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INDUSTRIAL COST ACCOUNTING PRACTICES IN CHINA

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(Textbook on Planned Cost Accounting)
Shanghai, Jul 1952

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[Summary: This report contains information on industrial cost accounting practices in China up to August 1951. Among the subjects discussed are the following: cost and price components; definition of cost items; itemization of accounts; cost and financial plans; fixed and working capital; construction and major repair expenditures; and depreciation and amortization. A sample profit and loss statement, balance sheet, and working papers are appended.]

I. INTRODUCTIONA. Meaning of Economic Accounting System

The economic accounting system is a unified system of calculation, combining the calculation of production costs, of commodity sales, of factory financial management, and of accumulations for expanded production. The system enables one to determine not only whether a product shows a profit or loss but also the reasons for its profit or loss. Thus the economic accounting system is an important tool for ascertaining working efficiency. Its principal objective is to expand production and increase social wealth by economizing on raw materials, reducing waste, lowering costs, raising product quality and production efficiency, speeding up the process of commodity sales, and increasing enterprise profits.

B. The Role of Cost Accounting

Cost accounting is the scientific and systematic calculation of costs and the recording of financial operations. It provides an accurate check on the implementation of cost and financial plans and facilitates increased production, lowered costs and the accumulation of capital.

Cost accounting differs from general accounting in five respects.

1. Cost accounting employs the perpetual inventory system; that is, when showing such asset accounts as materials, goods in process, and finished goods, calculations are made on the basis of book inventory. In general accounting it is necessary to take physical inventories at the time the books are closed.

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2. Detailed recording of costs facilitates the discovery of causes of waste.
3. From cost records, it is possible to ascertain better production methods, and thereby lower cost standards.
4. Cost accounting reveals the required amounts of materials and other cost items, which are then incorporated in the national economic plan.
5. On the basis of cost calculations, wholesale prices can be determined so as to insure the fulfillment of accumulation (profit) quotas.

C. Plan Cost

For cost accounting to be effective, it must make clear the achievements and deficiencies of the various shops and departments in an enterprise. Therefore, the enterprise must lay down production goals for its shops and departments, calculate expenditures on a monthly basis, and compare these expenditures with the results of production. Determining production goals in this way produces the cost plan, which is then compared with the actual cost. The cost plan becomes an index for production.

In a New Democratic society, administrative and sales costs, as well as enterprise production costs, are planned and included in the cost of products. This then becomes an important source of information for the state in determining price policies.

II. COST AND PRICE COMPONENTS

One of the main objectives of the economic accounting system is to encourage enterprises to increase their profits. These profits represent the surplus product created by the workers in enterprises and consist of the differential between the planned selling price of the product and the cost of the product.

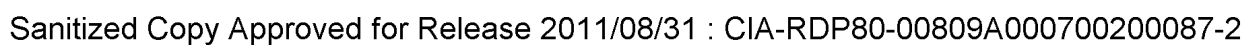
A. Cost-Finding Formulas

The formula for calculating the cost components of price are as follows:

1. Shops costs plus factory management expenses equals factory cost
2. Factory cost plus allotted expenses of administrative organs above the enterprise level equals industry cost
3. Industry cost plus sales expenses equals commercial cost
4. Commercial cost plus profits equals wholesale price

B. Breakdown of Price Cost Components

The above formula shows how the four price cost components are calculated. A further breakdown of these components is given in the chart which follows.



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III. FACTORY AND ADMINISTRATIVE ORGANIZATION

A. Types of Organization

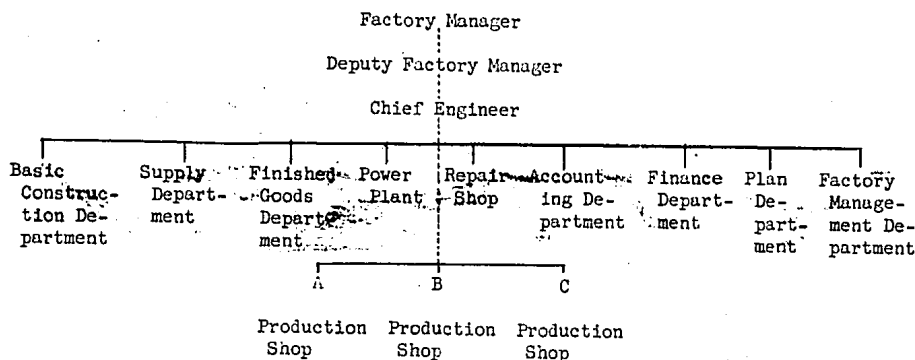
Organizational units which figure in the production process may be classified as follows:

1. Production shops -- shops that engage directly in production. Examples in the machine industry would be casting shops, metalworking shops, machine shops, etc.
2. Supplementary shops and departments -- units that team up with production shops in the production process. Generally, they are electric power shops, repair shops, supply departments, finished product departments, financial departments, accounting departments, planning departments, and factory management departments.
3. Administrative departments -- administrative organs above the enterprise level, such as bureaus, companies, etc.
4. Sales departments -- departments that undertake the selling of the finished product.

