DIRECT COSTING

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TABLE OF CONTENTS

INTRODUCTION

Business executives require information that will enable them to make intelligent plans and decisions to maximize profits. Accounting provides much of this information. A much discussed tool among the accounting techniques used in this respect is direct costing.

Direct costing is a relatively recent development in cost accounting and it is gradually being adopted in many enterprises. Direct costing has been known by other names, such as "differential costing," "variable costing," and in Great Britain "marginal costing." The term "direct costing" has commercial appeal, is generally accepted by accountants, and will be used throughout this report.

In recent years, interesting discussions and heated arguments have developed in this area. Horngren and Sorter say "Variable costing is the inventory costing method which applies only variable production costs to products; under this method fixed factory overhead is not assigned to product."[1]

Chiuminatto says, "Direct costing is the analysis of fixed and variable costs and their use in making products and manufacturing decisions and in the study of break-even points."[2]

Neikirk points out that, "Direct costing should be defined as a segregation of manufacturing costs between those which are fixed and those which vary directly with volume. Only the prime costs plus variable factory costs are used to value inventory and costs of sales. The remaining factory expenses are charged to profit and loss. However, the point to be emphasized is that direct costing is

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1. Charles T. Horngren and George H. Sorter: "Direct Costing for External Reporting." The Accounting Review, Vol. XXXVI No. 1 January 1961 p. 84.

2. Peter M. Chiuminatto: "Is Direct Costing The Answer To Better Management Accounting?" NACA Bulletin, February, 1956, p. 699.

primarily a segregation of expenses and only secondarily a method of inventory evaluation."[3]

Fess considers that, "Direct costing is basically a costing concept which treats only variable manufacturing costs as a part of product cost. Fixed manufacturing costs are considered to be period costs and unrelated to product cost."[4]

Wixon states "That the concept of direct costing involves the classification of manufacturing costs into fixed and variable elements, with subsequent assignment of variable costs to product and fixed costs to income in the period of their incurrence."[5]

The above opinions can be summarized as follows: direct costing is a method which charges the products with only those costs that vary directly with volume. The prime costs (direct materials and direct labor) plus variable factory overhead expenses are used to value inventories and to determine the cost of sales. Put another way, direct costing charges only variable production costs to products and treats all fixed costs as period costs.

Costs can be classified in several ways - fixed, variable and semivariable. In general, fixed costs do not fluctuate with changes in volume, i.e. fixed costs per unit decrease with increase in output. Examples would be salaries of production executives, depreciation, real estate taxes, property and liability insurance, rent, and pensions. Fixed costs may vary from period to period, but the variability is not in accordance with fluctuation in output.

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3. Waldo W. Neikirk: "How Direct Costing Can Work For Management?" NAA Bulletin, January, 1951, p. 525.

4. Philip E. Fess: "The Theory of Manufacturing Costs." The Accounting Review, Vol. XXXVI, No. 3, July, 1961 p. 446.

5. Rufus Wixon: "Accountant's Handbook" Fourth Edition 1962, The Ronald Press Company, New York p. 6060.

The principal characteristic of a variable cost is that it varies in direct proportion to volume of production. Examples are supplies, power, royalties, overtime premium and payroll taxes.

Semivariable costs are those that vary with production, but not in direct proportion to the volume. Examples would be supervision, inspection, compensation insurance, and social security taxes. Semivariable cost may be separated into fixed and variable elements. But quite obviously, this type of cost is a source of trouble in direct costing.

Direct costing has long been utilized for purposes of internal management, but recently some accounting authorities have advocated it as a basic costing principle for external financial reporting.

The purpose of this report is to explain the characteristics of direct costing, the use of direct costing and the effects of direct costing on inventories and profits. The eight parts into which it is divided are:

(1) Historical development of direct costing.

(2) Distinction between absorption costing and direct costing.

(3) Direct costing and inventory valuation.

(4) The accounting procedures of direct cost method.

(5) Readjustment of direct costing method for external financial reporting.

(6) Direct costing for decision-making.

(7) Advantages and disadvantages of direct costing.

(8) General criticism of direct costing.

HISTORICAL DEVELOPMENT OF DIRECT COSTING

Direct costing is about forty years old, but has become increasingly important in recent years, with the most rapid development having occurred since World War II. Its origin may be traced to the development of the principle of burden application, which was recommended by some authorities at the turn of the 20th century. The preliminary rate is considered to have been the forerunner of our modern predetermined burden or overhead rates. The use of a normal burden rate (based on 100% capacity) was the second development in overhead costing. This probably occurred about 1920, and is still widely used.

The adoption of the normal burden rate, was a slight improvement for some control purposes. Therefore many expenses were budgeted in accordance with this rate. At the end of the fiscal period, when financial statements were prepared, differences between actual expenses and those estimated from the use of predetermined burden or overhead rate are considered to be over or under absorbed overhead. The disposition of these differences in the accounting profession is still an unsolved problem. In general, year-end statements frequently take variances over into cost, without distributing them to inventories and to cost of goods sold.

