
Understanding Some of the Complex Financial Identities

Standard Balance Sheet

Current Assets Cash, M/S, A/R, Inventory, Ppd	Current Liabilities Ops: A/P, W/P, Accruals Fin: Current LTD, Bank Debt
Other Assets	<Minority Interest> <Deferred Taxes>
Fixed Assets Deferred Charges	Long Term Debt
Intangibles Goodwill, Copyrights, Patents Trademarks	Preferred Shares
	Common Equity Common Shares Contributed Surplus Retained Earnings Foreign Exchange Adjustment
<hr/> Total Assets	<hr/> Total Liabilities and Equity

Focus on Working Capital

- ➔ If the user of the statements wanted more focus on working capital, they could restate the balance sheet by subtracting the **Operational Current Liabilities** from both sides of the Balance Sheet, without affecting the balance
- ➔ The LHS is no longer Total Assets, but **Net Assets**
- ➔ The RHS is now the **Invested Capital**

Restated Balance Sheet

<p>Current Assets Cash, M/S, A/R, Inventory, Ppd - Ops: A/P, W/P, Accruals ←</p> <hr/> <p>= Net Working Capital</p> <p>Other Assets</p> <p>Fixed Assets Deferred Charges</p> <p>Intangibles Goodwill, Copyrights, Patents Trademarks</p> <hr/> <p>Total Assets Net Assets</p>	<p>Current Liabilities (Ops: A/P, W/P, Accruals) - Gone Fin: Current LTD, Bank Debt</p> <p><Minority Interest> <Deferred Taxes></p> <p>Long Term Debt</p> <p>Preferred Shares</p> <p>Common Equity Common Shares Contributed Surplus Retained Earnings Foreign Exchange Adjustment</p> <hr/> <p>Total Liabilities and Equity Invested Capital</p>
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Reading the Balance Sheet

- ➔ Read the Balance Sheet from Right to Left
- ➔ The RHS (Invested Capital) tells us where the money came from:
 - ◆ Lenders (Debt)
 - ◆ Owners (Equity Investment + Reinvested Earnings)
- ➔ The LHS tells us where the money is invested:
 - ◆ Working Capital
 - ◆ Fixed Assets
 - ◆ Intangibles

Intangibles

- ➔ Many analysts prefer to eliminate the Intangible Assets and Deferred Charges to be conservative since they cannot be expected to provide any value in liquidation
- ➔ Doing this will result in our Balance Sheet not balancing!

Net Tangible Assets

<p>Current Assets Cash, M/S, A/R, Inventory, Ppd - Ops: A/P, W/P, Accruals ← = Net Working Capital</p> <p>Other Assets</p> <p>Fixed Assets Deferred Charges - Gone</p> <p>Intangibles - Gone Goodwill, Copyrights, Patents Trademarks</p> <hr/> <p>Total Assets Net Tangible Assets</p>	<p>Current Liabilities (Ops: A/P, W/P, Accruals) - Gone Fin: Current LTD, Bank Debt</p> <p><Minority Interest> <Deferred Taxes></p> <p>Long Term Debt</p> <p>Preferred Shares</p> <p>Common Equity Common Shares Contributed Surplus Retained Earnings Foreign Exchange Adjustment</p> <hr/> <p>Total Liabilities and Equity Invested Capital</p>
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Understanding the Income Statement

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Income Statement

OPERATING SECTION	{	Net Sales
		- COGS
		Gross Operating Profit (Gross Margin)
		- SGA (Selling, General and Administrative) Costs
		- Depreciation and Other Amortizations
		Net Operating Profit
NON-OPERATING SECTION	{	+ Investment Income
		EBIT: EARNINGS BEFORE INTEREST & TAXES
CREDITOR'S SECTION	{	- Interest Expense
		Income/Profit/Earnings Before Tax
		- Taxes, Current
		- Taxes, Deferred
OWNER'S SECTION	{	Net Profit
		- Minority Interest
		+ Equity Income
		NET EARNINGS (Before Extraordinary Items)

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Profitability of Sales Ratios

