Session 1.2
Financial Sustainability, Financial Due Diligence, and Institutional Sustainability

Introductory Course on Economic Analysis of Investment Projects
5 May 2008

ADB

Financial Due Diligence

Elements include:

- Cost estimates and financial plan
- Financial projections
- Financial evaluation
- Financial management assessment

Terminology

Due Diligence

- Exercising an appropriate degree of care in preparing and appraising projects

Financial Due Diligence

- Broad descriptor covering financial management assessment and financial analysis activities

Project Analysis: includes economic analysis

ADB's Charter

- Due regard to the prospects that the borrower will be in a position to meet their obligations under the loan agreement
- Necessary measure to ensure that the proceeds of any loan are used for their intended purposes
- Due attention to considerations of economy and efficiency
- Guided by sound banking principles

Financial Viability and Sustainability

- Financial Analysis:
  Comparison of financial benefits (FIRR) to financial costs (WACC) [financial viability]
- Financial Management Assessment:
  Capacity of executing agency to effectively manage its financial resources [financial sustainability]
- Public Financial Management:
  Capacity of Government to effectively manage its financial resources [financial sustainability]

Cost Estimate - Elements

- Base Costs
- Taxes and Duties
- Physical Contingency
- Price Contingency
- Interest and other charges during construction(IDC)

Quality Review

- Confirm adequacy of cost structure
- Reasonableness of targeted units, outputs and unit cost assumptions
- Estimation of taxes and duties, physical and price contingencies and IDC

Financing Plan

- Prepared in the same currency units as the cost estimates
- Drawdown schedule should be consistent with cost estimates
- Sufficient to cover base costs, taxes and duties, contingencies and IDC
- RRP presentation should be in USD, with percentage of funds provided by each source presented.

Quality Review

- Assess existing capital structure of EA
- Assess availability of government counterpart financing
- Ensure that counterpart financing requirements are clearly identified in either the government budget and/or Medium Term Expenditure Framework
- Assess the availability of commercial and official co-financing
- Assess reasonability of EA self-financing