Another development of importance in dealing with overhead costs was the introduction of a flexible budget. The flexible budget came from cost control and pricing concerns. It contains estimated expenses for possible levels of output, and provides a partial solution to the disposition of over or underabsorbed overhead balances. The flexible budget takes into account the various kinds of fluctuatinns in each type of overhead cost item at the various levels of productive activity. This method provides an advantageous means of segregating the variable from the fixed costs, and the variable elements of certain costs from the fixed elements of those costs.

At the end of the fiscal year, the accountant may discover that the actual activity varies from the expected plant activity, thus, the costs and pricing policy should be revised. The flexible budget recognizes the fact that the fixed cost per unit of output increases with decreasing production and, conversely, decreases with increasing production. Sometimes, the predetermined standard overhead rate for special purposes can also come from the flexible budget.

The use of related overhead rates and the flexible budget are helpful in the application of costing methods for managerial purposes. Management may feel, however, that it is not sufficiently helpful to justify its use. They wish to know what was earned last month. They would like to have the monthly, and even the weekly earnings reports early. Business is, therefore, always dissatisfied and asking for more direct and understandable methods. This is the reason behind the development of a new method to meet management's demand -- direct costing.

Direct costing is designed to meet the requirements of modern management. The Research Institute of America has called it a "short-cut to executive decision . . . . . . a way of bridging the gap between conservative accounting and management's needs."[6]

The recent growth of direct costing has been dramatic. In the last six years, the American Management Association has offered twenty seminars on direct costing. The National Association of Accountants has experienced the same kind of response. Their (AMA) first meeting on the subject of direct costing was held in March 1959. In 1953 an NAA Research Committee found seventeen companies using direct costing. In 1959 another NAA Research Committee found one hundred ninety-seven such companies. This is evidence of the increased popularity and use of direct costing, and it is rapidly gaining acceptance for reporting.

DIFFERENCES BETWEEN ABSORPTION COSTING AND DIRECT COSTING

Absorption or conventional costing is the oldest form of cost allocation. It was developed and used when cost accounting was limited to cost finding. The basic difference between absorption costing and direct costing is the way in which

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6. Research Institute of America Bulletin 33, February 15, 1956, p. 1.

costs are classified, and the order in which they are applied against income. In the absorption costing method, all production costs, including variable costs, fixed costs, and beginning inventory minus ending inventory, are deducted from net sales to arrive at a gross profit figure. All other costs, such as selling and administration expenses, which also include variable and fixed costs, are deducted from the gross figure; the result is net profit. Direct costing, on the other hand recognizes as primary the distinction between variable costs and fixed costs. In the income statement developed under direct costing, all variable costs are deducted from net sales to arrive at a marginal income figure. From this figure, the fixed expenses - fixed factory overhead and selling and administrative expenses - are deducted to get net profit.

In order to explain these two methods clearly, an example is given to illustrate the differences between direct costing and absorption costing.

Table 1. Annual Budget.

	Total	Per Unit
Sales (180,000 units)	$1,800,000	$10.00
Cost of Goods sold		
Direct Materials	$ 450,000	$ 2.50
Direct Labor	$ 360,000	$ 2.00
Variable Factory Overhead	$ 90,000	$ 0.50
Fixed Factory Overhead	$ 180,000	$ 1.00
Total	$1,080,000	$ 6.00
Gross Margin	$ 720,000	$ 4.00
Selling and Administration		
Fixed	$ 48,000	$ 0.26
Operating Profit	$ 672,000	$ 3.74

Table 2. Unit production, sales and inventories by quarters.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Beginning Inventory	0	0	3,000	2,000	0
Production	43,000	47,000	45,000	46,000	181,000
Sales	43,000	44,000	46,000	45,000	178,000
Ending Inventory		3,000	2,000	3,000	3 ,000

Table 3. Income statement under absorption costing.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Sales	$430,000	$440,000	$460,000	$450,000
Direct Materials	$107,500	$117,500	$112,500	$115,000
Direct Labor	86,000	94,000	90,000	92,000
Variable Factory Overhead	21,500	23,500	22,500	23,000
Fixed Factory Overhead	43,000	47,000	45,000	46,000
Cost of Goods Manufactured	$258,000	$282,000	$270,000	$276,000
Beginning Inventory	-0-	-0-	18,000	12,000
Cost of Goods Available for Sales	$258,000	$282,000	$288,000	$288,000
Ending Inventory	-0-	18,000	12,000	18,000
Cost of Goods Sold	$258,000	$264,000	$276,000	$270,000
Gross Profit on Sales	$172,000	$176,000	$184,000	$180,000
Selling and Administration Expenses	12,000	12,000	12,000	12,000
Net Profit on Sales	$160,000	$164,000	$172,000	$168,000
Under or (overapplied) Factory Overhead	2,000	(2,000)	-0-	(1,000)
Net Profit for the Quarter	$158,000	$166,000	$172,000	$169,000

Table 4. Income statement under direct costing.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Sales	$430,000	$440,000	$460,000	$450,000
Direct Materials	$107,500	$117,500	$112,500	$115,000
Direct Labor	86,000	94,000	90,000	92,000
Variable Factory Overhead	21,500	23,500	22,500	23,000

Table 4 (cont.)