In addition, basic construction departments may be established, with the exclusive responsibility of carrying on basic construction work.

B. Typical Factory Organization

Although a more advanced organizational structure was introduced in the Northeast Administrative Area in 1951, the most common type of factory organization is shown on the following chart:



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Shops and departments listed above that do not directly engage in production have the following functions:

1. Power plant -- responsible for supplying and regulating flow of electric power
2. Repair shop -- responsible for normal factory repair work
3. Supply department -- responsible for procurement, purchasing, transportation, custody, and storage of materials
4. Planning department -- responsible for technical and research plans, estimates, and inspection
5. Finance department -- responsible for keeping capital transfer, receipts, and disbursements accounts
6. Accounting department -- responsible for cost estimates, accounting records and reports, and statistical work
7. Finished goods department -- responsible for the storage and shipment of finished goods
8. Factory management department -- responsible for drawing up and administering plans pertaining to labor management and labor welfare.

IV. COST ITEMS

A. Official List of Cost Items

The 13 cost items listed below have been selected from the unified accounting systems of the Ministry of Heavy Industry, Central People's Government, and the Department of Industry, Northeast People's Government.

1. Basic materials
2. Indirect materials
3. Fuel
4. Basic wages
5. Electric power
6. Steam
7. Water
8. Forced air
9. Contract work
10. Shop expenditures
11. Factory management expense
12. Administrative expense of organs above the enterprise level
13. Sales expense

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B. Cost Item Definitions

1. Basic materials -- materials used directly in the production process and going to make up the main body of the product. They include raw materials, processed materials, and semifinished goods (either purchased or manufactured on the premises).
2. Indirect materials -- materials used directly in the production process, but not in the main body of the product.
3. Fuel -- fuel used directly in the production process, including both gas and liquid fuel.
4. Basic wages -- wages paid for labor directly engaged in the production process, including bonuses, wages for extra shifts, and subsistence payments.
5. Electric power -- power used directly in the production process.
6. Steam -- steam used directly in the production process.
7. Water -- water used directly in the production process.
8. Forced air -- forced air used directly in the production process.
9. Contract work -- occurs when equipment needed to manufacture a given item is lacking and another factory is commissioned to do the work.
10. Shop expenditures -- in addition to the nine cost items listed above, shop costs include shop expenditures which can be broken down as follows:
 - a. Indirect wages -- wages paid to workers not directly engaged in production work, such as technical personnel, record keepers, etc. Includes regular wages, bonuses, and subsistence payments.
 - b. Nonproductive wages -- regular wages paid to workers absent from production work for officially approved reasons. Examples are workers injured on the job, attending conferences, on sick leave, receiving pay when production closes down for 5 days or less, attending marriages or funerals, etc.
 - c. Consumables -- includes materials and fuel consumed, but not used directly in the production process. Also includes sums set aside on a monthly basis for wear and tear and deferred expenditures on tools and instruments not classified as fixed assets.
 - d. Repairs -- includes expense for miscellaneous repairs necessary to maintain production
 - e. Inspection -- all expenses incurred in shop inspection work
 - f. Labor safety
 - g. Water and electricity -- cost of water and electricity not directly used in the production process
 - h. Transportation -- all transportation expense within the factory incurred during the production process
 - i. Office expense -- includes expense for paper, ink, notebooks, etc.
 - j. Heat -- shop heating expense

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k. Insurance -- includes expense for short-term insurance of fixed assets against flood, fire, and other disasters and periodic payments into the insurance fund for future insurance expense.

l. Rent -- expense for lease of property by the shop.

m. Taxes -- includes taxes levied according to quantity of production and various taxes to be borne by the shop.

n. Depreciation and amortization -- includes deductions for depreciation of fixed assets, major repairs, expense of initiating production, and deferred expenses.

o. Other expenses

11. Factory management expenses -- expenses which may be listed under two main headings.

a. Administrative expenses

(1) Indirect wages -- includes all types of wages paid to personnel engaged in the management of production

(2) Repairs -- expenses for miscellaneous repairs carried out in the management department

(3) Wear and tear -- monthly expenditures for wear and tear on tools and instruments of the management department which are not classified as fixed assets

(4) Post and telegraph -- expense for such items as telegrams, telephone calls, postage, etc.

(5) Communications

(6) Travel expenses

(7) Water and electricity -- expense for electricity and water used by the management department

(8) Transportation -- includes charges on articles shipped by management department

(9) Office expenses -- cost of paper, notebooks, etc. used by management

(10) Heat

(11) Insurance

(12) Rent

(13) Taxes -- includes taxes paid by management, such as building tax, public welfare contributions, etc.