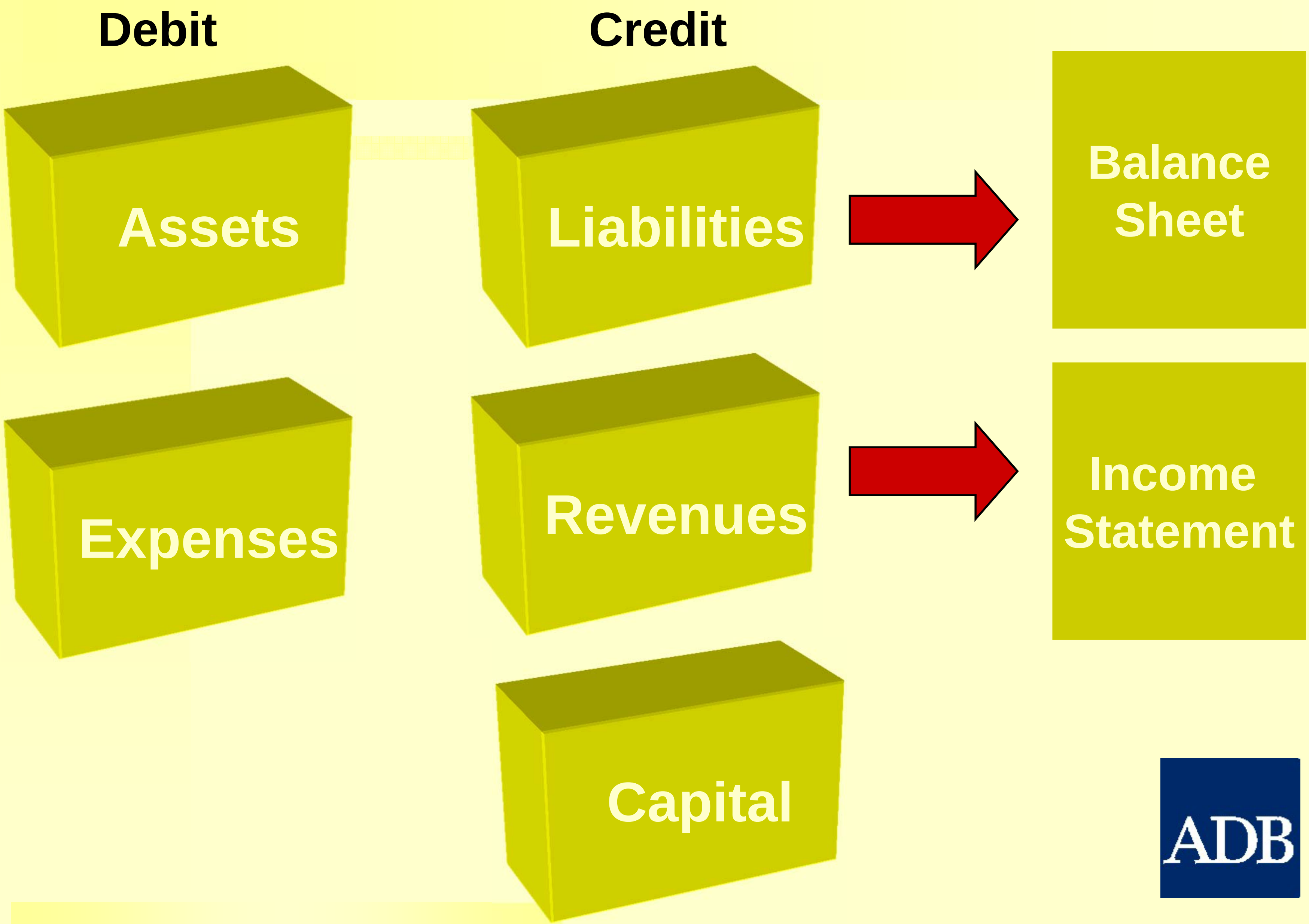
Accounting Terms

- Asset – any item of economic value owned by an entity
- Liability – a financial obligation, debt, claim or potential loss
- Revenue – the monetary value of goods and/or services sold by an entity
- Expense – cost incurred in the conduct of doing business or to generate revenue

Accounting Terms (cont'd)

- Profit – excess of revenues less expenses
- Accounting – systematic recording, reporting and analysis of financial transactions of an entity
- Accounting Principles – conventions, rules and procedures necessary to define accepted accounting practice at a particular point in time

Financial Reporting Building Blocks



Accounting Equations

- Assets = Liabilities + Owners Equity
- Owners Equity = capital + retained profit
- Retained Profit = Revenues – Expenses – Distribution to Owners
- Working Capital = Current Assets – Current Liabilities