OPERATING SECTION	{	Net Sales	
		- COGS	
		Gross Operating Profit (Gross Margin)	Margin
		- SGA (Selling, General and Administrative) Costs	
		- Depreciation and Other Amortizations	
		Net Operating Profit	Margin
NON-OPERATING SECTION	{	+ Investment Income	
		EBIT: EARNINGS BEFORE INTEREST & TAXES	
CREDITOR'S SECTION	{	- Interest Expense	
		Income/Profit/Earnings Before Tax	Margin
		- Taxes, Current	
		- Taxes, Deferred	
OWNER'S SECTION	{	Net Profit	Margin
		- Minority Interest	
		+ Equity Income	
		NET EARNINGS (Before Extraordinary Items)	

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Cash Flow

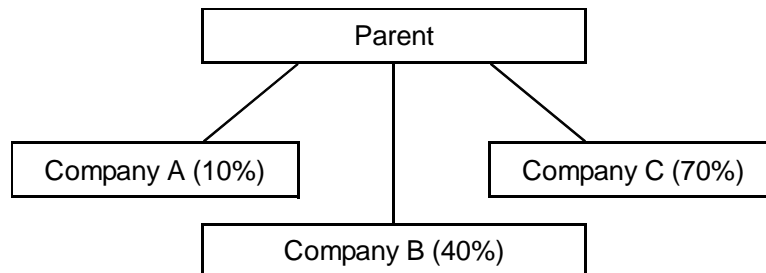
- ➔ The calculation of Net Earnings includes a few **NON-CASH** items which were added or subtracted in arriving at the Net Earnings figure

From Income to Cash Flow

OPERATING SECTION	{	Net Sales
		- COGS
		Gross Operating Profit (Gross Margin)
		- SGA (Selling, General and Administrative) Costs
		- Depreciation and Other Amortizations
		Net Operating Profit
NON-OPERATING SECTION	{	+ Investment Income
		EBIT: EARNINGS BEFORE INTEREST & TAXES
CREDITOR'S SECTION	{	- Interest Expense
		Income/Profit/Earnings Before Tax
		- Taxes, Current
		- Taxes, Deferred
		Net Profit
OWNER'S SECTION	{	- Minority Interest
		+ Equity Income
		NET EARNINGS (Before Extraordinary Items)

Minority Interest & Equity Income

- ➔ Before continuing, lets take a couple of minutes to understand these two items
- ➔ Consider the following corporate structure:



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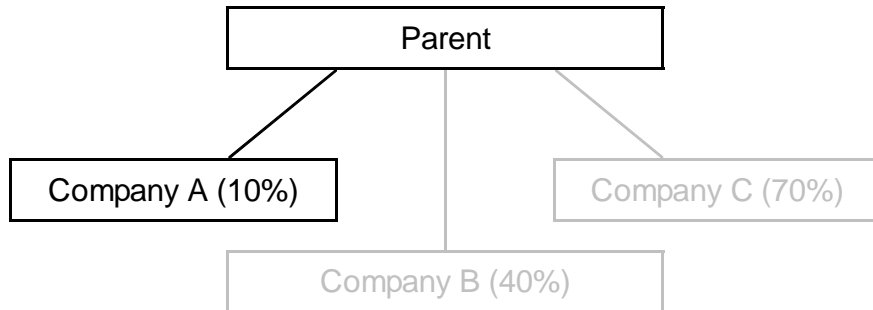
Consolidation

- ➔ The reporting of the affiliated or subsidiary company results will all be different
- ➔ Investment Method (<20% ownership)
- ➔ Equity Basis (20-49.9% ownership)
- ➔ Consolidation (50% ownership or more)

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Investment Method



Investment Method (<20%)

