a) The total number of people in the bargaining unit is _____.

(b) The mid-point of this series therefore is _____

(c) Therefore, the median average wage which is associated with this mid-point is \$ _____

4. The mode is the number which occurs most frequently in a series. Based on the information supplied:

(a) The job classification which has the largest number of people in it is _____

(b) How many people are in this job classification _____

(c) Therefore the mode (average) wage rate associated with this job classification is \$ _____

5. Based on your calculations is the weighted average higher or lower than the simple average?

Simple Average: \$ _____

Weighted Average: \$ _____

Answer: _____

6. Based on your calculations is median average higher or lower than the simple (arithmetic) average?

Median Average: \$ _____

Simple Average: \$ _____

Answer: _____

TURN PAGE UPSIDE DOWN FOR ANSWERS

ANSWERS TO PROBLEM SET

1. Simple average is \$5.66. Calculated as follows:
 $\$7.00 + \$6.00 + \$4.00 = \$17.00/3 = \$5.66$ simple average
 2. Weighted average is \$5.20. Calculated as follows:
 $(\$7.00 \times 20 \text{ people}) + (\$6.00 \times 30 \text{ people}) + (\$4.00 \times 50 \text{ people}) =$
 $\$520/100 \text{ people} = \5.20 weighted average.

3. (a) 100 people
 (b) 50 people
 (c) \$4.00

4. (a) Classification I
 (b) 50 people
 (c) \$4.00

5. Lower

6. Lower

THE OLD SHIFTING BASE YEAR TRICK

The use of the shifting base trick is the mark of a real professional manipulator. Shifting the base in an arithmetic calculation has the effect of changing the percentage increase up or down depending on whether the base was higher or lower than the figure it was compared with. The shifting base gimmick is most often encountered in the form of the shifting base year. The shifting base year trick takes two common variations: (1) The simple arithmetic notion that the lower the base figure a number is compared with, the higher the resultant percentage increase; the opposite is true as well, the higher the base figure, the lower the percentage increase; (2) the selective and deliberate choosing of two benchmark periods for comparison so as to demonstrate what you want to prove.

Among the most common abuses of this technique are long term measurements in the Consumer Price Index (CPI) or productivity calculations. Examples: An Employer, to show how well his employees have done might compare the average annual rate of inflation over a long period of time with wage increases. By increasing the number of years in this average annual calculation, he will smooth out, that is lower the rate of inflation because the divider in the calculation was large, reflecting the high number of years over the long term.

A recent classic abuse of the selective shifting base year technique is the AIB's productivity figure of 2% per year. This is an average annual figure using a 1954 base year. That's fine except that 1954 is just about the worst conceivable year to choose for a productivity measurement unless the AIB wanted to prove that productivity was low in order to justify low wage increases. If they had used 1961 as the base year in their calculation, as does Statistics Canada, it would have shown an average annual increase in productivity of 4.3%, not 2%. The recent AIB ads referred to earlier are another example of using different bench-mark-base periods to get the effect they wanted.

CONFUSING PERCENTAGE INCREASE AND POINTS

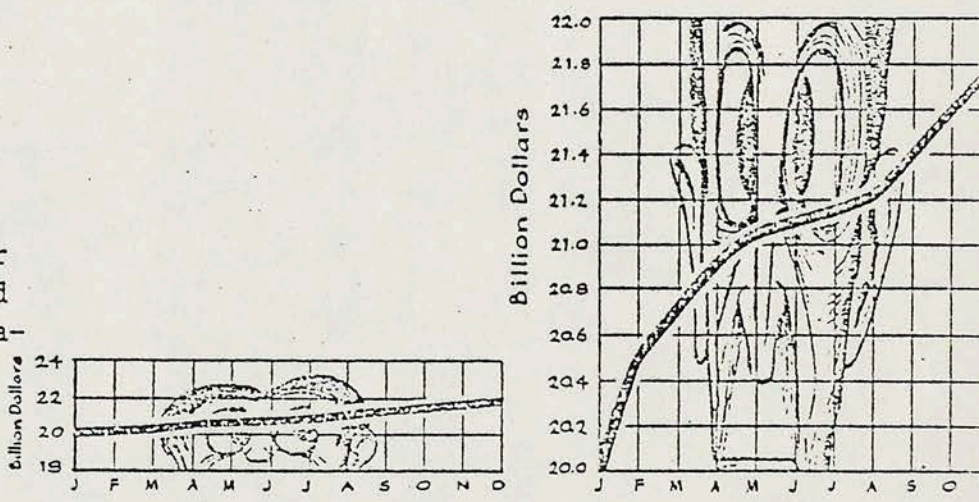
This is amateur stuff. Two examples will make the point clear. Examples: The All-Items Canada-wide Consumer Price Index stood at 193.5 points in January 1976 and at 201.1 points in September.

This represents an arithmetic increase of 7.6 points or an increase of 3.9 percent.
 $(201.1 - 193.5 = 7.6 \text{ points} / 193.5 \text{ points} = 3.9\%$

Another example - in one year of a back-loaded contract, wages went up by 6%; in the second year of the agreement wages went up by 12%. This represents a 6% point increase or a 100 percent year over year increase.

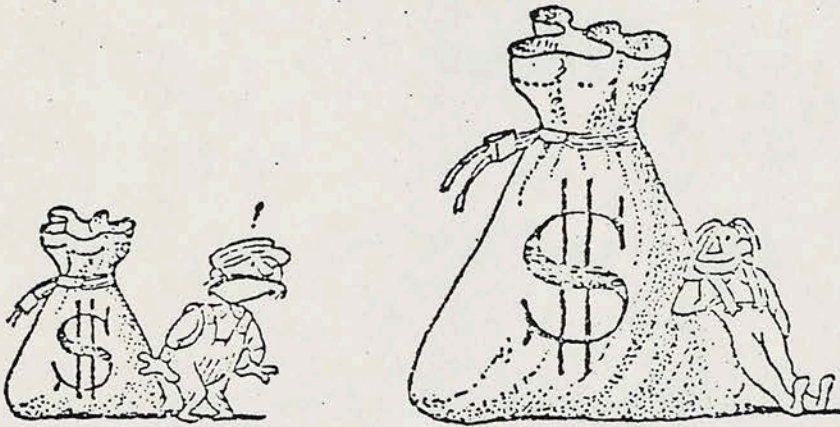
GEE-WHIZ GRAPHS

Graphs are pictures used to represent statistical data and usually take the form of line, bar or pictorial graphs. Graphs are often abused to misrepresent the accuracy of statistical material by: conveniently omitting the identity of what is being measured; truncation of the graph, that is cutting off the lower half of the graph which has the visual effect on a line graph of increasing the rate of climb (slope) of a curve which is meant to impress you or very commonly by altering the proportion (ratio) of the vertical and horizontal units of measure on the graph. This has the effect of making a small change into a large and impressive change. The following two (2) graphs for example, using the same data, represent the same growth in national income. Which is more impressive?