(14) Depreciation and amortization -- includes deductions for depreciation of fixed assets, major repairs, and expense of initiating production

(15) Other expenses

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b. General management expenses

- (1) Inspection -- expense incurred in inspection of products
- (2) Custody of materials
- (3) Plans and blueprints
- (4) Research and experimentation
- (5) Security
- (6) Accidents -- funds for losses due to accidents must be provided in each cost calculating period
- (7) Education -- expenses of schools and training courses established by the factory
- (8) Welfare -- all expenses incurred in providing for employee welfare
- (9) Other expenses

12. Administrative expenses of organs above the enterprise level -- the expenses of such superior administrative organs as bureaus, companies, etc. are prorated among their subordinate enterprises. They are kept separate from the expenses of the management of individual enterprises.

13. Sales expenses. These also may be listed under two main headings.

a. Internal factory expense -- in each cost calculation period, these are entered into goods in process or finished goods

- (1) Selling expense -- all normal expenses incurred by the sales department
- (2) Packing expenses
- (3) Taxes -- includes taxes levied during the sales process

b. External expenses -- expenses which are entered into inventory stored outside the factory in each cost calculation period.

- (1) Selling expenses -- includes expenses of sales departments located outside the factory
- (2) Packing expenses
- (3) Taxes
- (4) Transportation -- expenses of shipping goods from point of origin to destination

V. GENERAL LEDGER ACCOUNTS

A. Itemization of Accounts

The cost items enumerated above are the objects of cost calculation and do not reveal the entire process connected with production costs. For example, since they do not reveal the origin and use of operating capital, cost items are merely a part of the accounting process.

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The position of cost items in the accounting process may be seen in the following list of accounting items used in the "Unified Accounting System of the Ministry of Heavy Industry of the Central People's Government."

General Ledger Accounts

1. Assets

11. Fixed assets

- 1101 Land
- 1102 Buildings and installations
 - 1102.1 Depreciation reserve -- buildings and installations
- 1103 Machinery and equipment
 - 1103.1 Depreciation reserve -- machinery and equipment
- 1104 Power equipment
 - 1104.1 Depreciation reserve -- power equipment
- 1105 Transportation equipment
 - 1105.1 Depreciation reserve -- transportation equipment
- 1106 Miscellaneous equipment
 - 1106.1 Depreciation reserve -- miscellaneous equipment
- 1107 Basic construction awaiting settlement
- 1108 Unfinished basic construction
- 1109 Miscellaneous capital expenditures awaiting settlement
- 1110 Major repair expenditures awaiting settlement
- 1111 Major repair expenditures
- 1112 Expense of initiating production

12. Current assets

- 1201 ~~Cash in treasury~~
- 1202 Bank deposits
- 1203 Imprest fund
- 1204 Notes receivable
- 1205 ~~Accounts~~ receivable
- 1206 Income receivable
- 1207 Current account with basic construction fund

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1208 Materials
1209 Materials in transit
1210 Unapplied transportation expenses
1211 Goods in process
1212 Semifinished goods
1213 Finished goods
1214 Reprocessed goods
1215 Secondary products
1216 Finished goods cost adjustment
1217 Other current assets

13. Other assets

1301 Deferred expenses
1302 Prepaid expenses
1303 Inventory of supplies
1304 Temporary payments
1305 Payments out of guaranty fund

2. Liabilities

21. Net worth

2101 Fixed capital
2101.1 Allowance for fixed capital
2102 Working capital
2103 Production profit and loss
2104 Operating profit and loss
2105 Other profit and loss
2106 Current surplus and deficit
2107 Accumulated surplus and deficit
2108 Abnormal losses
2109 Plan fulfillment

22. Fixed liabilities

2201 Payments into basic construction fund
2202 Payments into miscellaneous capital expense fund
2203 Payments into major repair fund
2204 Long-term loans

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23. Current liabilities

- 2301 Bank overdraft
- 2302 Notes payable
- 2303 Accounts payable
- 2304 Expenses payable
- 2305 Funds payable to government
- 2306 Funds received as an agent for others
- 2307 Estimated cost of materials payable

24. Other liabilities

- 2401 Advance income
- 2402 Temporary receipts
- 2403 Payments into guaranty fund

3. Losses

31. Operating expenses

- 3101 Cost of goods sold -- finished goods
- 3102 Cost of goods sold -- semifinished goods
- 3103 Cost of goods sold -- secondary products
- 3104 Repair cost
- 3105 Adjusted cost of goods sold
- 3106 Production expenses
 - 3106.1 Basic materials
 - 3106.2 Secondary materials
 - 3106.3 Fuel
 - 3106.4 Basic wages
 - 3106.5 Electric power
 - 3106.6 Steam
 - 3106.7 Water
 - 3106.8 Forced air
 - 3106.9 Contract work
 - 3106.10 Shop expenditures
 - 3106.11 Factory management expense

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3106.12 Administrative expenses of organs above the enterprise level

3106.13 Sales expenses

3107 Production shop costs (by production shop units)

3108 Supplementary shop and department costs (by production and department units)

3109 Administrative department costs

3110 Sales department costs

32. Nonoperating expenses

3201 Financial expenses

3202 Errors in price estimates

3203 Price differential

3204 Inventory loss

3205 Asset sales loss

3206 Allocations shortage

3207 Other nonoperating expenses

4. Income

41. Operating income

4101 Sales income -- finished goods

4102 Sales income -- semifinished goods

4103 Sales income -- secondary products

4104 Income for repairs

4105 Other operating income

42. Nonoperating income

4201 Financial income

4202 Errors in price estimates

4203 Inventory gain

4204 Asset sales profit

4205 Allocations overage

4206 Other nonoperating income

B. Classification of Accounts

The accounting items listed above may be classified according to their economic content. This may be presented in chart form as follows.