Table 4 (cont.) Income statement under direct costing.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Cost of Goods Manufactured	$215,000	$235,000	$225,000	$230,000
Beginning Inventory	-0-	-0-	15,000	10,000
Cost of Goods Available for Sales	$215,000	$235,000	$240,000	$240,000
Ending Inventory	-0-	15,000	10,000	15,000
Cost of Goods Sold	$215,000	$220,000	$230,000	$225,000
Marginal Income	$215,000	$220,000	$230,000	$225,000
Less: Fixed Expense				
Factory Overhead	$ 45,000	$ 45,000	$ 45,000	$ 45,000
Selling & Administration expenses	$ 12,000	12,000	12,000	12,000
Total Fixed Expenses	$57,000	$ 57,000	$ 57,000	$ 57,000
Net Profit for the Quarter	$158,000	$163,000	$173,000	$168,000

From the above two statements, a comparison of these two methods of costing will serve to show the following six points:

(1) Inventory figures are larger under absorption costing than under direct costing.

Ending inventory is one element of working capital. Thus, the direct costing method may produce asmaller working capital ratio on the balance sheet. The working capital ratio is indicative of the degree of safety with which short-term credit may be extended, since this ratio reflects the relationship of current assets to current liabilities.

(2) With the exception of the first quarter, all the reported net profits are different under the absorption costing and direct costing methods. The main reason is that some of the fixed costs have been contained in the ending inventory under the absorption costing method.

(3) The beginning inventory under absorption costing is greater than that under direct costing, because the former includes the fixed costs and the latter excludes it.

(4) "The inclusion or exclusion of fixed expenses from inventories and cost of goods sold causes the gross profit to vary considerably from marginal income. Marginal income in direct costing is greater than the gross profit in absorption costing. This difference has resulted in some criticism of direct costing. It is argued that a greater gross margin might mislead the sales department into asking for lower prices or demanding higher bonuses or benefits. In defense of direct costing, it is well to recognize the fact that selling prices and bonuses are in most cases not based on gross profit but on net profit."[7]

(5) It is obvious that under direct costing, the ending inventories, cost of goods sold, and marginal income are related directly to the volume of production, whether this is sold or not. Therefore, when managements adopt direct costing, they have a very useful tool to control the production operation. Absorption costing seems less realistic in this report than direct costing. In the examples given, the second quarter and the fourth quarter profits were more than under direct costing because the fixed costs in inventory values were capitalized. That is, cost control and financial planning becomes difficult.

(6) Another reason for the difference in net profits is the result of under- or overapplied factory overhead having been deferred under absorption costing. If the sales increase and production decreases, the under-absorbed burden is deducted. The opposite is true if the sales decrease with an increase in production, that is, if production exceeds sales, absorption costing shows a higher profit than does direct costing, conversely, if sales exceed production direct costing shows a higher profit than does absorption costing.

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7. Adolph Matz, Othel J. Curry and George W. Frank: "Cost Accounting," 3rd Edition (Cincinnati: South-Western Publishing Company, 1962) p. 792.

DIRECT COSTING AND INVENTORY VALUATION

From the previous section, it is evident that the inclusion or exclusion of fixed costs from inventory causes the difference in figures under the absorption costing and direct costing. In the absorption costing method, fixed expenses are included in inventory, where as in the direct costing method, fixed expenses are excluded. The difference in figures between the absorption costing and direct costing method in inventory values constitutes the main point of attack by opponents of direct costing.

Inclusion of fixed expenses in inventory has merit. Facilities represented by fixed expenses are necessary for production and have to be included in inventory values. The American Institute of Certified Public Accountants supports this contention. Accounting Research Bulletin 43[8] states that: "A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues." The bulletin continues, to say that "The primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset. As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location." And the bulletin emphasizes that "It should also be recognized that the exclusion of all overheads from inventory costs does not constitute an accepted accounting procedure." This seems to imply that the American Institute of Certified Public Accountants opposes direct costing for external reporting.

The Internal Revenue Service and the Securities and Exchange Commission will no doubt, refuse to accept the reports which were prepared on the basis of the

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8. Accounting Research and Terminology Bulletin, American Institute of Certified Public Accountants, Final Edition 1961, p. 28.

direct costing until the American Institute of Certified Public Accountants recognizes direct costing method as an accepted accounting procedure.