-11-

In a bar or pictorial graph the most common gimmick is to change the proportions of the graph to distort the amount of volume actually represented, thus giving a misleading visual impression to the reader. This is usually done by changing the width of a bar or pictorial graph, even if the length is correct, as was done in the recent AIB ads. For example, the pictorial graph below is meant to represent a 2 to 1 ratio, but the visual effect is four to one.



GUESTIMATION AND EXTRAPOLATION

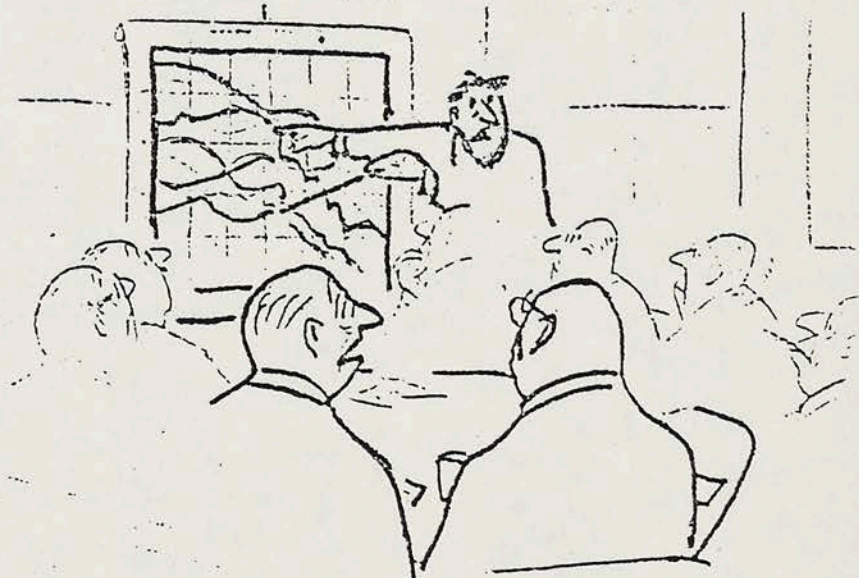
Extrapolation is an attempt to statistically project or forecast future trends. The cynics among us call it "guestimation", economists call it making a living. While the trend up to the present may be a fact, the future trend represents no more than an educated guess. Implicit in forecasting or extrapolation is "everything else being equal" and "present trends continuing". Extrapolations or projections are abused often in statistical presentations because they are based on incomplete information or because there is an assumption based on an irrelevant or phoney (spurious) relationship between two events.

The most dangerous type of extrapolation is "straight-line" or mechanical projection, that is the mechanical projection of trends or numbers. For example, Gross National Product (GNP) went up $x\%$ this year, therefore next year it will go up by the same percentage. Example: The average per capita income for Canadians is \$9,000 per year and the average family has four (4) people, therefore, the average Canadian family's income is \$36,000.

Right? Wrong--the wife and 2 children don't work, so the average family income is still only \$9,000. (You should have also asked whether the "average" was arithmetic, the median or the mode).

CHICKEN AND EGG - CAUSE AND EFFECT

The relationship between events is one of the most difficult and important areas of statistical analysis. That is, what is the relationship between cause and effect? What is the direction of causality between two events? Does in fact A have any relationship with B? Does A cause B or does B cause A? Do high wage or high profits cause inflation--what is the interrelationship? Or as one wit once remarked: "proper treatment will cure a cold in seven (7) days, but left to itself, a cold will hang on for a week". It can not be emphasized too strongly that just because there is a statistical relationship between two events (called a correlation) says absolutely nothing about the causality or the direction of causality between them. A statistical relationship between two occurrences without establishing or identifying any causal relationship between them is a meaningless or spurious (false) relationship. As someone remarked: "If you can't prove what you want to prove, use something else and pretend that they are the same thing."



"McBelling certainly has a gift for making cold statistics come to life."

One of the most crucial elements in any social or economic analysis is the ability to isolate variables or factors and identify the causal relationship(s) and the direction of causality. One of the most serious errors is the lumping together of different causal factors. For example, what causes inflation? Only by identifying and isolating different factors can it be determined whether an event

was caused by one (monocausation) or by many factors (multi-causation). One must be careful in terms of generalizing from a specific case to the general (is it representative?); similarly, one must guard against, without careful qualification, going from the general to the specific (mechanical extrapolation).

Perhaps the best advice when dealing with statistical data at the bargaining table is to analyze it carefully, placing it in its proper context and looking for conscious and unconscious biases and not to make statements which go beyond the empirical evidence.

We hope you have found this guide useful. Understanding the use, misuse and abuse of statistical data should help to strengthen your position at the bargaining table and make reading the daily newspaper or employer financial statements a more interesting and challenging experience.

GUIDE TO THE USE OF SALAD CONTRACT ANALYSIS SERIES

INTRODUCTION:

SALAD (an acronym for System for the Analysis of Labour Agreement Data) is a computer data base system which stores, retrieves, and analyzes collective agreement provisions. It was developed by CUPE in 1976 to meet the growing demand for timely and easily-understood reports regarding the provisions existing in agreements within CUPE's jurisdiction.

The SALAD Contract Analysis Series consists of a proposed group of approximately thirty surveys which will be issued and updated on a regular basis. Examples of such surveys are "Major Canadian School Board Agreements" and "New Brunswick Municipal Agreements". Each survey contains information on all the collective agreements in that jurisdiction that the Research Department has been able to obtain, not just CUPE's own agreements.

The system presently stores information regarding approximately 120 non-wage provisions as well as virtually all the wage rates within collective agreements. Surveys will rarely include all 120 provisions however. This is done for two reasons--first, to avoid printing tables where all agreements are listed as having "No Provision" and secondly, to reduce the bulk of surveys which are often 400 or more pages.