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3106.12 Administrative expenses of organs above the enterprise level

3106.13 Sales expenses

3107 Production shop costs (by production shop units)

3108 Supplementary shop and department costs (by production and department units)

3109 Administrative department costs

3110 Sales department costs

32. Nonoperating expenses

3201 Financial expenses

3202 Errors in price estimates

3203 Price differential

3204 Inventory loss

3205 Asset sales loss

3206 Allocations shortage

3207 Other nonoperating expenses

4. Income

41. Operating income

4101 Sales income -- finished goods

4102 Sales income -- semifinished goods

4103 Sales income -- secondary products

4104 Income for repairs

4105 Other operating income

42. Nonoperating income

4201 Financial income

4202 Errors in price estimates

4203 Inventory gain

4204 Asset sales profit

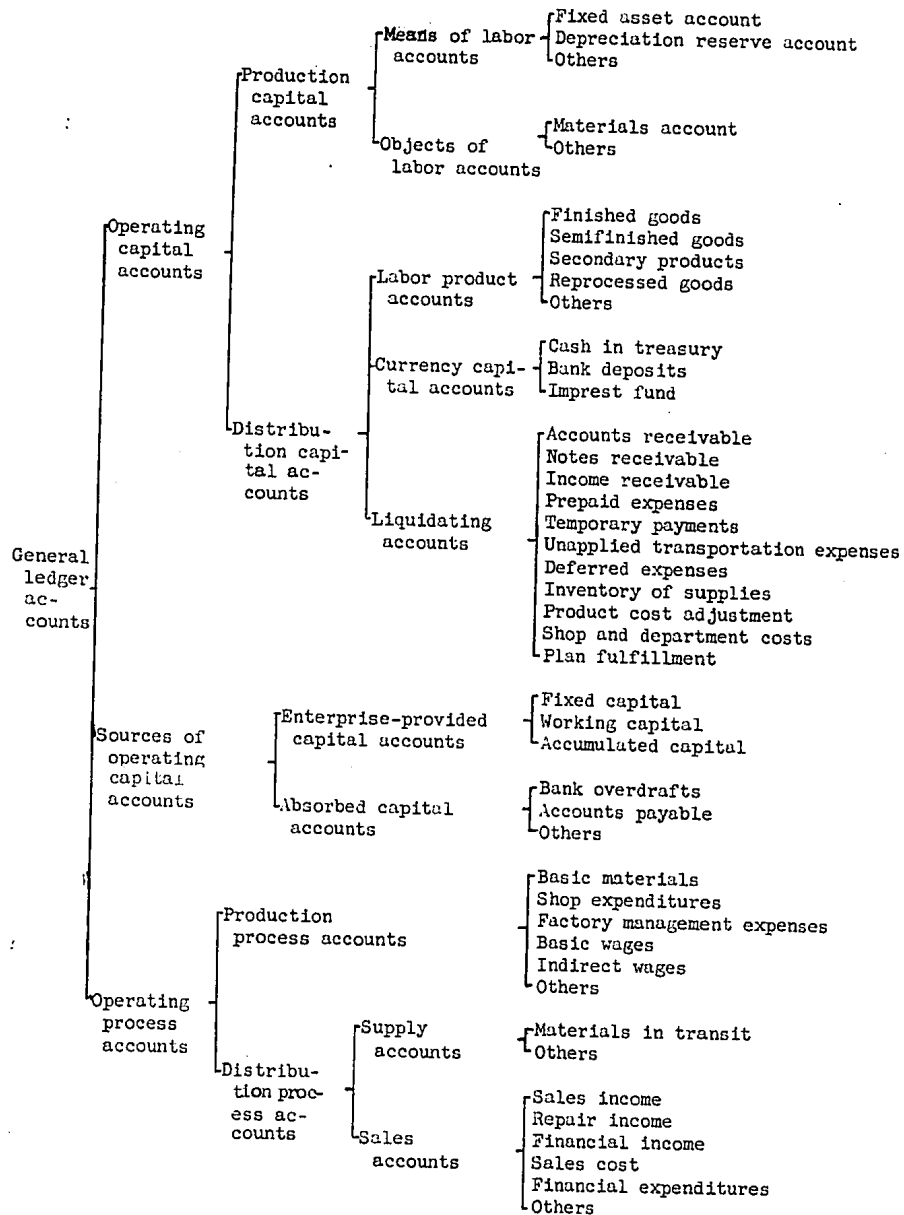
4205 Allocations overage

4206 Other nonoperating income

B. Classification of Accounts

The accounting items listed above may be classified according to their economic content. This may be presented in chart form as follows.