There are two tests which were provided by section 471 of the Internal Revenue Code of 1954. It stated that "each inventory must conform: (1) It must conform as nearly as may be to the best accounting practice in the trade or business; and (2) it must clearly reflect income. The regulations define inventory cost in the case of merchandise produced to be (1) The cost of raw materials and supplies entering into, or consumed in connection with, the product; (2) expenditures for direct labor; (3) indirect expenses incident to, and necessary for, the production of the particular article, including in such indirect expenses a reasonable proportion of management expenses."[9]

The attitude of the Securities and Exchange Commission considers "(1) the policy of the Commission to favor consistency among reporting companies as far as possible and (2) the attitude that direct costing is not 'generally accepted accounting procedure'."[9]

There are many methods of valuing inventories which are in conformity with accepted accounting principle, such as "first-in, first-out," "last-in, first-out," and "average." Direct costing, obviously, does not correspond to the objective stated in Bulletin 43.

In recent years, scholars have discussed the affect of direct costing upon inventory valuation, and their opinions differ. Hepworth states, "the elimination of fixed manufacturing costs from product cost will result in the pricing of inventories for financial statement purposes at amounts which bear no identifiable relationship with realizable value, at least in the case of a concern which is going to continue to operate successfully. It is interesting to note

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9. Adolph Matz, Othel J. Curry & George W. Frank: Loc. cit., p. 794.

that the use of the LIFO concept of the flow of cost factors produces the same undesirable results."[10] His opinion emphasized that inventories be stated at net realizable values.

Seiler points out that "Under to-day's generally accepted accounting principles, the inventory figures appearing on the balance sheet of a manufacturing company have only small value in a general analysis of the company's financial position. This is especially true when such techniques as last-in-first-out, lower of cost or market, and 'normal' capacity application methods are used. In evaluating the merits and demerits of direct costing, its effect upon inventory valuation may be classed as a distinct merit, since it would greatly facilitate an analysis of the company's working capital."[11] Brummet also comments that "Any serious discussion of the 'costing' method and its effects on inventory valuation should not be allowed to resort to such defective logic as an argument in its favor. The fact is that 'direct costing' as opposed to any 'absorption costing' method decreases the valuation of inventories and by so doing adds to the misrepresentation of valuations that are now being shown on financial statements in accordance with generally accepted accounting principles."[12]

In the writer's opinion, the American Institute of Certified Public Accountants' theory is correct with regard to the inventory valuation, because costs should match with revenues. However, even though direct costing is not accepted by A.I.C.P.A. for external reporting, it is a valuable tool in internal reporting.

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10. Samuel R. Hepworth: "Direct Costing -- The Case Against". The Accounting Review Vol. 29, No. 1, January 1954, p. 96.

11. Robert E. Seiler: "Improvements in External Reporting by Use of Direct Costing." The Accounting Review Vol. 34, No. 1, January 1959, p. 64.

12. R. Lee Brummet: "Direct Costing - Should It Be a Controversial Issue?" The Accounting Review Vol. 30, No. 3, July 1955 p. 443.

THE ACCOUNTING PROCEDURES OF THE DIRECT COSTING METHOD

The disposition of "cost" is a most complicated problem in cost accounting. The accounting procedures for direct materials and direct labor are the same under direct costing as under absorption costing. But the procedures for manufacturing overhead differ. In absorption costing, there is just one manufacturing overhead control account. In direct costing, there are three control accounts; one is variable manufacturing overhead costs control; the other is fixed manufacturing overhead costs and the third is applied variable manufacturing overhead account. There may be a difference between the variable manufacturing overhead costs account and applied variable manufacturing overhead account. If this difference occurs, the accountant or management should analyze to determine the reason and make some improvement.

The other accounts are variable selling overhead control, variable administrative overhead control, fixed selling overhead control and fixed administrative overhead control. The debit in each of these accounts is actual costs incurred, and the credit is closed to the profit and loss account.

The following procedures are widely used:

Variable Manufacturing Overhead Costs Control

Actual Incurred Costs detail in subsiding cost analysis sheets	

Applied Variable Manufacturing Overhead

	Credited here and charged to production

Variable Selling Overhead Costs Control

Actual (see above)	Closed to profit and loss

Variable Administration Overhead Costs Control

Actual (see above)	Closed to Profit and loss

In statement of income and expense either combined with other variable costs before showing marginal income or presented as a deduction from manufacturing margin to derive marginal income.

Fixed Manufacturing Overhead Costs Control	
Actual (see above)	Closed to profit and loss

Fixed Selling Overhead Costs Control	
Actual (see above)	Closed to Profit and loss

Fixed Administrative Overhead Costs Control	
Actual (see above)	Closed to profit and loss

In statement of income and expense the fixed costs of these functions are combined and deducted from marginal income to derive net income.