Every survey consists of three different types of tables. It is very important that users of the surveys understand how to read these tables and how to use them to the Union's best advantage. For this reason, the structure and functions of each of the three types of tables is outlined below.

Aggregate Tables (Exhibit A)

The "aggregate" or "statistical" tables are frequency distributions of the level of each provision by occupational group. They are useful in showing at a glance what are the most common levels of the provision in each occupational group and for the survey group as a whole. Only the levels which are actually found in the agreements surveyed are listed--for example, in Exhibit A there were no agreements which had four weeks' vacation after 6 or 7 years, so these levels are not listed on the left hand side.

Each of the columns 1 - 4 represents an occupational group--i.e., production, office, technical or professional. Provisions are analyzed by occupational group because frequently one collective agreement contains different provisions for each group when it covers more than one group. A common example of this would be an agreement which has a 40-hour week for the "production" (manual) group and a 35 hour week for the office group. By breaking down each provision according to occupational group, it enables us to make statements such as "15,000 out of a total of about 16,500 office employees receive four weeks' vacation after 10 years or less".

Columns 5 and 6 represent the totals of each provision found--column 5 in terms of agreements and column 6 in terms of employees. Both contain totals in absolute numbers and percentages. The total number of agreements (column 5) will not usually be an accurate reflection of the actual number of agreements in the survey. This is due to the fact that if there is more than one group covered by a collective agreement, each group is counted as an "agreement".

Users should note that the percentages for each level of provision often markedly differ for "agreement" totals and "employee" totals. For example, in Exhibit A, columns 5 and 6, only 3 agreements (3.5%) receive 4 weeks vacation after 5 years service, but 20,000 employees (46.1%) are covered by this provision. Obviously, it would be to the Union's advantage in a case like this to emphasize the number of employees who receive four weeks vacation after 5 years service rather than the number of agreements which contain such a provision.

Survey Tables (Exhibit B)

The "Survey" tables are lists of the actual provisions existing in each collective agreement. Again, if there are different occupational groups within a single collective agreement involved, the provision applying to each group is indicated (see Quebec RCSSB--production, office and technical group).

These tables enable the Union to point to specific agreements which have provisions which support their demands. For example, if the Union's demand was for 3 weeks vacation after 1 year, it could point to the Peel County School Board agreement in support of this proposal. If it was also demanding 4 weeks vacation after 10 years, it could point to the Peel County, Dufferin-Peel RCSSB, Lincoln County, Niagara South, Sudbury and Lakehead RCSSB School Boards, as well as the Quebec RCSSB to support its proposal.

In certain cases there is a need to provide supplementary information in addition to what is listed in the table. This usually occurs where the provision changes during the life of the agreement, or where the provision is too complex to adequately represent by a computer code for use in the table. In these situations, "footnotes" are created and printed at the bottom of the page. In Exhibit B, for example, there is a footnote (number 2) pertaining to the Quebec RCSSB agreement, due to the fact that the provision changes over the life of the agreement.

Wage Tables (Exhibit C)

The wage tables are lists of wage rates by employer, with a separate table for each job title. In the example, Exhibit C, the table lists all the agreements in the survey which contain the job title "Accountant". Agreements which do not contain that job title do not appear in the table.

Column 1 in the table indicates the "Level" of the job. This is to handle situations in which a job title has more than one level--for example, Accountant I, Accountant II and Accountant III.

Column 2 indicates the number of months of service required for employees in that job category to progress from the minimum rate to the maximum rate for the job.

Column 3 indicates the unit in which the wages are expressed in the collective agreement--e.g. \$ per hour, \$ per month, \$ per room per month, etc. The program is capable of converting these differing units into a common unit. Where this is done (not in Exhibit C) the wage unit column (column 3) will be blank and the common wage unit will be indicated at the top of the page.

Columns 4, 5 and 6 show the minimum and maximum rates on up to three different dates. In Exhibit C the dates are 27/12/75 (December 27, 1975), 31/12/76 (December 31, 1976) and 30/06/77 (June 30, 1977). The dates are chosen for each survey so as to include as many rates as possible on each date.

Since the commencement date of some agreements is later than the first date on which wages are indicated (column 4), blanks will appear frequently in the first column of wages. In Exhibit C, the commencement date of the Ottawa and the Borough of York agreements is January 1, 1976, so no wages for those agreements are shown under the December 27, 1975 column. Also, where agreements expire prior to one of the dates on which wages are shown, blanks will be printed. In Exhibit C, the N.B. School Boards agreement expires prior to December 31, 1976 and all but the Ottawa agreement expire prior to June 30, 1977.

As was the case with the Survey table, footnotes are used on the Wage tables to add relevant supplementary information in addition to the wage rates which are shown. In Exhibit C, the Victoria SD #61 agreement has a footnote which indicates that the wage rates shown will be increased in 1976 due to a COLA clause.

Conclusion

We hope that this brief outline of a SALAD series survey will serve to make the information reasonably comprehensible to our members and staff. However, we do recognize that it is virtually impossible to adequately explain material such as this on paper, and therefore Research Department staff will be continually amplifying and expanding on this guide verbally at conferences, staff meetings and other such gatherings.

We welcome any comments, questions or suggestions you might have regarding the SALAD contract analysis series, and hope that you will find the information to be useful for your purposes.