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Account Classification by Economic Content

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VI. COST AND FINANCIAL PLANS

A. Product Cost Plan

To meet the requirements of the national economic plan, cost plan norms fall into two major categories: quantity and value. In setting the norm for quantity of production, the criterion is what the labor force, with normal exertion, can be expected to attain. The norm for value or cost usually falls between the previous plan period's average cost and minimum cost.

B. Product Cost Reduction Plan

Cost reduction quotas are established by comparing this period's costs with the preceding period's costs. The preceding period for a 1951 cost plan would be 1950, which is also called the base year. However, to achieve a valid comparison, cost item prices of the base year must be adjusted so as to conform to the plan prices of the plan year. For example, base year wages must be adjusted in terms of the value of the wage unit at the time the plan is being drawn up.

An illustration of cost reduction in a factory cost plan follows.

	Quantity (Items)	Unit Cost (Yuan)	Total Cost (Yuan)
Average unit cost of basic materials in 1950	19	10	190
Average unit cost of basic materials in 1951	16	10	160
Difference [cost reduction]			30

The plan price of cost items in the cost plan is also called the fixed or constant price. Before an enterprise draws up a product cost plan, the plan price is determined on a higher level and is forwarded to the enterprise. The cost reduction quota is also determined on a higher level. Assuming this quota to be 10 percent, comparing plan year costs with base year cost, then the enterprise must draw up a cost reduction plan showing in detail how the reductions will be made.

C. Plan Price Cost and Actual Price Cost

The procedures for calculating plan price costs and actual price costs are as follows.

1. Plan price costs are calculated on the basis of base year [often usually the preceding year] plan prices, and become the constant or fixed cost for this year. In this way, progress in fulfilling the plan can be measured with no need to allow for changes in the prices of materials.
 - a. Prices of basic materials, indirect materials, fuel, electric power, steam, and forced air are all calculated on the basis of plan prices.
 - b. Prices of products manufactured by the factory and used in production are, upon approval of higher organs, calculated on the basis of plan prices.

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c. Depreciation and amortization are calculated according to the plan figure. Deferred expenses are calculated on the basis of the plan price cost of the month in which they are incurred.

d. Wages and other expenses that cannot be treated as price items are to be calculated on the basis of the value of wage units in the area in question.

2. Actual price costs are calculated on the basis of actual disbursements. Once the actual costs of a factory are known, it is possible to determine the commodity's selling price.

a. Expenses for basic materials, indirect materials, fuel, wages, electric power, steam, water, forced air, and other items are all calculated on the basis of actual disbursements.

b. Prices of finished and semifinished goods manufactured by the factory and used in production are, upon approval of higher organs, calculated on the basis of the allocation price. If approval is not forthcoming, they are calculated on the basis of actual cost.

D. Income and Expenditure Plan

For the purpose of effecting control of currency income and expenditure, enterprise units must prepare receipts and disbursements plans on a quarterly basis. After approval by superior administrative organs, the plans will be sent to the People's Bank to serve as a basis for receipts and disbursements.

Items used in income and expenditure plans have been standardized by the People's Bank as follows.

1. Income items

a. Previous period's treasury cash -- any cash in treasury left over from previous period; enter as cash

b. Previous period's bank balance -- enter as transfer

c. Appropriations from superior organs -- enter as transfer

d. Increase in capital -- any increase in capital allocated by the government or superior organs

e. Business income -- any income from sale of goods, etc.

f. Other income -- miscellaneous, such as interest

2. Expenditure items

a. Wage payments

b. Expenditure for purchase of agricultural products

c. Expenditure for purchase of nonagricultural products

d. Basic construction expenditures

e. Expenditure for repairs -- any expense for major repairs

f. Administrative expense -- all administrative expenses except those for wages

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- g. Business expenses
- h. Funds paid in -- any profits, depreciation, etc., paid in; enter as transfer
- i. Pensions, welfare expenditure -- all employee pension, welfare, insurance, etc., payments
- j. Repayment of bank loans -- enter as transfer
- k. Other expenses -- miscellaneous expenses
- l. This period's treasury cash -- enter as cash
- m. This period's bank balance -- enter as transfer

VII. FIXED AND WORKING CAPITAL

A. Separation of Fixed Capital From Working Capital

Just as basic construction capital must be kept distinct from operating capital, so, in the operating capital sector, fixed capital must be kept separate from working capital.

Fixed capital appears as means of labor production, and also as fixed assets. Working capital appears in three forms: in the form of raw materials, fuel, and other materials purchased and stored in the production preparation stage; in the form of unfinished goods (goods in process and semifinished goods) in the production stage; and in the form of finished goods, commercial products, cash, transfers, and bank drafts in the circulation stage.