It appears that these procedures are designed for income statement presentation, especially external financial reporting. In discussing this issue, an important paper which should be taken into consideration is one written by Horngren and Sorter. They offer two points in regard to direct costing for external reporting. They said "(a) Variable costing concepts rather than conventional costing concepts are more consistent with the existing framework of 'generally accepted accounting principles.' (b) Variable costing will provide users of external reports with more helpful information than is presently available."[13]

READJUSTMENT OF DIRECT COSTING METHOD FOR EXTERNAL FINANCIAL REPORTING

Since the American Institute of Certified Public Accountants, the Internal Revenue Service, and the Securities and Exchange Commission do not accept the direct costing method for external financial reporting, many scholars suggest ways to reconcile the results of this method with those of the absorption costing method, and thus to solve the problem for a company using direct costing. Direct costing is a valuable managerial tool in cost analysis. But there are still some

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13. Charles T. Horngren and George H. Sorter: "Direct Costing For External Reporting." The Accounting Review, Vol. XXXVI, No. 1, January, 1961, p. 86.

objections to it. Raymond P. Marple offers an inventory adjustment, on the income statement prepared under direct costing, to reflect fixed costs. Through this adjustment it is possible to reconcile the external reports presented on an absorption costing basis with the book kept on a direct costing basis.

Raymond P. Marple gave an example to explain the reconciliation for external reports.[14]

Table 5. Basic data for exhibit.

Normal capacity	100,000	Fixed Cost for Period	
Production	90,000	Production	$200,000
Sales	95,000	Selling	75,000
Selling Price Per Unit . . .	$ 10	Administration	50,000
Operating variances	$ 4,500	Others	25,000

Standard Variable Costs Per Unit	
Material and Labor	$4.00
Factory Overhead	1.00
Selling Expense	.50

Table 6. Income statement - absorption costing.

		Amount		Percent of Net Sales
Net Sales		$950,000		100
Less: Standard Cost of Sales		665,000		70
Standard Gross Profit		285,000		30
Less: Variances				
Operating Variances	$ 4,500		.47	
Volume Variances	20,000		2.11	
Total Variance		24,500		2.58
Gross Profit		260,500		27.42
Less: Selling expenses	122,500		12.90	
Administrative expenses	50,000		5.26	
Other expenses	25,000		2.63	
Total expenses		197,500		20.79
Net Operating Profit		63,000		6.63

14. Raymond P. Marple: "Direct Costing and the Uses of Cost Data." The Accounting Review Vol. 30, NO. 3, July 1955, p. 436-7.

Table 7. Income statement - direct costing.

	Amount		Percent of net sales
Net Sales	$ 950,000		100
Less: Standard Variable Cost of Sales . .	$ 475,000		50
Manufacturing Margin	$ 475,000		50
Variable Selling Expenses	47,500		5
Distribution Margin	$ 427,500		45
Operating Variances	4,500		.47
Marginal	$ 423,000		44.53
Less: Fixed Costs			
Production . . . . $ 200,000		21.05	
Selling Expenses . . . 75,000		7.89	
Administrative expenses 50,000		5.29	
Other expenses 25,000		2.64	
Total Fixed Costs	350,000		36.85
Direct Cost Operating Profit	73,000		7.68
Less: Reduction of Fixed Costs in Inventory	10,000		1.05
Absorption Cost Operating Profit	$ 63,000		6.63

From the above statement, the reconciliation of direct costing income to absorption costing income can be seen. Reduction of fixed costs in inventory is subtracted from direct costing net income and absorption costing net income is obtained ($73,000 - $10,000 = $63,000.) The reason is more units were sold than were produced. Inventory is reduced by 5 thousand units.

As to the reconciliation problem, R. Lee Brummet considered that direct costing can be used as internal control, but can not be used in published reports. He said, "Many, if not most, of the arguments about the pros and cons of 'direct costing' can be reconciled, it seems to me, if accountants realise and admit the existence of cost analysis outside of formal ledger accounts as an ordinary and essential activity in which they should be engaged and that different accounting procedures are appropriate and essential for the differing needs of individuals for whom accounting information is prepared and arrayed. The question of whether overhead reates used in ledger accounts should or should not include an element of fixed costs is of little moment in itself. The important objective is the accumulation of sufficient cost information either in or outside of the formal accounts and its use in developing cost analyses that have an important bearing on decisions to be made by management and other analyses demand to be appropriate for published statements and tax return."[15]

DIRECT COSTING FOR DECISION MAKING

Direct costing can be used for marginal decision-making. Generally speaking, this is its major use. The analyst needs studies of cost trends and a segregation of fixed and variable costs in order to apply direct costing. Such analysis can be helpful in bringing about cost control and planning at all levels of responsibility. The identification and classification of costs as either fixed or variable, with semivariable expenses subdivided into fixed and variable elements offer a framework for the accumulation and analysis of costs.