Research Department,
Canadian Union of Public Employees,
November, 1976

EXHIBIT A

N - 2 MAJOR CANADIAN SCHOOL BOARD AGREEMENTS

FOUR WEEKS VACATION	① PRODUCTION		② OFFICE		③ TECHNICAL		④ PROFESSIONAL		⑤ AGREEMENTS		⑥ TOTAL EMPLOYEES	
	AGTS	EMPLS	AGTS	EMPLS	AGTS	EMPLS	AGTS	EMPLS	#	%	#	%
NO PROVISION			1	70					1	1.2	70	.2
5 YR(S)	1	7000	1	11000	1	2000			3	3.5	20000	46.1
8 YR(S)	3	849	1	252					4	4.7	1101	2.5
9 YR(S)	1	194	1	210					2	2.3	404	.9
10 YR(S)	21	8115	11	3349	1	50			33	38.4	11514	26.5
11 YR(S)	3	541							3	3.5	541	1.2
12 YR(S)	3	693	3	451					6	7.0	1144	2.6
13 YR(S)	17	5570	4	1094	3	141	1	20	25	29.1	6825	15.7
14 YR(S)	4	1077							4	4.7	1077	2.5
15 YR(S)	1	464	2	93					3	3.5	557	1.3
20 YR(S)	2	156							2	2.3	156	.4
TOTAL	56	24659	24	16519	5	2191	1	20	86	100.0	43369	100.0

EXHIBIT B

N - 2 MAJOR CANADIAN SCHOOL BOARD AGREEMENTS

EMPLOYER NAME OCCUPATIONAL COVERAGE THREE WEEKS VACATION FOUR WEEKS VACATION

PEEL CTY SB OFFICE 1 YR(S) 10 YR(S)

DUFFERIN-PEEL RCSSB PRODUCTION 3 YR(S) 12 YR(S)

DUFFERIN-PEEL RCSSB OFFICE 2 YR(S) 10 YR(S)

LINCOLN CTY SB PRODUCTION 3 YR(S) 10 YR(S)

LINCOLN CTY SB OFFICE 3 YR(S) 10 YR(S)

LINCOLN CTY RCSSB PRODUCTION 3 YR(S) 11 YR(S)

NIAGARA SOUTH SB PRODUCTION 3 YR(S) 10 YR(S)

WATERLOO SH PRODUCTION 4 YR(S) 12 YR(S)

WATERLOO CTY SB OFFICE 4 YR(S) 12 YR(S)

WATERLOO CTY RCSSB PRODUCTION 5 YR(S) 13 YR(S)

SUDBURY SB PRODUCTION 4 YR(S) 10 YR(S)

LAKEHEAD SB PRODUCTION 4 YR(S) 13 YR(S)

LAKEHEAD SB OFFICE 4 YR(S) 12 YR(S)

LAKEHEAD RCSSB PRODUCTION 3 YR(S) 10 YR(S)

LAKEHEAD RCSSB OFFICE 5 YR(S) 15 YR(S)

QUEBEC

QUEBEC RCSSB PRODUCTION 2 YR(S) 5 YR(S) (2)

OFFICE 2 YR(S) 5 YR(S) (2)

TECHNICAL 2 YR(S) 5 YR(S) (2)

(2) EFFECTIVE JUNE 30/77 - 4 WEEKS AFTER 3 YRS
 YRS! EFFECTIVE JUNE 30/78 - 4 WEEKS AFTER 1 YEAR

EXHIBIT C

N - 2 MAJOR CANADIAN SCHOOL BOARD AGREEMENTS

ACCOUNTANT

EMPLOYER NAME	LEVEL	MONTHS TO MAX	WAGE UNIT	27/12/75		31/12/76		30/06/77	
				MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
VICTORIA SD #61 OTTAWA SB	1	36	\$/HOUR	8.12	9.41	8.61	9.98	-	- (1)
	1	36	\$/YEAR	-	-	8382.00	9610.00	9011.00	10331.00
	2	36	\$/YEAR	-	-	9329.00	10943.00	10029.00	11764.00
	3	36	\$/YEAR	-	-	10948.00	12561.00	11769.00	13503.00
BOROUGH OF YORK SB NB SCHOOL BOARDS - STENO.	1	36	\$/YEAR	-	-	15239.00	18180.00	-	-
	1	24	\$/MONTH	754.00	809.00	-	-	-	-
	2	24	\$/MONTH	840.00	908.00	-	-	-	-
ST. JOHN'S RCSSB	3	24	\$/MONTH	944.00	1021.00	-	-	-	-
	1	0	\$/YEAR	15291.00	15291.00	15291.00	15291.00	-	-

(1) PLUS COLA IN 1976

COLLECTIVE BARGAINING TRENDS

NEW EMPLOYER TACTIC

A new tactic has been added to the anti-labour roll-back, cut-back campaign. Demanding that workers pay for new cost reduction programmes, employers are trying to take back previously negotiated, hard-won contractual rights and benefits.

CUPE'S EXPERIENCE IN B.C.

CUPE's first experience with this management tactic occurred last spring in the form of an anti-union crusade by the Mid-Island Public Employers Association (MIPEA), an accredited employers' group in Nanaimo, British Columbia. Six hundred (600) members of CUPE-municipal, school board and college employees-were forced into a 10-week strike-lockout merely to defend their old contracts and negotiate a few modest improvements.

MIPEA, among other things, demanded the following changes and reductions to the articles in the old contracts:

- The removal of seniority in determining promotions and transfers.
- A decrease in the number of statutory holidays.
- The elimination of a 4 hour minimum reporting pay.
- The elimination of overtime premiums by extending the normal hours of work.
- A cut-back to the prior notice of lay-off period from 30 days to 10 days, or 24 hours in the case of a labour dispute.
- An increase from 3 months to one year in the term of service before receiving sick leave.
- A reduction to the length of maternity leave.

It now appears that the large private corporations are prepared to follow the same course. While profits for the auto companies have been soaring, in their current round of negotiations with the United Auto Workers, company negotiators are trying to put "cost-cuts" into the language of the new collective agreements.

- An extension in the probationary period from 3 months to one year.

In all, MIPEA proposed over 100 negative amendments to the collective agreements.

According to MIPEA's chief negotiator, Mr. Ken Waldron, "The decision to form MIPEA was predicated on the conviction that the greater Nanaimo area employers could and should establish their independence as pattern setters in the establishment of rates and conditions of employment for public employees."

When the Union accused the employer of engaging in a reckless, reactionary program, Waldron's response was "Reactionary, yes. Reckless, no."

After a seven-week Industrial Inquiry Commission, the longest such hearing in CUPE's history--which the union estimates will cost B.C. taxpayers in excess of \$60,000--the CUPE members were able to preserve their old contracts. But the pattern which MIPEA wanted so much to promote is surfacing in other contexts.

TACTICS USED IN OTHER PROVINCES

Recently, school board employees in New Brunswick and construction workers in Quebec have faced the same tactic. In New Brunswick, the provincial Treasury Board is requesting the forfeiture of a union shop provision, the elimination of sick leave usage on maternity leave, elimination of job classifications and a longer waiting period before receiving 4 weeks vacation. In Quebec, construction workers recently struck against the Province's Association of Building Contractors which wants to reduce the role of on-site shop stewards, do away with union controlled hiring halls, and "declassify" skilled labour to reduce the wages of skilled tradesmen.