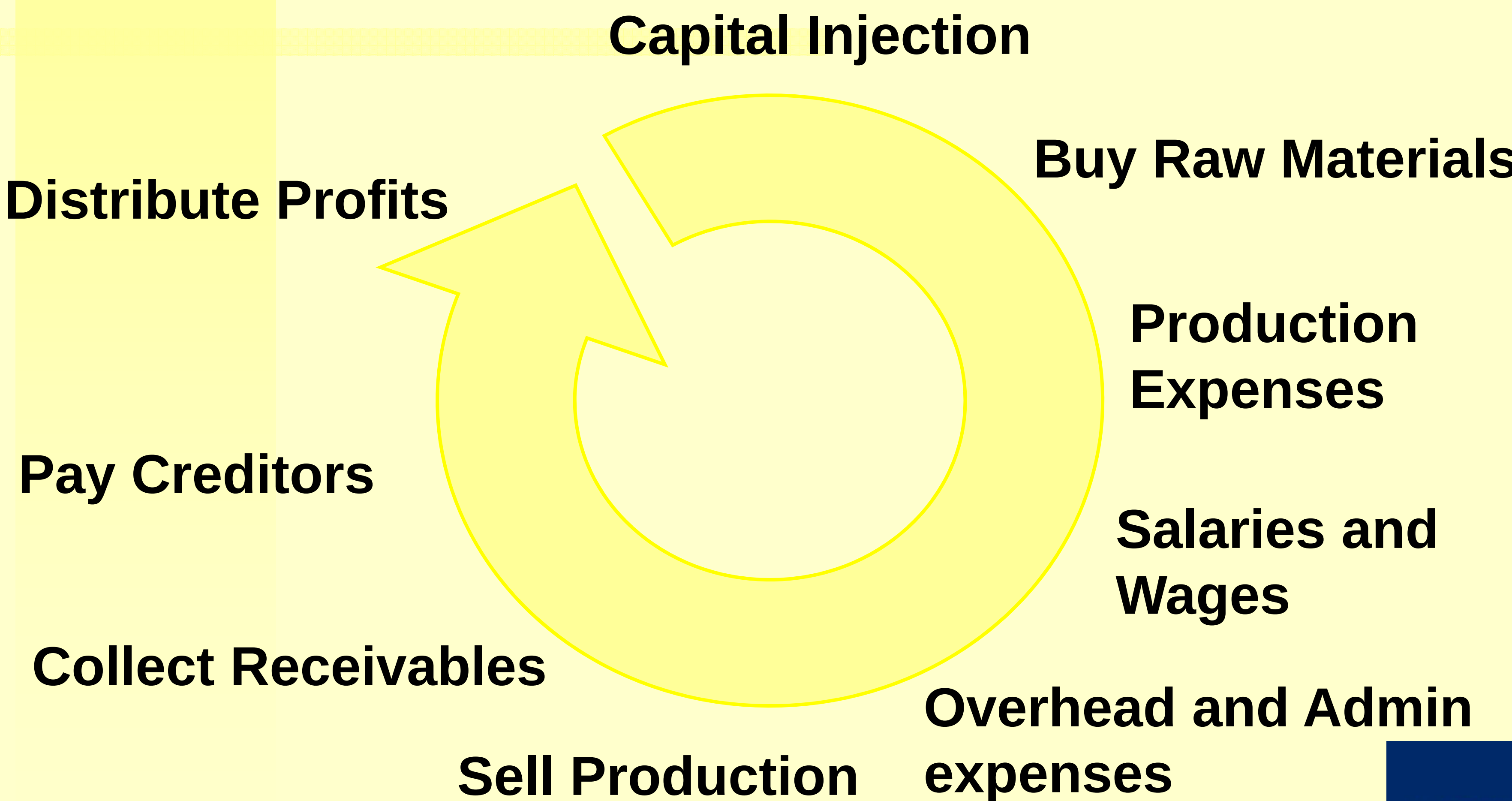
Income Statement

- Income Statement: presents information with respect to revenues, expenses and profits over a specified time period
  - Revenue – Operating Expenses – Non Operating Expenses – Financing Charges – Taxes = Net Profit
- Change in Retained Profits
  - Retained profit beginning of year + net profit – distributions to owners = retained profit end of year
- Tells us whether or not the entity is profitable

Balance Sheet

- Balance Sheet: presents the financial position at a given date
- Assets = Liabilities + Owners Equity
- Statement of the entity’s financial “health”
- Profitability does not always translate into financial health

Working Capital Circulates



Cash Flow Statement

- Cash flow Statement: presents cash flow from operations, investments and financing over a specified time period
- Shows how the company is managing its cash flow
- Cash is King!

Example of Integrated Financial Statements

Income Stmt		Cash Flow		Balance Sheet	
Revenues	900	Operating		Current Assets	
Less		Cash Flow	200	Cash	400
Expenses	500	Loan Proceeds	200	Accts Receivable	100
Net Profit	400	Investment in		Fixed Assets	400
Equity, beg	200	Fixed assets	100	Total Assets	**900**
Dividends	100	Net Cash flow	300	Accts Payable	200
Equity, end	**500**	Cash beginning	100	Loan	200
		Cash End of Year	**400**	Equity	500
				Liab + Equity	**900**

ADB

Example of Integrated Financial Statements

Income Stmt		Cash Flow		Balance Sheet	
Revenues	900	Operating		Current Assets	
Less		Cash Flow	200	Cash	400
Expenses	500	Loan Proceeds	200	Accts Receivable	100
Net Profit	400	Investment in		Fixed Assets	400
Equity, beg	200	Fixed assets	100	Total Assets	**900**
Dividends	100	Net Cash flow	300	Accts Payable	200
Equity, end	**500**	Cash beginning	100	Loan	200
		Cash End of Year	**400**	Equity	500
				Liab + Equity	**900**

Example of Integrated Financial Statements

Income Stmt		Cash Flow		Balance Sheet	
Revenues	900	Operating		Current Assets	
Less		Cash Flow	200	Cash	400
Expenses	500	Loan Proceeds	200	Accts Receivable	100
Net Profit	400	Investment in		Fixed Assets	400
Equity, beg	200	Fixed assets	100	Total Assets	**900**
Dividends	100	Net Cash flow	300	Accts Payable	200
Equity, end	**500**	Cash beginning	100	Loan	200
		Cash End of Year	**400**	Equity	500
				Liab + Equity	**900**

Understanding Financial Statements

- Comparative year figures are important!
- Look for logical corresponding movements across key accounts
  - Increased revenues should equal increased cash and/or accounts receivable
  - Increased fixed assets should equal decreased cash and/or increased debt and/or equity

Financial Analysis

- Financial Statements:
- historical
- static
- financial performance
- financial position

- Ratio Analysis:
- Diagnostic
- Dynamic
- Analytical
- Future Predictability

Financial Ratios

- Test the mathematical relationship between revenues, expenses, assets, liabilities and equity
- Profitability ratios : help interpret the income statement
- Debt, Asset and Liquidity ratios: help interpret the balance sheet
- Cash Management and Liquidity ratios: help interpret the cash flow statement
- Should compare to benchmarks