Another advantage of direct costing is that the cost-volume-profit relationships are readily available and are extensive. These relationships are very important in managerial decision making, and also in pricing policies, sales volume and break-even analysis.

The use of direct costing techniques is helpful in the appraisal of management. There is no denying that direct costing offers the type of costs management needs for decision-making. The aim of business enterprise is to get a price which will provide the maximum amount of net profit. The profit return on each unit sold is not as important as the total return realized from all units sold. If fixed costs stay constant, then the price which gives a volume that yields the greatest margin in excess of variable costs is the price to be charged. If a firm wants to get maximum profit, it should make certain that marginal revenue is equal to marginal cost. This is the so-called "equilibrium point." If these two figures are not equal, the firm may increase or decrease production until

15. R. Lee Brummet: "Direct Costing - Should It Be A Controversial Issue?" The Accounting Review. Vol. 30, No. 3, July 1955. p. 443.

equilibrium is reached. Direct costing methods are used to compute the marginal income.

John J. W. Neuner points out that the direct costing approach is helpful in deriving and presenting future cost information which management can use in the following ways:

"1. In considering the costs of changing production requirement and alternative production methods.

2. In grasping the probable effect on production and distribution costs of the anticipated changes in prices and wages rates.

3. In understanding the effect by product lines and for the total firm of changes in the volume and composition of demand.

4. In formulating marketing plans related to:

a) Price setting on individual products and the revision of the firm's total pricing structure.

b) The discontinuance of unprofitable items or the addition of new ones.

c) The selection of improved methods of promotion and distribution."[16]

Horngren and Sorter, on the other hand, identify the investor's decision-making process with management's in support of the superiority of variable costing over absorption costing in external reporting. They state, "We find it strange that variable costing should be widely regarded as helpful to management but as useless, dangerous, or confusing to the intelligent investor. In substance, both management and investors have the same task, decision-making. Both groups are concerned primarily with future results. Why exclude the investor group from a useful analytical device and burden their task of interpretation by treating irrelevant costs as assets?"[17]

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16. John J. W. Neuner: "Cost Accounting" Fifth Edition (Homewood: Richard D. Irwin, Inc. 1957) p. 783.

17. Charles T. Horngren and George H. Sorter: "Direct Costing for External Reporting." The Accounting Review, Vol. XXXVI No. 1, Jan. 1961, p. 91.

Another advantage of direct costing is that it places emphasis on relevant cost factors. Information on variable and fixed costs are important and relevant to investors. Any planning for the future depends on knowledge of cost factors' behavior. Direct costing is helpful in predicting not only income, but also cash flows in relation to volume changes in this field. Since there is a relatively close correlation between cash flow and variable costs.

Generally speaking, direct costing is a very useful tool for making marketing decisions, for production planning, and in establishing a pricing structure in the whole operation. Direct costing also furnishes a basis for (a) the study of contemplated changes in production level, (b) adjusting to economic conditions, (c) proposed action relating to new marketing, plant expansion or contraction, or (d) special promotional activity.

ADVANTAGES AND DISADVANTAGES OF DIRECT COSTING

In the accounting field, there are many arguments about advantages and disadvantages of direct costing. Many express its merits and consider it should be adopted in modern accounting systems. And others explain its disadvantages and consider that the conventional or absorption costing method should be used. The clearest explanation of the advantages and disadvantages of direct costing is contained in the National Association of Cost Accountants Research Bulletin No. 23.

"Advantages of Direct Costing

1. Cost-volume-profit relationship data wanted for profit planning purposes are readily obtained from the regular accounting statements. Hence, management does not have to work with two separate sets of data to relate one to the other.
2. The profit for a period is not affected by changes in absorption of fixed expenses resulting from building or reducing inventory, Other

things remaining equal (e.g. selling prices, cost, sale mix) profits move in the same direction as sales when direct costing is in use.

3. Manufacturing cost and income statements in the direct cost form follow management's thinking more closely than does the absorption cost form for these statements. For this reason, management finds it easier to understand and to use direct cost reports.
4. The impact of fixed costs on profits is emphasized because the total amount of such costs for the period appears in the income statement.
5. Marginal income figures facilitate relative appraisal of products, territories, classes of customers, and other segments of the business without having the results obscured by allocation of joint fixed costs.
6. Direct costing ties in with such effective plans for cost control as standard costs and flexible budgets. In fact, the flexible budget is an aspect of direct costing and many companies thus use direct costing methods for this purpose without recognizing them as such.
7. Direct cost constitutes a concept of inventory cost which corresponds closely with the current out-of-pocket expenditure necessary to manufacture the goods.

Disadvantages of Direct Costing:

1. Difficulty may be encountered in distinguishing fixed costs. In particular, certain semivariable costs may fall into a borderline area and a more or less arbitrary classification may be considered necessary in order to arrive at a practical determination of fixed and variable components.
2. Complete manufacturing costs are not determined in the process of costing production and the supplementary allocation of fixed overhead

on normal or some other volume base must be made to provide product costs for long-range pricing and other long-range policy decisions.