From management's perspective, Trudeau's wage control program, the cut-backs to social services and the lingering economic crisis, have all created an atmosphere conducive to increased management militancy. Defending the MIPEA position in Nanaimo, Mr. Waldron asserted that "Collective bargaining means negotiating in good faith. It doesn't mean improving the living and working conditions of workers." We can all expect more of this "good faith" negotiating in the future.

COMMENTS ON OTTAWA'S
DISCUSSION PAPER ON DECONTROLS
AND
BRITISH COLUMBIA'S PROGRAM FOR
INFLATION CONTROL

A STATEMENT ISSUED BY
HON. EVAN WOLFE
MINISTER OF FINANCE

HARRISON HOT SPRINGS

JUNE 10, 1977

Continuing inflationary pressures are still of day-to-day concern for our government. Inflation has not yet been beaten. In fact, pressures are renewing and it is very unlikely that the goal of a six per cent increase in the cost of living will be met this year. The rate will more than likely approximate 7.5 per cent especially with higher energy costs and pressures on food prices on the horizon. This will lead only to demands for higher wages and corporate price increases. We can afford neither.

The British Columbia government is therefore dismayed by the federal government's determination to phase out the Anti-Inflation Program before the end of its statutory life -- December 31, 1978. British Columbia's views are well known on the need to keep the program in place. Both the Premier and I have stated publicly several times our support for the program to run to its statutory end and failing that commitment, our determination to introduce positive measures in British Columbia to plug any gaps in the national program that will help protect British Columbians against further erosion of their purchasing power.

British Columbia, perhaps more than any other province, depends basically for its prosperity on its ability to sell its goods at competitive prices throughout the world. If our costs become too high, there are many other producing nations that can fill the world demand for forest and mining products, and then our plants shut down, or go on short shifts, and the job opportunities that our people need evaporate.

Strong leadership in terms of restraint and encouragement to the private sector is required by government, and we find the federal government's Discussion Paper on Decontrols to be weak in its failure to give firm leadership by supporting the anti-inflation program to its end. Not only does the Paper fail in that respect,

but it compounds the uncertainty and lack of resolution by waffling on the date for the start of decontrols. This date has been the subject of speculation now for nearly a year and Canadians are entitled to more certainty than they found in the May 27th document.

The principal proposal in the Paper is for a post A.I.B. federal agency to monitor wage and price increases once the process of decontrols starts at an undetermined future date. The agency's powers, however, would be limited to "obtaining information and publishing reports". This would be the successor agency to the Anti-Inflation Board, and it would have a limited life and be located in Ottawa.

It is surprising that the agency would not have the power, at least for the first year of its existence, to refer obvious violations of the final year A.I.B. Guidelines back to the Anti-Inflation Board -- which would be in existence during the period of decontrols. The Anti-Inflation Board in such cases should have the residual power to assert its former jurisdiction and bring some muscle to bear against the opportunists. As proposed, the monitoring agency would be a pretty timid watchdog.

In the area of wage increases, governments have a special responsibility to ensure that compensation levels for public employees do not run away from those in the private sector. In the case of B.C., I refer specifically to compensation standards in the export-oriented industries of forestry, mining and fishing. They should set the basic compensation standards and not the public sector. We want to treat our employees fairly and equitably but we have no intention of becoming the pacesetter for wage standards in B.C.

Since the start of the controls program, the British Columbia government has paid strict attention to the problem of inflation. As Minister of Finance, I have been chairman of the Cabinet Committee on Anti-Inflation Programs. This Committee was formed on the very day that the government took office. We kept the Price Freeze until we were confident of the A.I.B.'s readiness to tackle price increases. We signed the agreement with the Government of Canada last June which formally brought the provincial public sector under the national Anti-Inflation Program. As a government, we have taken other steps in recent months to fight inflation, including

- . Creating a special committee of the legislature to watch over the activities of Crown corporations which have a monopoly or near-monopoly on specific goods or services;
- . Strengthening Treasury Board staff in order to conduct advance checks on Crown corporation spending proposals and, in each case, to conduct mid-year reviews;
- . An on-going program of price reviews involving Crown corporations which has already resulted in two important price rollbacks -- I.C.B.C. and B.C. Ferries;
- . An investigation by the House Standing Committee on Agriculture into food supply and prices;
- . The rent controls program; and
- . Exercising budget restraint -- an increase of only 5.9% this year over last year's budget -- the smallest increase of all provincial budgets -- only \$1590 per capita and \$125 below the average of all provinces in Canada.

Government, above all, must show leadership in this field and with our program of restraint we have attempted to lessen our

demands on the private sector. What government spends has a very real effect, too, in adding pressure to the inflationary spiral and, right now, inflation is still our number one problem. There is no doubt that inflation robs everyone; it reduces real income and denies jobs which a sound economy expanding at a rate well below this year's target objective can provide.

Our government believes that many of our citizens are apprehensive about ending the controls program this year and that this apprehension extends to the operators of many small and medium-sized businesses. British Columbia cannot go back to the rampaging inflation of 1975. We have spent the last two years battling to bring inflation under control, and we should not relax the controls prematurely for the sake of political expediency or to please special-interest groups and see that effort wasted.

In view of the inadequacies of the federal proposal and the very real need to renew the war against inflation, I wish to announce a set of initiatives the British Columbia government will implement in the months ahead.

We will, first of all, establish a Prices Review and Monitoring Board which will be in operation no later than the date for the start of decontrols under the national Program. This Board will be charged with assuring British Columbians that prices are being monitored and that good reasons will have to be given for price increases by suppliers during the decontrols period. The Commission, as we see it now, would have the power to monitor prices generally, to investigate price increases, to call for substantiation, to make its reports public, and refer unwarranted price increases to the government for action under the provincial Anti-Inflation Measures Act passed last year.

I am not attempting to claim today that the Board will be able, in some miraculous fashion, to keep down all prices charged to consumers. That would be an impossible task when our region is tied so inextricably to out-of-province suppliers. However, the establishment of this Board will emphasize our government's commitment to a competitive, efficient market system where unwarranted price jumps will not be permitted and where calls for wage restraints are balanced by calls for restraint on the prices side.