If working capital and fixed capital are mixed, there is no way to determine whether the amount of working capital conforms to production requirements. Naturally, working capital is supplied not only by the enterprise itself, but also comes from external sources. But first of all, that portion to be supplied by the enterprise must be accurately determined. And if the sources of capital accounts of a state-operated enterprise are mixed, it is necessary, as a cost accounting preliminary, to make a division between fixed and working capital.

B. Revised Balance Sheet Used in New Accounting System

The first of the two balance sheets which follow was drawn up by the Hung-hsing Factory, 31 December 1950, using the old accounting system. The second is a balance sheet of the new type, drawn up so as to indicate the division between fixed and working capital.

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1. Original balance sheet

Balance Sheet of Hung-hsing Factory

<u>Assets (1,000 yuan)</u>	<u>Amount</u>	<u>Total</u>	<u>Liabilities (1,000 yuan)</u>	<u>Amount</u>	<u>Total</u>
<u>Current assets</u>		1,325,000	<u>Current liabilities</u>		315,000
Cash in treasury	15,000		Accounts payable	165,000	
Bank deposits	160,000		Notes payable	45,000	
Notes receivable	180,000		Bank overdraft	55,000	
Accounts receivable	355,500		Expenses payable	50,000	
Materials	614,500		Deferred liabilities		15,000
Deferred assets		297,000	Advance receipts	15,000	
Prepaid expenses	50,000		Fixed liabilities		45,000
Inventory of supplies	90,000		Long term credits	45,000	
Expense of initiating production	57,000		Capital and net worth		2,240,000
Major repair expenses	100,000		Government capital	2,118,500	
<u>Fixed assets</u>		993,000	This period's surplus and deficit	105,000	
Land	400,000		Accumulated surplus and deficit	16,500	
Buildings and installations	295,000				
Machinery and equipment	138,000				

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Power equipment	85,000
Transportation equipment	75,000
Total	2,615,000

2,615,000

2. Revised balance sheet

Balance Sheet of Hung-hsing Factory

Assets (1,000 yuan)	Closing Figure- Amount	Total	Opening Figure	Increase or Decrease	Liabilities (1,000 yuan)	Closing Figure Amount	Total
Fixed assets		1,150,000			Net worth		2,240,000
Land	400,000				Fixed capital	1,150,000	
Buildings and installations	295,000				Working capital	968,500	
Machinery and equipment	138,000				This periods's surplus and deficit	105,000	
Power equipment	85,000				Accumulated sur- plus and deficit	16,500	
Transportation equipment	75,000				Fixed liabilities		45,000
Expense of initi- ating production	57,000				Long term credits	45,000	
Major repair ex- penses	100,000				Current liabilities		315,000
					Accounts payable	165,000	

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Current assets	1,325,000		
Cash in treasury	15,000	Notes payable	45,000
Bank deposits	160,000	Bank overdraft	55,000
Notes receivable	180,000	Expenses payable	50,000
Accounts receivable	355,500	Other liabilities	15,000
Materials	614,500	Advance receipts	15,000
Other assets	140,000		
Prepaid expenses	50,000		
Inventory of supplies	90,000		
Total	2,615,000	Total	2,615,000

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The item "government capital" in the first sheet combines both fixed and working capital. The first step in separating the two is to revalue the fixed assets, and enter the resulting figure in the new account "fixed capital." All remaining capital comprises working capital. The journal entry is made as follows.

Debit: Government capital

Credit: Fixed capital
Working capital

When the government newly transfers an existing factory to the management of an enterprise, the entries are made as follows.

Debit: Fixed assets

Credit: Fixed capital

Debit: Current assets

Credit: Working capital

After the work of separating fixed and working capital has been completed, the asset and liability accounts are entered as shown on the revised balance sheet.

VIII. CONSTRUCTION AND MAJOR REPAIR EXPENDITURES

A. Construction Expenditures

An enterprise must distinguish between its expenditures for construction and expenditures for production. Only then can costs be correctly calculated.

In general, construction expenditures fall into the following categories:

1. Production preparatory expenses -- this includes expenses for initiating production, major repairs, and others.
2. Expenses for construction and installation of fixed assets.
3. Expenses for appreciation of fixed assets. This includes all expenses for the expansion, improvement, or replacement of fixed assets.

Other expenditure, if related to production during the period at hand, are regarded as production expenditures. If expenses are incurred which are connected with production in subsequent periods or are to be borne in subsequent periods, they are regarded as deferred expenses.

B. Major Repair Expenditures

When fixed assets are in need of repair and the aim is merely to maintain original productivity, these expenses are paid out of the major repair fund and not out of the construction funds.

After an enterprise has drawn up a major repair plan and its request for funds has been honored by a superior organ, the accounting procedure is as follows.