3. Serious income tax problems may be encountered if a change is made from full cost to variable cost for costing inventory and definite rulings are not available for guidance.
4. Some accountants question the acceptability of direct costing as a basis for costing inventory in financial statements prepared for stockholders and the public at large. However, extensive interest in direct costing has arisen very recently and opinion with respect to this question has not crystallized at the present."[18]

Another advantage of direct costing is its simplicity. The classification of variable costs and fixed costs in the income statement is clear. Direct costing can reduce the cost of the cost accounting process. It offers less guesswork, because volume is not a consideration and equal figures are only charged off to each period. This is very helpful to the accounting system as it allows it to keep step with the direct economic needs of operations. The prevailing issue today regarding direct costing is whether it can be used for external financial reporting.

Other disadvantages advanced in accounting literature by opponents of direct costing may be summarized as follows:

"1. Direct costing does not give the full cost of the product.
2. There is danger in the idea, which is not new but seems to be popular with the advocates of direct costing, that any addition of business which recovers something more than direct cost is worth taking on. This type of thinking may lead to too much marginal business and very little profit.

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18. National Association of Cost Accountants Research Bulletin No. 23 "Direct Costing" Vol. 34, pp. 1127-28.

3. Direct costing may improperly equalize periodic profit."[19]

GENERAL CRITICISM OF DIRECT COSTING

The American Institute of Certified Public Accountants, the Internal Revenue Service and the Securities and Exchange Commission refuse to accept annual corporate reports prepared on the basis of the direct costing method. This is a major obstacle to the use of direct costing for financial external reporting. The position of the American Accounting Association in respect to direct costing is set forth in a statement in "Accounting and Reporting Standards for Corporate Financial Statements, 1957 Revision" - "Thus the cost of a manufactured product is the sum of the acquisition costs reasonably traceable to that product and should include both direct and indirect factors. The omission of any element of manufacturing cost is not acceptable."[20]

Although this statement implies a lack of acceptability of direct costing for external purposes, there are several dissenting points in the 1957 revision. Its critique is that, "Direct costing does not exclude from product inventories those manufacturing costs directly attributable to current production, this is, varying with changes in the rate of manufacturing operation; it does exclude fixed manufacturing costs, on the ground that such invariant elements (like general administration costs) ought to appear as expense of the period in which they are incurred. Mr. Hill and Mr. Vatter dissent from the majority position that direct costing is not an acceptable practice of accounting measurement." "They therefore conclude that direct costing is at least as acceptable in accounting theory as is the conventional 'full costing' concept. Moreover, they believe

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19. Harold J. Smolinske: "Direct Costing An Accounting Principle for External Reporting." The Accountants Digest, Vol. 28, No. 2, December 1962, p. 76.

20. American Accounting Association: "Accounting and Reporting Standards for Corporate Financial Statements and Preceding Statement and Supplements." 1957. p. 4.

that the use of direct costing procedures will, in many cases, yield results more useful to investors as well as to management."[21]

This critique of direct costing has been criticized by several scholars in the recent accounting literature. Carman G. Blough stated that "direct costing is fine for handling internal managerial problems but it should not be carried over into the financial statement since costs must match revenues."[22] Apparently 90% of all accountants feel this way. This may be a result of the American Accounting Association's opinion.

A discussion of direct costing should take into consideration the period cost concept, and product cost concept. This is the subject of a major controversy in the recent accounting literature. One explanation of the period cost concept was provided by Charles T. Horgren and George H. Sorter. They considered that "Proponents of variable costing maintain that fixed factory overhead provides capacity to produce. Whether that capacity is used to the fullest extent or not used at all is usually irrelevant insofar as the expiration of fixed costs is concerned......., as the clock ticks fixed costs expire, to be replenished by new bundles of fixed costs that will enable production to continue in succeeding periods."[23] But, another author, James M. Fremgen, disagrees with them and comments, "this period cost concept clearly conflicts with the traditional accounting view that costs attach to production."[24]

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21. American Accounting Association: "Accounting and Reporting Standards for Corporate Financial Statements and Preceding Statement and Supplements." 1957,p. 10.

22. Carman G. Blough: "Accounting and Auditing Problems." Journal of Accountancy, April, 1955, p. 64.

23. Charles T. Horngren and George H. Sorter: "Direct Costing for External Reporting." The Accounting Review, Vol. XXXVI, No. 1, January, 1961, p. 88.

24. James M. Fremgen: "The Direct Costing Controversy - An Identification of Issues," The Accounting Review. Vol. 39, No. 1, January 1964 p. 46.