Assets: Investment

Income: Investment Income

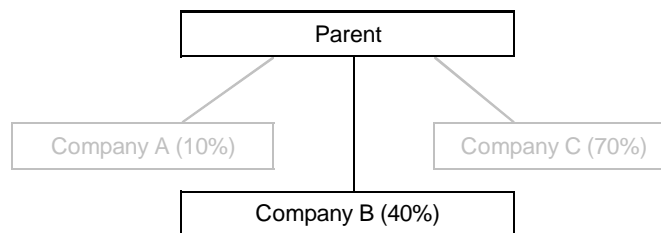
Balance Sheet - Investment Basis

<p>Current Assets Cash, M/S, A/R, Inventory, Ppd</p> <p>Other Assets (Investments)</p> <p>Fixed Assets Deferred Charges</p> <p>Intangibles Goodwill, Copyrights, Patents Trademarks</p> <hr/> <p style="text-align: center;">Total Assets</p>	<p>Current Liabilities Ops: A/P, W/P, Accruals Fin: Current LTD, Bank Debt</p> <p><Minority Interest> <Deferred Taxes></p> <p>Long Term Debt</p> <p>Preferred Shares</p> <p>Common Equity Common Shares Contributed Surplus Retained Earnings Freign Exchange Adjustment</p> <hr/> <p style="text-align: center;">Total Liabilities and Equity</p>
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Income Stmt - Investment Basis

OPERATING SECTION	<ul style="list-style-type: none"> Net Sales - COGS Gross Operating Profit (Gross Margin) - SGA (Selling, General and Administrative) Costs - Depreciation and Other Amortizations Net Operating Profit
NON-OPERATING SECTION	<ul style="list-style-type: none"> + Investment Income
CREDITOR'S SECTION	<ul style="list-style-type: none"> EBIT: EARNINGS BEFORE INTEREST & TAXES - Interest Expense
OWNER'S SECTION	<ul style="list-style-type: none"> Income/Profit/Earnings Before Tax - Taxes, Current - Taxes, Deferred Net Profit - Minority Interest + Equity Income NET EARNINGS (Before Extraordinary Items)

Equity Basis



Equity Basis (20-49.9%)

Assets: Investment, with carrying value adjusted annually for amount of Equity Income

Income: Prorata Share of Subsidiary Total Income added as EQUITY INCOME (Less actual income received as Investment Income)

Balance Sheet - Equity Basis

<p>Current Assets Cash, M/S, A/R, Inventory, Ppd</p> <p>Each Year, this amount is increased by the Equity Income</p> <p>Other Assets (Investments)</p> <p>Fixed Assets Deferred Charges</p> <p>Intangibles Goodwill, Copyrights, Patents Trademarks</p> <hr/> <p>Total Assets</p>	<p>Current Liabilities Ops: A/P, W/P, Accruals Fin: Current LTD, Bank Debt</p> <p><Minority Interest> <Deferred Taxes></p> <p>Long Term Debt</p> <p>Preferred Shares</p> <p>Common Equity Common Shares Contributed Surplus Retained Earnings Freign Exchange Adjustment</p> <hr/> <p>Total Liabilities and Equity</p>
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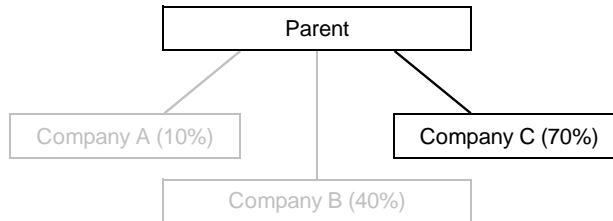
Income Statement - Equity Basis

OPERATING SECTION	<ul style="list-style-type: none"> Net Sales - COGS Gross Operating Profit (Gross Margin) - SGA (Selling, General and Administrative) Costs - Depreciation and Other Amortizations Net Operating Profit
NON-OPERATING SECTION	<ul style="list-style-type: none"> + Investment Income
CREDITOR'S SECTION	<ul style="list-style-type: none"> EBIT: EARNINGS BEFORE INTEREST & TAXES - Interest Expense
OWNER'S SECTION	<ul style="list-style-type: none"> Income/Profit/Earnings Before Tax - Taxes, Current - Taxes, Deferred Net Profit - Minority Interest + Equity Income NET EARNINGS (Before Extraordinary Items)

Sum will be the Parent's share of the Subsidiary's profit

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Consolidation



Consolidation

Assets All Subsidiary Assets and Liabilities are included in the Parent's Balance Sheet

MINORITY INTEREST is entered on the RHS to reflect the portion of equity not owned by the parent

Income All Subsidiary income costs and expenses are included on the Income Statement.