The Board will also serve as the provincial contact on prices with the proposed national monitoring agency in line with suggestions posed in the federal Discussion Paper.

Secondly, I wish to announce the establishment of a new organization -- the British Columbia Council of Public Sector Employers -- to provide better coordination and an exchange of information on public sector wages among public service employers in the province. This is not a new bargaining agency. ITS purpose is to encourage the development of a fair and equitable correlation between private and public sector compensation packages in British Columbia. The provincial government desires that public service employees in British Columbia remain at compensation levels in line with the private sector, but it does not want public service workers to lead the way. There are more than 200,000 employees in the public sector of this province with a payroll of more than \$2 billion annually. What happens in this huge sector has a great impact on every other key sector of our economy. It is our feeling that public sector employers must conduct their compensation affairs with more concern for the total impact on all taxpayers and with more guidance from private sector settlements.

N.B

Apart from bringing about a much more direct and accurate correlation of relationships between public and private sector wages, the new Council is also intended to encourage the development of improved management skills in the public sector, particularly in the area of labour relations and collective bargaining, and to ensure a full and proper exchange of information and data between public sector employers.

The Council will also liaise with other governments and, while its establishment has been initiated and encouraged by the provincial government, it will be an entirely independent and cooperative group working on behalf of all its members. It is a purely voluntary organization whose strength and influence will closely reflect the worth that its members feel it is providing. To assist the Council in its initial period of operation, the government will loan the services of Mr. A. J. Keylock, a well-known consultant in labour-management relations, who is presently the Co-Ordinator of Public Sector Compensation for the Cabinet Committee on Anti-Inflation Programs.

There is every reason to believe that the Council will have wide-spread support among a broad cross-section of employers in the provincial public sector. Preliminary indications, I am happy to report, point to positive participation by a good number. An interim steering committee has been established to develop the organization. It is composed of representatives of the following employers: B.C. School Trustees Association, Health Labour Relations Association, B. C. Hydro, Government Employee Relations Bureau and the Greater Vancouver Regional District. We are confident, as the organization finds its feet and proves its worth, that more employers will also join the Council and contribute to stronger managerial leadership in public sector matters.

Our third concern is, of course, the private sector. We believe in the role of private enterprise, and we also believe

that the private sector has a responsibility toward restraint. Our government, led by the Premier, will initiate a series of informal meetings with labour and business representatives to discuss the community of interests affecting all three sectors -- government, labour and business -- as we enter the decontrols and post-controls periods. We are very hopeful that labour and business leaders will participate in these frank exchanges of information which we believe will keep the focus strongly and fairly on the fight against inflation.

If I may recap, then:

Our government will move to implement a comprehensive, forward-looking program to fight inflationary pressures which will include:

- . A watchdog agency on market prices;
- . Leadership in ensuring that public sector compensation is in line with the private sector;
- . Meetings with business and labour to talk about the realities facing this province.

This is our basic program for continuing an all-out assault on excessive price and wage increases which are the building blocks of inflation. We want the people of British Columbia to be assured that in this province, at least, the months ahead will not mean a new round of irresponsibility, uncertainty and fresh attacks on the worth of your dollar. Our economy is on the move but we must be more vigilant than ever to ensure that we keep our gains, and that we can compete around the world. The war against inflation is only partly over. We intend to do everything possible as a provincial government to press the battles in order to win that war.

BILL 91

38. The *Universities Act* is amended by
- (a) striking out "full-time" in the definition of "Student Association" in section 1,
 - (b) inserting "full-time" after "Two" in section 20 (e),
 - (c) striking out "by and" in sections 20 (e), 21 (1) and 35 (2) (h),
 - (d) striking out "who shall hold office for one year and who may be re-elected for one further year only," in section 28 (b),
 - (e) inserting "full-time" before "students" in section 35 (2) (h),
 - (f) striking out "and he shall devote his full time and best effort to the performance of his duties as chairman" in section 65 (5),
 - (g) striking out "with the approval of the minister," in section 67 (4), and
 - (h) inserting the following after section 80:

Labour
Code does
not apply.

80A. The *Labour Code of British Columbia* does not apply to the relationship of employer and employee between a university and its faculty members.

SECTION 38: This section amends the *Universities Act* to

- (a) clarify who is eligible to participate in student body affairs or represent students on a university board or senate,
- (b) allow a person to be elected chairman of the board of a university for further terms after 2 years' service as chairman,
- (c) allow the chairman of the universities council to serve on a part time basis,
- (d) empower the universities council to retain consultants, experts, or specialists without first having to obtain approval of the Minister of Education, and
- (e) provide that the *Labour Code of British Columbia* does not apply to a university and its faculty members.

ECONOMIC NOTES:

HIGHER INFLATION, MORE UNEMPLOYMENT, FEWER JOBS, HIGHER PROFITS

OTTAWA (CPA) - The usual decline in the seasonally-adjusted unemployment rate did not come about this April, as the jobless rate rocketed to 8.3 percent, the worst since the depression.

There were 914,000 people officially out of work in April, 30,000 less than the rate for March, but the third month in a row where unemployment has passed the 900,000 mark. The decline in the actual number of jobless was not reflected in the seasonally-adjusted rate, since unemployment is supposed to decline in April as the economy gears up after the winter.

But that did not happen this spring, even though 110,000 new job openings have been reported since December. Growth in the labour force far outstripped the number of new jobs. And the number of jobs open actually declined by 9,000 between March and April while the labour force rose by 5,000.

OTTAWA (CPA) - Preliminary estimates for the first quarter of 1977 show almost no change in the number of vacant jobs from the previous quarter but the decrease from the same period a year ago is 17%, Statistics Canada has reported.

OTTAWA (CPA) - If the government wants to meet even its revised target of holding inflation to seven percent this year, it had better do something about prices, and fast. The consumer price index, the most commonly-used measure of inflation, jumped 0.6% in March.

The jump means the seasonally-adjusted annual rate of inflation, as calculated over the last three months, stands at 11.3%. Between March of 1976 and the same month in 1977, the CPI climbed 7.6%.

A rise of a full percent in the cost of food accounted for two-fifths of the CPI rise. But increased housing and clothing prices were also guilty of pushing the index upward.

