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ED 24 AND BHEL'S CURRENT
COST ACCOUNTS

By
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AHMEDABAD

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Abstract

In May 1979, Accounting Standards Committee of U.K. has issued Exposure Draft 24 "Current Cost Accounting". The purpose of this article is to prepare the BHEL financial statements for the last three years (1975-76, 1976-77 and 1977-78) on the basis of new guidelines available. The prepared financial statement would be analysed further in conjunction with my earlier article, "Inflation Accounting in India - A Case Study of the Bharat Heavy Electricals Ltd.", published as a Working Paper (No.228). Subsequently, this article has appeared in January 1979 issue of "Chartered Accountant".

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ED 24 AND BHEL'S CURRENT COST ACCOUNTS

In an earlier article 'Inflation Accounting in India - A Case Study of the Bharat Heavy Electricals Limited' published in January 1979 issue of the 'Chartered Accountant', I had corrected the current cost data of the BHEL for the year 1976-77 in accordance with the principles recommended by the Accounting Standard Committee set out in Exposure Draft 18 (Morpeth Committee recommendations)*. It is indeed gratifying to see that the Annual Report of the year 1977-78 of the BHEL incorporates the data for the previous year (1976-77) as corrected by me rather than those given originally in the Company's annual report of 1976-77. (see page numbers 63 and 64 of the 1977-78 report and page numbers 53 and 54 of the 1976-77 annual report).

However, since the publication of my article, the Accounting Standard Committee has issued Exposure Draft 24 for Current Cost Accounting. The purpose of this article is to reanalyse the BHEL financial statements for last three years (1975-76, 1976-77 and 1977-78) on the basis of new guidelines available.

* Originally this article was circulated privately as Indian Institute of Management Working Paper Series No. 228 in July 1978 under the same title.

ED-24 : Background & Important Features

There has been a great deal of debate among accountants on what kind of system should replace or supplement the historical cost statements to account for changing prices. In UK the first official proposal came in the form of ED-8 followed by SSAP7 recommending to provide general price-level adjusted accounts as a supplement to the statutory accounts prepared under historical cost conventions. In July 1973, the UK Government appointed an independent inquiry committee chaired by Mr Sandilands to consider the various methods of adjusting company accounts. The Committee recommended "Current Cost Accounting" (CCA) as opposed to Current Purchasing Power (CPP) method. To implement Sandilands' recommendations, Accounting Standard Committee (ASC) came out with ED-18 - popularly known as Morpeth Committee recommendations. Very soon it became clear that the Sandilands recommendations and ED-18 which stemmed from it were not acceptable. ASC not to abandon inflation accounting completely, issued 'An Interim Recommendations' (also known as Hyde guidelines) in November 1977.

"An interim recommendation" was a short and fairly simple statement. It leaves balance sheet values untouched, and recommends adjustments only to income. Three separate adjustments - depreciation, cost of sales and gearing adjustment - are recommended. The first two are aimed to adjust historical cost to the current cost, while the third (i.e. gearing adjustment) shows how the method of financing affect the business income in times of inflation.

ED-24, in common with Hyde guidelines, proposes that a separate statement be given showing the current cost adjustments made to the historical costs profits in respect of depreciation, cost of sales and gearing. The Exposure Draft however goes further in introducing an adjustment known as 'Monetary Working Capital Adjustment' (hereinafter called MWCA) which in effect extends the cost of sales adjustment (COSA) to the other working capital items needed to support the operating capability. The COSA provides for the extra funds needed to replace, at current prices, stock which has been consumed during the year. However, when suppliers allow credit, the amount of credit increases as the price increases. This reduces the need for business to provide additional working capital from its own resources. Broadly speaking, if the MWCA is added to (or deducted from) the cost of sales adjustment (COSA), the resulting adjustments deals with the whole of net working capital and not stocks alone. The general intention is that current cost operating profits should be struck after allowing for the maintenance of net working capital rather than just stocks.

ED-24, vide para 29, defines 'Monetary Working Capital' as the aggregate of trade debtors, prepayment, trade bills receivables and stocks not subject to a cost of sales adjustment less trade creditors, accruals and trade bills payable, in so far as they arise from the day to day operating activities of the business as distinct from transactions of a capital nature. It can include cash loans and that

part of bank balances and overdrafts which arises from fluctuations in the volume of stock, trade debtors and trade creditors; if their exclusion can be shown as misleading in calculating current cost profits.