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1. At time major repair fund is received:

Debit: Bank deposit

Credit: Payment into major repair fund

2. At time major repairs are in progress:

Debit: Major repair expenditures awaiting settlement

Credit: Bank deposit

3. At time repairs are completed:

Debit: Major repair expense

Credit: Major repair expenditures awaiting settlement

Debit: Payment into major repair fund

Credit: Fixed capital

IX. DEPRECIATION AND AMORTIZATION

A. Depreciation

Depreciation is figured on fixed assets, such as buildings and installations, machinery and equipment, power equipment and transportation equipment. The "straight line average method" is used to calculate depreciation on a monthly basis, as shown in the following formulas.

1. Amount of depreciation equals (the total value of fixed assets at the beginning of the month plus the total value of new construction and replacements minus the total value of assets destroyed or surrendered) multiplied by the monthly depreciation rate.

2. Monthly depreciation rate equals the plan year depreciation rate multiplied by $1/12$.

Employing this method, a factory might calculate its monthly depreciation in the following manner:

1. Total value of fixed assets at the beginning of month = 20,000,000 yuan.
2. Total value of new construction this month = 5,000,000 yuan.
3. Total value of assets surrendered = 1,000,000 yuan.
4. Monthly depreciation rate = 1 percent (plan year rate as 12 percent).
5. Amount of depreciation = $(20,000,000 + 5,000,000 - 1,000,000) \times 1/100 = 240,000$ yuan.

B. Amortization

Major repair expenses and expenses to initiate production are listed under fixed assets, but they differ from such assets as buildings and equipment in that they must be amortized within a relatively short period. In calculating amortization, a limit of years is determined, generally three or at most five, and periodical deductions are made accordingly.

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C. The Paying in of Depreciation and Amortization Funds

State-operated enterprises carrying out the economic accounting system receive basic construction capital needed for new construction, for expanded construction, and for reconstruction in the form of allocations from the state treasury. With regard to that part of depreciation which enters into the cost of a product, the enterprise pays an equivalent amount periodically into the state treasury. This serves not only to increase the ordinary income of the state treasury, but also forms a reserve for capital needed to replace fixed assets when they come obsolete. Actually, the paying in of depreciation is equivalent to the repayment by installments of fixed capital invested in the enterprise by the state treasury.

If depreciation is paid into the state treasury at the end of each month according to plan, the entry is made as follows:

Debit: Payment into state treasury basic construction depreciation fund.

Credit: Bank deposit

The amount of depreciation paid in results in a corresponding reduction in fixed capital. Therefore, it is necessary to transfer and enter this amount into the "allowance for fixed capital account" as follows:

Debit: Allowance for fixed capital

Credit: Payment into state treasury basic construction depreciation fund

If the depreciation fund system is not employed and payments are made not at the end of each month but after closing the books, then the following entries are made:

Debit: Allowance for fixed capital

Credit: Funds payable to the government

At the time of paying in, the entry changes as follows:

Debit: Funds payable to the government

Credit: Bank deposit

On the other hand, payments into the major repair fund do not affect the amount of fixed capital, and deductions for major repair expenses are entered as follows:

Debit: Production expenditures

Credit: Major repair expenses

At the time of forwarding the deductions for major repair expenses, the entry is made as follows:

Debit: Payment into major repair fund

Credit: Bank deposit

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When major repair funds are allocated from above, a temporary account is established. When the major repair work has been completed, it is then transferred to fixed capital. Then deductions for major repairs in succeeding years must be listed on the credit side of the account for major repair expenses. The amounts for amortization are combined with the amounts for fixed asset depreciation and are paid in periodically to the state treasury. At this time, the entry is made on the debit side of the account for allowance for fixed capital, with a corresponding reduction in the fixed asset account.

The amounts for depreciation and amortization are shown on the balance sheet as follows:

Fixed capital		
Minus: Allowance for fixed capital	xxx	
	xxx	xxx

The total allowance for fixed capital must equal the total depreciation and amortization payments.

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APPENDIX A. WORKING PAPERS
(Hung-Hsing Factory, 31 January 1951)

<u>Items</u>	<u>Trial Balance</u>		<u>Adjustments</u>	
	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>
Land				
Buildings and installations	400,000,000			
Reserve for depreciation-- buildings and installations	325,000,000			919,500
Machinery and equipment	157,900,000			
Reserve for depreciation-- machinery and equipment				426,250
Power equipment	85,000,000			
Reserve for depreciation-- power equipment				110,725
Transportation equipment	75,000,000			
Reserve for depreciation-- transportation equipment				108,575
Expense of initiating production				
Major repair expenses	56,744,000			
Cash in treasury	99,946,050			
Bank deposits	2,267,500			
Notes receivable	167,687,610			
	180,000,000			

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<u>Adjusted Statement</u>		<u>Statement of Profit and Loss</u>		<u>Balance Sheet</u>	
<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>
400,000,000				400,000,000	
325,000,000				325,000,000	
	919,500				919,500
157,900,000				157,900,000	
	426,150				426,150
85,000,000				85,000,000	
	110,725				110,725
75,000,000				75,000,000	
	108,575				108,575
56,744,000				56,744,000	
99,946,050				99,946,050	
2,267,500				2,267,500	
167,687,610				167,876,610	
180,000,000				180,000,000	