MINORITY INTEREST is subtracted to reflect the profits not owned by the parent

Balance Sheet - Consolidation

Current Assets
Cash, M/S, A/R, Inventory, Ppd

Other Assets

Fixed Assets
Deferred Charges

Intangibles
Goodwill, Copyrights, Patents
Trademarks

All the Subsidiary's assets and liabilities are included in the Parent's Balance Sheet

Current Liabilities
Ops: A/P, W/P, Accruals
Fin: Current LTD, Bank Debt

<Minority Interest>

<Deferred Taxes>

Long Term Debt

Preferred Shares

Common Equity

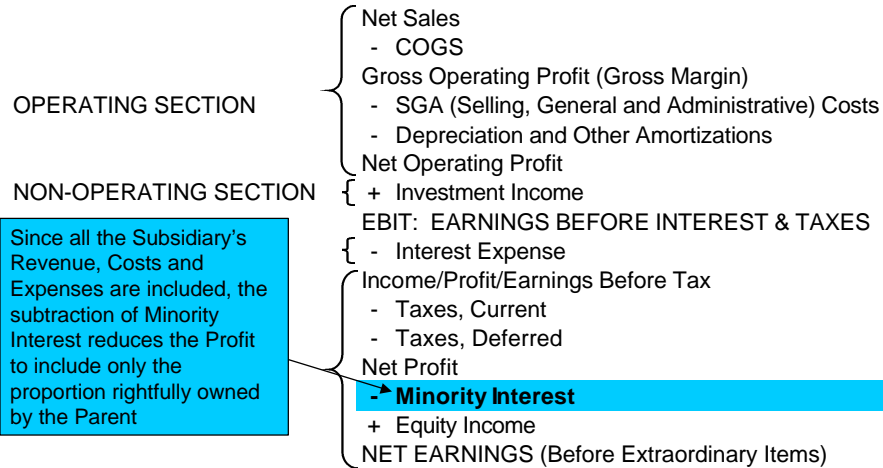
Common Shares
Contributed Surplus
Retained Earnings
Freign Exchange Adjustment

The Minority Interest entry reduces the overall carrying value of the Subsidiary to the Parent's proportional ownership share

Total Assets

Total Liabilities and Equity

Income Stmt - Consolidation



Since all the Subsidiary's Revenue, Costs and Expenses are included, the subtraction of Minority Interest reduces the Profit to include only the proportion rightfully owned by the Parent

Deferred Taxes

- ➔ Deferred Taxes are the taxes that will not need to be paid until future years due to difference between proper accounting (GAAP rules) and taxation accounting (CCRA rules)
- ➔ The most significant discrepancy is related to depreciation versus Capital Cost Allowance

Deferred Taxes

- ➔ The Deferred Taxes on the Income Statement reflect the current year's difference
- ➔ The Deferred Taxes on the Balance Sheet reflect the accumulated difference

Treatment of Deferred Taxes

- ➔ Financial Analysts split three ways on the treatment of Deferred Taxes:
 - ◆ They represent an interest-free loan from the government and are included with the debt
 - ◆ They represent profits that have not been allowed to flow through, so that are equity
 - ◆ They are not part of Invested Capital
 - This is what we use in the CSC

From Income to Cash Flow

OPERATING SECTION	{	Net Sales - COGS Gross Operating Profit (Gross Margin) - SGA (Selling, General and Administrative) Costs - Depreciation and Other Amortizations
NON-OPERATING SECTION	{	Net Operating Profit + Investment Income
CREDITOR'S SECTION	{	EBIT: EARNINGS BEFORE INTEREST & TAXES - Interest Expense
OWNER'S SECTION	{	Income/Profit/Earnings Before Tax - Taxes, Current - Taxes, Deferred Net Profit - Minority Interest + Equity Income
		NET EARNINGS (Before Extraordinary Items)

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Cash Flow

- ➔ Clearly, the Net Earnings UNDERSTATE cash flow by the value of the three items (in green) subtracted and OVERSTATE cash flow by the EQUITY INCOME added.
- ➔ To Get CASH FLOW, we simply start with Net Earnings and REVERSE each of the items in green
- ➔ Cash Flow = Net Earnings - Equity Income + Minority Interest + Deferred Taxes + Depreciation and all Amortizations

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