The computation of gearing adjustment in ED-24 is slightly modified. It is calculated by multiplying the total of the charges or credits made to allow for the impact of price changes on the net operating assets of the business by the proportion which net borrowing bears to the net operating assets. The net borrowing in ED-24 (vide para 30) has been defined as the excess of all liabilities and provisions (including convertible debentures and deferred tax but excluding proposed dividends) other than those included within monetary working capital over the aggregate of all current assets other than those subject to a cost of sales adjustment ~~and those included within~~ of monetary working capital.

BHEL'S CURRENT COST ACCOUNTS

The current cost accounts of the BHEL for the year 1975-76, 1976-77 and 1977-78 have been presented here based on principles recommended by the Accounting Standard Committee set out in Exposure Draft 24. To prepare the CCA statements, I have used published information contained in the BHEL's annual reports for the two consecutive years namely 1976-77 and 1977-78.

The highlights of the accounts are that Cost of Sales Adjustments (COSA) for all the three years get reduced by Monetary Working Capital Adjustment (MWCA) to the extent of 77% in the year 1975-76 and 53% in the years 1976-77 and 1977-78. The company finances its inventory heavily by advances received from customers which have been progressively increasing. In 1975-76, they were 47% of the inventory values, increased to 71% in 1976-77 and to 80% in the year 1977-78. Such large amount of advances has to finance the inventory; and therefore the impact of inflation on inventory holding in BHEL's case has been very little.

As far as financing the net operating assets are concerned, again the BHEL has been in a very fortunate position. On Historical Cost basis, the debt : equity ratio has been above 1.3 for past few years. The high debt component in financing the net operating assets helps a great deal in reducing the inflation related cost of sales and depreciation. In BHEL's case, the 'gearing adjustments' have reduced the current cost operating adjustments, by Rs.75.9 millions in 1977-78, Rs.77.5 millions in 1976-77 and Rs.73.6 millions in 1975-76. However, one may note here, that the Government, which is also sole owner of the company, has lent about 78% of the total debts. In 1977-78, the Government loans (including interest accrued) is Rs.1777 millions out of the total net borrowing of Rs.2284 millions. In this fully owned Government undertaking, the major lender is also the sole

shareholder. One may question the justification of making gearing adjustment in evaluating the Company's financial performance based on current cost statements.

I must mention here that ED-24 recommends 'gearing adjustment' to be adjusted against interest charges to show the inflation adjusted interest cost of the debt financing. In 'Hyde guidelines', the benefit due to gearing were set off against COSA and additional depreciation.

BHEL has been among the first companies in India to adopt the principles of current cost accounting while presenting its annual financial statements. I hope that BHEL will continue to keep pace with the international developments.

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BHARAT HEAVY ELECTRICALS LIMITED

Balance Sheet*

(Based on Historical Costs)

	(Rs. in millions)					
	As on <u>31.3.1978</u>		As on <u>31.3.1977</u>		As on <u>31.3.1976</u>	
Share Capital	1300.0		1300.0		1300.0	
Reserves and Surplus	<u>742.8</u>	2042.8	<u>561.1</u>	1861.1	<u>357.8</u>	1657.8
Borrowings		<u>2619.9</u>		<u>2510.3</u>		<u>3160.1</u>
		<u>4662.7</u>		<u>4371.4</u>		<u>4817.9</u>
Fixed Assets	3343.9		2917.4		2496.1	
Less : Accumulated Depreciation	<u>1216.2</u>	2127.7	<u>1028.1</u>	1889.3	<u>891.9</u>	1604.2
Capital Expenditure in Progress		438.4		280.2		254.4
Investment		17.9		14.5		
Net Current Assets						
Inventory	5129.2		4614.4		4740.5	
Net Monetary Liabilities	<u>(3050.5)</u>	2078.7	<u>(2427.0)</u>	2187.4	<u>(1795.5)</u>	2945.0
Miscellaneous Expenditure		-		-		13.9
		<u>4662.7</u>		<u>4371.4</u>		<u>4817.9</u>

*Source : The BHEL's Annual Report for the year 1976-77.