Canadian corporate profits jumped over 20% in the first quarter of this year as compared to the same quarter a year ago, depending upon whose survey you believe.

A survey of 161 companies by Canadian Dow Jones found corporate profits totalled \$949.6 million in the first quarter, 1977, up from \$789.9 million in the first quarter, 1976 -- a rise of 20.2%.

A Globe and Mail Report on Business survey showed corporate profits climbed 13.7% higher in the first quarter this year compared to a year earlier, the largest-recorded increase since the third quarter of 1974.

Why The Social Service Cutbacks—Lower Corporate Taxes

"We can't afford it" is the favourite lament these days of the Federal, Provincial and Municipal Governments.

A lack of sufficient revenues, we are told, makes it necessary to increase taxes, introduce lotteries and slash social service expenditures. What government spokesmen aren't telling us is that they have been consistently cutting back on corporate taxes.

The Canadian Tax Foundation has documented that during the past fifteen years, corporate income tax has been steadily falling as a source of federal and provincial revenues. At the same time, individual income tax, paid for primarily by workers, has been dramatically rising.

Between 1961 and 1976, corporation income taxes as a source of federal government revenues fell by 30.8% while personal income taxes increased by 42.6%.

CORPORATE AND PERSONAL INCOME TAX AS A SOURCE OF GOVERNMENT REVENUES

All Provincial Governments

Percent of Total Revenue

<u>Source</u>	<u>1962/63</u>	<u>1974/75</u>	<u>% Change</u>
Corporate Income Tax	9.4%	5.5%	-41.5%
Personal Income Tax	8.5	21.1	+148.2

Federal Government

Percent of Total Revenue

<u>Source:</u>	<u>1961</u>	<u>1976</u>	<u>% Change</u>
Corporate Income Tax	22.7%	15.7%	-30.8%
Personal Income Tax	30.5	43.5	+42.6

Source: Our calculations from National Finances, Published by The Canadian Tax Foundation

In 1961, personal income tax provided 30.5% of revenue and corporations contributed 22.7%. By 1976, the corporate income tax share was down to 15.7% and individuals are now filling 43.5% of the federal revenue cup.

Provincial government policies have not conflicted with federal practices. Here, too, individual income taxes have increased sharply and the corporate tax share has diminished.

Examining the combined picture for all provincial governments, the data demonstrates that in fiscal year 1962/63, personal income tax provided 8.5% of provincial revenues. By 1974/75, personal income taxes provided 21.1% of revenues--an increase of 148.2%! During the same twelve year period, the corporate tax share dropped from 9.4% to 5.5%--a decline of 41.5%.

Source: Labour Research, No. 1, CUPE Research Department, October, 1976.

CPI Deceptive

by SIDNEY H. INGERMAN

As inflation is a general increase in the price level of all things bought and sold it should be measured by the rate of change of a price index of all goods and services. However, there is no single satisfactory index of all prices in the economy and it is the Consumer Price Index (C.P.I.) which is usually used to judge the extent of inflation and to adjust money payments linked to inflation.

Modern economies require a large variety of negotiated contracts in order to function smoothly. They also require legislated or social contracts to facilitate the transfer of goods and services from the economically active population to the aged, the sick, and in general to those in need. But inflation and especially unexpected inflation causes grave difficulties to those locked into these contracts.

One response to this problem has been to index contractual payments to the C.P.I. As the C.P.I. rises money payments are adjusted upwards so as to maintain the "real" value or purchasing power of the contracted payments at some agreed to level.

For example, a collective bargaining agreement that intends to increase purchasing power by 3.5 per cent per year might attempt to do so by granting a 3.5 per cent increase in compensation to all employees and then provide for further increases in compensation if the C.P.I. rises above the level that existed in the period prior to the negotiated compensation increase. Thus if the C.P.I. rose on average by 10 per cent per year, compensation would increase by 13.5 per cent per year. However, if there was no inflation, as measured by a zero increase in the C.P.I., employees would simply receive the negotiated 3.5 per annual increases.

In 1975 approximately six-hundred-thousand Canadian workers were covered by collective bargaining agreements in which wage rates were to one degree or another linked to changes in the C.P.I.

A key element of compensation control in the government's Anti-Inflation Act Regulations has been the "basic protection factor" which links a portion of allowable increases in compensation to expected and actual changes in the C.P.I.

Old Age Security and Canada-Quebec Pension payments are linked to changes in the C.P.I., as are pension payments in public sector plans covering federal and most provincial government employees. (Private sector pensions plans, however, rarely provide for the indexing of post-retirement payments.)

Federal income tax payments are also adjusted as increases in the C.P.I. raise personal exemption levels and income tax brackets thus reducing tax rates on given levels of money income.

In addition to the now current practice of indexing group contracts a large variety of individual contracts ranging from alimony payments to rental payments are now indexed.

A word of caution is in order at this point. The fact that a contract is linked to changes in the C.P.I. or any other index does not guarantee that payment will be fully protected from inflation. The degree or protection depends on the particular indexation arrangements that are provided.

Obviously, then, the Consumer Price Index has become a measure of price change that affects the standard of living of millions of Canadians. It is therefore necessary to understand how the index is developed and how effective it is in protecting various groups and indi-

viduals against inflation.

Statistics Canada has said that the C.P.I. is not a measure of changes in the cost of living such that if persons receive income increases equal to the percentage increases in the index their standard of living (or welfare) would remain the same. (The interested reader can find the technical discussion of this point in Statistics Canada, catalogue number 62-539 Occasional, page 5.) However, as we have shown the C.P.I. is used in many cases with just such a purpose in mind.

In fact, the C.P.I. is designed to measure changes in retail prices of a fixed quantity of goods and services bought by families. The fixed quantity of goods whose prices are surveyed represent purchases made in 1967 and 1969 by a sample of families living in urban centers of 30,000 or more population whose annual incomes in 1967 ranged between \$4,000 and \$12,000. (In 1975 this group would have had annual incomes in the \$7,200 - \$21,600 range if their incomes increased in proportion to the sum of inflation and the trend increase in national productivity.)

Three problems are associated with using the C.P.I. to protect incomes against inflation.

The first problem is that certain prices that are important for many consumers are excluded from calculation of the index. These include: income taxes; consumer credit (except mortgage debt on owned Homes); used durable goods the most important of which is used automobiles, and; land used for new housing.