William L. Ferrara and Philip E. Fess were two of the strongest proponents of the product cost concept. They opposed Horngren and Sorter and said "Those who claim that only the variable costs of manufacturing should be inventoried on the basis that only variable costs are beneficial to the firm in terms of reducing future cost outlays misunderstand the very nature of income measurement when the recognition of income is delayed. Future benefits have nothing to do with the valuation of inventories. Inventories are simply an expression of all costs used up in the process of acquiring revenue which has not yet been recognized."[25] It appears that James M. Fremgen agreed with Fess and Ferrara's opinion when he said "basically, they have argued that all manufacturing costs are costs of product and that there is no such thing as a manufacturing cost of the period ....Fess and Ferrara supported a value-added approach to revenue recognition but accepted the deferral of revenue recognition to the point of sale on grounds that measurement is more objective at that point."[26]

In July, 1962, Horngren and Sorger published a paper, - "Asset recognition and Economic Attributes - The Relevant Costing Approach," - to rebut the views of Fremgen, Fess and Ferrara. Horngren and Sorter write "However, our preoccupation with direct costing per se evidently obscured our arguments for relevant costing as a principle distinct from both conventional and direct costing ..... Furthermore, we considered future revenue as an important aspect of our relevant costing approach. Yet we apparently failed to make the breadth of our cost concept clear because James F. Fremgen and Philip E. Fess and William L. Ferrara mistakenly asserted that our position confined itself to future outlays and ignored future revenues."[27.]

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25. Philip E. Fess and William L. Ferrara: "The Period Cost Concept For Income Measurement - Can It Be Defended?" The Accounting Review, Vol 36, No. 4, Oct.,1961.

26. James M. Fremgen: Loc. cit., p. 47

CONCLUSION

Accounting is the universal language of business. As such, accounting is in a continual process of refinement and improvement. After almost thirty years of development, direct costing is gradually being considered as an acceptable method of inventory measurement in external as well as in internal financial reportings. Direct costing has substantial usefulness but some limitations. It can be helpful in many business situations and management needs. It can most effectively serve particular management purposes, so it should be used selectively by many accountants and managers. On the other hand, direct costing can provide much available information to accountants and to management. As indicated by the foregoing statement, direct costing is better than conventional or absorption costing in connection with the existing framework of accounting principles, and direct costing may provide management with more useful data for guiding business operations than does the absorption costing system. However, there are many other users of accounting data outside this internal, operational organization, such as creditors, owners, governmental agencies, labor unions and so forth. All of them are also interested in the firm's plant expansion, contraction and special promotional activities.

Accounting can provide information to both internal and external interests. Information provided to external users must be based on generally accepted accounting theory. Direct costing is not in accordance with generally accepted accounting theory and, therefore, is not acceptable for published financial statements. This restricts the use of direct costing to internal uses.

Direct costing has grown over the past few years. It is predicted by many people that it will continue to grow in use and will become generally accepted in the future, since it has more advantages than disadvantages for usefulness in the accounting area. Time will prove or disprove this prediction. On the other it is not thought that direct costing is the final answer to all cost accounting problems. Direct costing does not serve to solve every question concerning costs, and it also can not replace the other cost systems; but it is the best available method to give the interested parties a clear picture of the relationships of all costs. When new conditions develop in the future, further improvements will no doubt be made. However, it appears probable that direct costing is a considerable improvement over conventional or absorption costing and should help to make accounting reports more meaningful as well as more useful to management.

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DIRECT COSTING

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AN ABSTRACT OF A MASTER'S REPORT

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Direct costing has been known by other names duch as "differential costing," "variable costing," and "marginal costing." In the direct costing method, the prime costs plus variable overhead expenses are used to value inventories and to determine the cost of sales. Therefore, direct costing charges only variable production costs to products and treats all fixed cost as period costs.

Absorption costing is the oldest form of costing. There is basically one essential difference between absorption costing and direct costing; that is the way costs are classified and the order in which they are applied against income.

The chief criticism of direct costing comes from the American Institute of Certified Public Accountants. It does not accept direct costing for external reporting. Thus, the Internal Revenue Service and the Securities and Exchange Commission also refuse to accept annual corporate reports on the basis of the direct costing method. From this result, there are some suggestions which advocate reconciling the results of this method with those of the absorption costing method, and thus solve the problem for a company using direct costing.

Direct costing aids in achieving the analysis objective of cost accounting. The direct costing income statement can be used as a management control tool. On the other hand, direct costing also can be used to develop and analyze cost data for pricing and for managerial decision-making.

There are many argumente about direct costing. Direct costing is not in accordance with generally accepted theory and therefore is not acceptable for published financial statement, since cost must match revenues. But 90% of all accountants feel that direct costing is fine for handling internal managerial problem.

Direct costing has become increasingly important in recent years. It is a considerable improvement over conventional or absorption costing. It has more advantages than disadvantages for usefulness in the accounting area. Time will prove that direct costing will continue to grow in use and will become generally accepted in the future.