BHARAT HEAVY ELECTRICALS LIMITED

Current Cost Profit & Loss Account for the year
(Rs .in millions)

	1977.78	1976-77	1975-76
Sales	<u>4958.0</u>	<u>4697.2</u>	<u>3742.5</u>
Profit before interest & taxes & taxes on HC basis	843.0	956.5	858.4
Current Cost Operating adjustments (See Note 1)	(174.1)	(136.8)	(119.8)
Current Cost Operating Profits	668.9	819.7	738.6
<u>Less:</u> Interest payable	268.8	327.0	311.8
Gearing Adjustment	<u>(75.9)</u>	<u>(77.5)</u>	<u>(73.6)</u>
Current Cost Profit before tax	476.0	570.2	500.4
<u>Less : Tax</u>	<u>290.0</u>	<u>315.0</u>	<u>322.0</u>
Current Cost Profit attri- butable to shareholders	186.0	255.2	178.4
Dividend	<u>78.0</u>	<u>78.0</u>	<u>-</u>
Retained Cost Profit for the last year	108.0	177.2	178.4

Current Cost Balance Sheet As On

(Rs in millions)

	<u>31.3.78</u>	<u>31.3.77</u>	<u>31.3.76</u>
ASSETS EMPLOYED			
Gross Block	7032.8	6203.7	5750.0
Accumulated Depreciation	(2592.6)	(2246.1)	(1981.0)
Net Fixed Assets	4440.2	3957.6	3769.0
Capital Expenditure-in-progress	438.4	280.2	254.4
Investments	17.9	14.5	0.4
Misc. Expenditure	-	-	13.9
Inventory	5129.2	4614.4	4740.5
Monetary Working Capital	(3650.6)	(2450.5)	(2475.6)
Other Net Current Assets	342.0	(190.2)	(395.9)
	<u>6717.1</u>	<u>6226.0</u>	<u>5906.7</u>
FINANCED BY			
Loan Capital	2283.8	2218.6	2084.1
Proposed Dividend	78.0	78.0	-
Share Capital :			
Issued	1300.00	1300.0	1300.0
Capital Maintenance Reserve (See Note 2)	2520.6	2173.7	2210.9
Retained Profit : (See Note 3)	534.7	455.7	311.7
	<u>6717.1</u>	<u>6226.0</u>	<u>5906.7</u>

Matters arising from application of the Standard which should be included in the notes to the Current Cost Accounts for the year

	<u>Rs in millions</u>		
	<u>1977-78</u>	<u>1976-77</u>	<u>1975-76</u>
1. CURRENT COST OPERATING ADJUSTMENTS:			
Cost of Sales Adjustment	69.9	16.9	26.6
Monetary Working Capital Adjustment ¹	(49.8)	(9.0)	(13.9)
	<u>20.1</u>	<u>7.9</u>	<u>12.7</u>
Additional Depreciation	154.0	128.9	107.1
	<u>174.1</u>	<u>136.8</u>	<u>119.8</u>
<hr/>			
2. CAPITAL MAINTENANCE RESERVE			
Balance as on 1st April	2173.7	2210.9	
Surplus on revaluations:			
Fixed Assets	402.7	32.4	2271.8 ²
Inventory	69.9	16.9	26.6
Monetary Working Capital Adjustment	(49.8)	(9.0)	(13.9)
Gearing Adjustment ³	(75.9)	(77.5)	(73.6)
	<u>2520.6</u>	<u>2173.7</u>	<u>2210.9</u>
<hr/>			
3. STATEMENT OF RETAINED PROFITS			
Balance as on 1st April	455.7	311.7	133.3 ⁴
Retained Current Cost Profit for the year	108.0	177.2	178.4
Prior period adjustment Income/(Expenditure)	(29.0) ⁵	(33.2)	-
	<u>534.7</u>	<u>455.7</u>	<u>311.7</u>
<hr/>			

Footnotes:

1. Monetary Working Capital Adjustment (MWCA) is calculated by

$$\text{COSA} \times \frac{\text{Monetary Working Capital}}{\text{Inventory}}$$

2. Being the first year of CCA system, all accrued revaluation gains are shown as the first year's surplus on revaluations. Thereafter, only current year's figures to be shown.