Financial Ratios - Examples

- Debt to Equity ratio – depending on the industry 50 – 80 percent of capital should be in debt
- Current Ratio – current assets should be at least equal to, or slightly more, than current liabilities.
- Debt Service Coverage Ratio – cash flow generated from operations should be 1.2 – 1.4 times the cash required to meet debt service obligations in the next year
- Self Financing ratio – indicates the amount of internal cash flow available to meet forward capital investment plans

Summary

- The mechanics of accounting really just mathematical relationships
- Five key building blocks to financial reports (assets, liabilities, revenues, expenditures and equity)
- Accounting equations represent relationship between the building blocks
- The financial statements are integrated
- CASH IS KING!!!
- Ratio analysis is a valuable tool to interpret financial information

ADB

What are Financial Projections?

- Estimated income statement, balance sheet and cash flow statements for a period of time in the future
- Essentially forecasts of financial performance and financial position

ADB Project Financial Projections

- Financial projections include income statement, balance sheet and cash flow statement
- Presentation format should follow the enterprise's chart of accounts
- Projections should be prepared in domestic current terms and should take into account the potential impact of inflation and foreign exchange rate fluctuations

ADB Project Financial Projections

- Model the risks
- Income statement, balance sheet and cash flow assumptions
- Projections should be completed for a minimum of 5 years, but not usually longer than 10 years.
- 2-3 years of historical financial information should be presented

Revenue vs Non-Revenue

- Project the incremental recurrent costs
- The Expenditure Projections should follow the chart of account classifications
- Model the risks
- Assess EA capacity to absorb the recurrent costs

Financial Internal Rate of Return

- Net present value – present value of future cash flow stream
- FIRR: The discount rate at which the present value of a stream of cash flows is equal to zero (in financial terms)
- Needs a hurdle

ADB

Weighted Average Cost of Capital

- Need a project specific hurdle rate (ADB's analysis is from the perspective of the project)
- WACC represents the costs associated with financing the investment
- FIRR > WACC = Financial Viability

How to Compute the FIRR

- Cash basis
- Incremental – with versus without the project
- Real versus nominal – remove impacts of inflation and foreign exchange fluctuation
- After tax – remove tax impact

Issues

- Time frame
  - Estimated economic life of the assets
  - Not the loan term!
  - Same as EIRR
  - If shorter than economic life, include a residual value
- Depreciation Excluded
- Interest, Debt Service Payments, and Dividends excluded

WACC

- Real terms on an after tax basis
- Each component of the financing plan is costed individually
- Weighting based on proportionate contribution by each source to the total financing plan

ADB

Financial Evaluation

- Comparison of FIRR to WACC
- Key Ratios, FIRR and WACC should be subjected to sensitivity analysis
- Assess whether the financial evaluation is robust (i.e can withstand variations in key assumptions)

Financial Risks

- Risk Identification
  - What events or occurrences could adversely impact project viability and/or sustainability
- Mitigation Measures

Assurances

- An assurance is a declaration of intent to perform certain activities or agree to certain conditions
- Not legally binding
- Appropriate for RRP, as the RRP precedes signing of the loan agreement

Covenant

- A written and signed “pledge”
- Two parties sign and are legally bound to certain actions, conditions, etc.
- Covenants documented in the Loan agreement
- Assurances are not actionable, but covenants are.

Examples of Common Financial Covenants

- Audit requirements
- Financial ratios (eg. Debt:equity ratio; self-financing ratio; current ratio)
- Operating ratios (eg. reduced transmission losses, unaccounted for water, improved accounts receivable performance)
- Provision of counterpart funds and agreement to meet incremental recurrent costs

Hints

- Covenants should:
  - be realistic and achievable;
  - address risks;
  - clearly stated; and
  - measurable

Financial Management and Development Effectiveness

- "ring fencing" versus reliance on country systems
- PIUs/PMOs
- Sustainability
- Development Impact versus Fiduciary control

ADB

Financial Management Assessment (FMA)

- Objective – to assess whether or not financial management arrangements are sufficient for purposes of recording transactions, preparing reliable financial statements and for safeguarding assets
- Issues or weaknesses identified need to be taken into consideration either through project design or implementation arrangements

FMA – How?

- Review of country and/or previous EA/IA financial management diagnostics
- Complete FMAQ and/or update FMA previously completed for the EA/IA
- Identify risks and/or issues associated with EA/IA financial management arrangements
- Develop appropriate mitigation measures

FMA – When and Who?

- The FMA should be undertaken as early as possible, preferably during early stages of the PPTA
  - Provides sufficient time to develop mitigating measures
- FMAQ is self assessment instrument
  - Domestic consultants can assist EA

Thank you

ADB