At present the exclusion of income tax is partially compensated for by the fact that taxes collected by the federal government are indexed. However, provincial taxes in Quebec are not indexed and higher incomes associated with high rates of inflation push tax payers into brackets with steeper tax rates.

New consumer durable goods (refrigerators, washers, dryers, television, automobiles, etc.) prices are used to also represent used durable goods prices changes. To the degree that these price changes diverge the C.P.I. will be an inaccurate adjuster for those who make important purchases of used durable goods.

Consumer credit prices (the interest rate) is another significant exclusion. Outstanding consumer credit increased by 240 per cent between 1961 and 1972 and according to a 1972 study published by the Prices and Incomes Commission (An Examination of the Consumer Price Index and Implicit Price Index or Measures of Recent Price Change in the Canadian Economy) "interest rates on consumer credit have increased more rapidly than average prices in the [Consumer Price] index in recent years."

Large increases in land prices have also contributed to recent increases in housing prices that are not reflected in the housing component of the C.P.I.

The effect of these exclusions on individual consumers will depend upon how important the excluded categories are in their budgets and the difference between the price change of these items and that of the C.P.I. For example, the cost of consumer credit, which is an important element in the budget of low and middle income families, has risen more rapidly than the C.P.I. in recent years. Therefore, changes in the C.P.I. will tend to underestimate the increase in the price level of these families expenditures.

A second problem with the C.P.I. is the retail outlets in which Statistics Canada pricing officers record prices. Specialty and ethnic stores, discount stores, so called "direct-wholesale" and mail-order sales establishments are excluded. Food is priced in chain and independent food stores; automotive items in garages, filling stations and automobile dealers; and dentists' fees through their offices. Thus for individual consumer or groups of consumers the actual cost of identical products or services may change at a different rate than the C.P.I. if purchases are made at retail outlets whose prices change at a different rate than at the sample of surveyed outlets.

A third problem, is that the importance given to different expenditure categories in determining the C.P.I. may be grossly unrepresentative of actual purchases of persons or groups that we wish to protect from impoverishment by inflation. Food costs illustrate the problem.

A 1969 Statistics Canada study of family expenditure patterns re-

veals that families with incomes under \$3,000 (the equivalent of roughly \$5,200 in 1976) spent 27.2 per cent of their surveyed expenditures on food. However, the survey which produces the monthly C.P.I. assumes that only 24.8 per cent of household expenditures are on food. Thus when food prices advanced more than 50 per cent faster than the overall C.P.I. between 1972 and 1975 purchasing power of the poor deteriorated more rapidly than the C.P.I. indicated because the poor spend a larger portion of their income on food than the average surveyed family.

Another group that may fair poorly when their income protection is regulated by the C.P.I. is the elderly. Many of the elderly are poor and their expenditures on goods and services are undoubtedly different than that used for the C.P.I.

We certainly need a general index of consumer price movements for the Canadian economy and the presently produced C.P.I. is a valuable instrument for providing

such information. However, the need to adjust money incomes to maintain purchasing power for particular groups requires far more specific measures of changes in consumer prices. Janet L. Norwood, Chief of the Division of Consumer Prices and Price Indexes of the U.S. Bureau of Statistics has declared that:

"An index for retired persons should be related entirely to the experience of its own index population. The entire program, not just the index weights, should be constructed so as to reflect the experience of consumer units headed by retired persons. Prices should be collected for the items retirees purchase, in the stores and service establishments in which retired persons shop, and collection should be carried out in the areas of the country in which retired persons tend to live."

A similar demand would now seem justified for low middle and high income groups.

CPA, 26.8.77.

FALLING DOLLAR OF NO BENEFIT TO WORKERS

TORONTO (CPA) - Rather than increase the number of jobs, the continuing decline in the value of the Canadian dollar will lead to further inflation and attacks on labour, as workers try to catch up.

That is one of the conclusions reached by Sam Gindin, research director of the United Auto Workers, in an article in a recent issue of the UAW Economic News.

"The decline in the value of the Canadian dollar will have only a small positive effect in terms of job creation," Gindin says. "Since the falling exchange rate is primarily a reflection of problems in the economy, changes in the exchange rate without structural changes in the economy won't solve our basic problems.

"The falling dollar will also raise corporate profits in the manufacturing and resource sectors, and it will aggravate the rate of inflation.

"As workers respond to the rising profits and rising prices by demanding higher wages, the government can be expected to intensify its campaign against working people by either retaining and strengthening controls, or trying to trap the labour movement into 'voluntary' restraints on wages."

Gindin says estimates show the nine percent decline in the dollar over the past year may lead to a 2.5-3.0% increase in the rate of inflation, as workers are forced to pay more for imported goods.

And while the decline will "aggravate the Canadian rate of inflation," Gindin says, "it will hardly dent the unemployment rate."

Gindin gives three reasons for the failure of the dollar decline to create new jobs.

Because of Canadian dependence on foreign-made machinery, equipment and manufactured parts, the costs of those goods will now be higher, offsetting any competitive advantage gained by lower prices for Canadian goods in world markets.

Canadian exporters and importers may raise their profits and prices rather than expand production as the value of the dollar falls.

"Third, we should not forget that the original reason for the falling dollar was the weakness in our economy," the article says. "In the context of such weakness, new investment will be limited. A falling dollar won't end the weakness; in fact, during the period of uncertainty about how far the dollar will, in fact, fall, the 'investment climate' may decline still further."

Gindin says Canada's huge trade deficit in the past few years might have been expected to lead to a fall in the dollar's value. But a large influx of foreign investment kept its value high. Now, foreign investors are uncertain about the future of the economy and are keeping their money out.

The federal government, says Gindin, also wanted to keep the exchange rate high.

"First, the banks -- which are a particularly powerful force within the Canadian economy -- did not want to see a devaluation of the Canadian dollar since they are obviously major holders of the dollar. Moreover, they also gained from the higher interest rates that were part of this policy. (This gain was at the expense of both individual consumers and some smaller Canadian businesses.)

"Second, the federal government and corporations generally were identifying inflation rather than unemployment as the number one problem, and ... letting the dollar fall would stimulate jobs but increase inflation. So the government-business policy of weakening labour by permitting higher rates of unemployment meant a corresponding policy of maintaining an overvalued dollar," the article says.

Numbers havoc

School enrolment in turmoil again