3. Gearing Adjustment is calculated as

$$\text{Current Cost Operating Adjustment} \times \frac{\text{Net borrowing}}{\text{Net Operating Assets}}$$

4. This is taken from BHEL's 1976-77 Annual Report.

Reserves & Surplus	Rs 357.9	(p.20)
Less : Profit After tax for 1975-76	<u>Rs 224.6</u>	(p.21)
Reserves & Surplus as on 1.4.75	<u>Rs 133.3</u>	

5. This consists of (:)

Incidental Expenses originally written off	Rs. 4.8
Net Prior Period Expenditure	<u>Rs.24.2</u>

(See p.31 of 1977-78 Annual Report)

COMPUTATIONAL NOTES(Do not form part of the Current Cost Accounts)Rs in millionsBALANCE SHEET ITEMS:

1. Net Monetary Working Capital as per ED-24			
	as on <u>31.3.78</u>	<u>31.3.77</u>	<u>31.3.76</u>
Cash Credit (Sch. 3)*	277.51	225.65	986.48
Post-shipment Credit (Sch.4)	58.62	66.09	89.50
Acceptances (Sch. 10)	5.22	3.68	5.32
Sundry Creditors (Sch. 10)	389.56	284.78	298.41
Advances Received from customers & Others (Sch.10)	4117.55	3085.64	2234.93
<u>Total MWC Liabilities</u>	<u>4848.46</u>	<u>3665.84</u>	<u>3614.64</u>
Sundry Debtors (Sch. 8)	1086.10	1133.25	1037.41
Advances for Purchases (Sch. 9)	<u>111.76</u>	<u>82.05</u>	<u>101.65</u>
<u>Total MWC Assets</u>	<u>1197.86</u>	<u>1215.30</u>	<u>1139.06</u>
Net Monetary Working Capital (Liabilities less Assets)	3650.60	2450.54	2475.58
Inventory	5129.18	4614.37	4740.50
Proportion of MWC to Inventory	.712	.531	.522

* Schedule references are those of Annual Reports.

Contd.

(Rs in millions)

	as on 31.3.78	31.3.77	31.3.76
2. Loan Capital includes			
a. Unsecured Loans (Sch.4)*			
From Government	1737.34	1667.45	1608.18
Interest accrued thereon	39.59	35.45	3.25
From banks	-	.34	.61
b. Deferred Credits (p.30)	<u>506.82</u>	<u>515.32</u>	<u>472.08</u>
	2283.75	2218.56	2084.12
3. Other Net Current Assets			
Current Assets (Sch.8)*			
Interest accrued on Deposits	1.08	1.61	-
Cash & Bank Balances	1114.90	449.90	167.81
Loans & Advances (Sch.9)* (excluding advances for purchases)	373.13	249.39	174.25
	<u>1489.11</u>	<u>700.90</u>	<u>342.06</u>
Less : Current Liabilities & Provisions (Sch. 10 and 11)*			
Deposits of from Contractors	23.88	16.05	10.24
Employees' Provident Fund	6.80	5.63	5.86
Other Liabilities	391.35	305.84	255.45
Interest accrued but not due on loans	59.44	49.47	33.40
All provisions except for dividend (Sch. 11)*	665.67	514.11	433.00
	<u>1147.14</u>	<u>891.10</u>	<u>737.98</u>
Net Current Assets	<u>341.97</u>	<u>(190.20)</u>	<u>(395.69)</u>
4. Net Borrowings as per ED 24			
Loan Capital	2283.8	2218.6	2084.1
Net Other Current Liabilities	<u>-</u>	<u>190.2</u>	<u>395.9</u>
	<u>2283.8</u>	<u>2408.8</u>	<u>2480.0</u>

*References are those of Annual Reports.

(Rs in millions)

	as on <u>31.3.78</u>	<u>31.3.77</u>	<u>31.3.76</u>
5. Net Operating Assets as per ED 24			
Net Fixed Assets	4440.2	3957.6	3769.0
Capital Expenditure in progress	438.4	280.2	254.4
Misc. Expenditure	-	-	13.9
Investment	17.9	14.5	0.4
Net Other Current Assets	<u>342.0</u>	<u>-</u>	<u>-</u>
	<u>5238.5</u>	<u>4252.3</u>	<u>4037.7</u>
6. Gearing Adjustment :			
Proportion of net borrowings to net operating assets	.436	.566	.614
Current Cost operating adjust- ments	Rs 174.1	136.8	119.8
Gearing Adjustments	Rs 75.9	77.5	73.6