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Accounts receivable			
Materials	126,500,000		
Unapplied transportation expenses	636,096,101		
	30,000		
Finished goods	6,015,000		452,411 (2)*
Supply inventory	90,000,000		
Prepaid expenses	50,000,000		
Fixed capital			
Working capital	1,199,900,000		
Allowance for fixed capital	968,500,000		
Production profit and loss	1,875,000		
Long-term loans	9,501,111	9,501,111 (1)	
This period's surplus or deficit	45,000,000		
Accumulated surplus or deficit	105,000,000	105,000,000 (5)	
Accounts payable	16,500,000	105,000,000 (5)	
Notes payable	3,299,946		
Expenses payable	45,000,000		
	50,000,000		

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126,500,000
 636,096,101
 30,000
 5,562,589
 90,000,000
 50,000,000
 1,199,900,000
 968,500,000
 45,000,000
 121,500,000
 3,299,946
 45,000,000
 50,000,000

[Adjoins page 29 here.]

126,500,000
 636,096,101
 30,000
 5,562,589
 90,000,000
 50,000,000
 1,199,900,000
 968,500,000
 45,000,000
 121,500,000
 3,299,946
 45,000,000
 50,000,000

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*Numbers in parentheses refer to adjustment entry numbers

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15,000,000	15,000,000
126,500,000	126,500,000
111,251,300	111,251,300
207,400	207,400
325,080	325,080

[Adjoins page 28 here.]

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5,522,526	5,522,526	9,843,854
2,576,590,076	126,825,080	2,459,608,850
	126,825,080	2,459,608,850
		9,843,854



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APPENDIX B. STATEMENT OF PROFIT AND LOSS
(Hung-Hsing Factory)

Items	Current Period		Amount to Date	
	Actual Figure	Planned Figure	Actual	Differential
Operating income				
Sales income -- finished goods	126,500,000	132,825,000		-6,325,000
Less:				
Operating expenses				
Cost of goods sold -- finished goods	111,251,300	126,315,000		-15,063,700
Operating profit	15,248,700	6,510,000		-8,738,700
Plus:				
Financial income	325,080	300,000		+ 25,080
Allocations overage	42			+ 42
	15,573,822	6,810,000		+ 8,763,822
Less:				
Financial expenses	207,400	240,000		- 23,600
Allocations shortage	153			+ 153
Price differential	5,421,315			+ 5,421,315
Inventory loss	101,100			+ 101,100
This period's surplus	9,843,854	6,570,000		+ 3,273,854

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APPENDIX C. BALANCE SHEET
Hsin-Hsing Factory 31 January 1951

Assets	End of Period	Beginning of Period	Differential	Liabilities	End of Period	Beginning of Period	Differential
Fixed Assets							
Land	400,000,000	400,000,000		Net Worth			
Buildings and installations (325,000,000)				Fixed capital (1,199,900,000)			
Less reserve for depreciation				Less allowance for fixed capi- tal (1,375,000)	1,198,025,000	1,150,000,000	+48,025,000
Buildings and installations (919,500)	324,080,500	295,000,000	+29,080,500	Working capital	968,500,000	968,500,000	
Machinery and equipment (157,900,000)				This period's surplus or deficit	9,843,854		+9,843,854
Less reserve for depreciation -- machinery and equipment (426,250)	157,473,750	138,000,000	+19,473,750	Accumulated surplus or deficit	121,500,000	121,500,000	
Power equipment (85,000,000)				Fixed Liabilities			
Less reserve for depreciation of power equipment (11,725)	84,889,275	85,000,000	-110,725	Long term loans	45,000,000	45,000,000	

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Transportation equipment (75,000,000)				Current Liabilities		
Less reserve for depreciation of transportation equipment (108,575)	74,891,425	75,000,000	-108,575	Notes payable	45,000,000	45,000,000
				Accounts payable	3,299,946	165,000,000 -161,700,054
Expense of initiating production	56,744,000	57,000,000	-256,000	Bank overdraft		55,000,000 -55,000,000
Major repair expenses	99,946,050	100,000,000	-53,950	Expenses payable	50,000,000	50,000,000
Current Assets				Other Liabilities		
Cash in treasury	2,267,500	15,000,000	-12,637,610	Advance income	15,000,000	15,000,000
Bank deposits	107,687,610	160,000,000	+7,637,610			
Notes receivable	180,000,000	180,000,000				
Accounts receivable	126,500,000	355,500,000-229,000,000				
Materials	636,096,101	614,500,000 +21,596,101				
Unapplied transportation expense	30,000		+ 30,000			
Finished goods	5,562,589		+ 5,562,589			

[Adjoins page 33 here.]

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Other assets			
Prepaid expenses	50,000,000	50,000,000	
Supply inventory	90,000,000	90,000,000	
Total	2,456,168,800	2,615,000,000 -158,831,200	2,456,168,800 2,615,000,000 -158,831,200

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