

Valuing Hidden Liabilities



**16TH M&A VALUATION TECHNIQUES FOR CFOS
TORONTO, 9 OCTOBER 2013**

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PART 1



Definitions

Definitions

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- Liabilities are present obligations arising from past events; their settlement is expected to result in an outflow of resources.
- Provisions are liabilities of uncertain timing or amount.

Definitions

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- Contingent Liabilities are present obligations that do not meet recognition criteria:
 - It is not probable that an outflow of resources will be required to settle them.
 - A sufficiently reliable estimate of the amount cannot be made.

Definitions

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- Contingent Assets are possible assets that may arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events, not wholly within the control of the entity.

Definitions

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Obligations are either legal or constructive.

- Legal Obligations are those from a contract (explicit or implicit), legislation, regulations or other law.

Definitions

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- Constructive Obligations are expectations created by an established pattern of past practices, published policies or sufficiently specific current statements that the entity will accept certain responsibilities.
- Therefore others have a valid expectation of their being discharged as they come due.

Hidden Liabilities

Hidden Liabilities

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- In valuing a business, a reporting or cash generating units it is important to:
 - Look for and value unrecorded liabilities
 - This is harder than doing the same for unrecorded assets.

Hidden Liabilities

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- “To warn that the untoward may occur when the event is contingent is prudent; to caution that it is only possible for the unfavorable events to happen when they have already occurred is deceit.”

*Huddleson v. Herman &
MacLean*

650 F.2d 815 (U.S. 5th Cir. 1981)

Hidden Liabilities

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Hidden liabilities arise in eight ways:

- Litigation – *IAS 37 Provisions, Contingent Liabilities and Contingent Assets*
- Overstated Assets – IAS 37
- Unresolved Contingencies – IAS 37

Hidden Liabilities

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- Retirement Obligations – IAS 19 *Employee Benefits*
- Earn-outs – IFRS 3 *Business Combinations*
- Tax Disputes & Penalties
- Warranties, Guaranties & Rebates
- Embedded Derivatives

Hidden Liabilities

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- Important indicators are:
 - Credit ratings – a major risk relating to disclosed and hidden liabilities causing default, non-performance of obligations as they come due.
 - Existence of embedded derivatives such as rights to convert into equity etc.

Fair Values of Liabilities

Fair Values of Liabilities

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- The Fair Value of a liability reflects assumptions that a market participant would use to establish a purchase price including all inherent risks.
- It is the amount the existing owner could receive through its sale as a financial asset.
- A measurement not including an adjustment for non-performance risk (for example ‘marked-to-model’) is not Fair Value.

Fair Values of Liabilities

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- **Every Fair Value calculation should include:**
 - An amount market participants would demand due to the risks (uncertainties) in the particular technique(s) adopted.
- Determining the appropriate adjustment can be complex.
- Look at comparable entities with publicly traded debt securities as a source of market participants' views.

Fair Values of Liabilities

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- Credit risks differ among an entity's liabilities depending on their term and nature.
- Those for payables or other current items are likely to be:
 - Lower than for longer term unsecured liabilities.
 - Higher than for a secured debt such as a mortgage.
- The greatest risks are in junior subordinate unsecured notes.

Fair Values of Liabilities

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- Investigate every obligation of all component legal entities.
- In liquidation some (nominally junior) may have a higher priority against key assets than the senior debt of parent.
- An entity's credit rating does not necessarily show the effects of credit risks on the Fair Values of its liabilities.

Fair Values of Liabilities

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Example

- for administrative purposes, a public company has all its Canadian real estate in a single subsidiary.
- This entity has property tax arrears.
- Those (though unusual) would have to be paid on liquidations before any funds could go to the parent firm.

Fair Values of Liabilities

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- Visit at least one operation of a Target and meet management to:
 - Obtain a good knowledge of the business.
 - Improve understanding of information contained in Target's financial statements and other documents.

Fair Values of Liabilities

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- Identify current and potential changes that might cause Target's future results to differ from those indicated by an extrapolation of historical data.
- Provide additional insight as to the future prospects of Target's business.
- Assess all financial and operational risks
- Example pricing considerations

Fair Values of Liabilities

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- **Verification required in acquisitions:**
 - are all assets bargained for included?
 - is quantity correct?
 - is quality satisfactory?
 - are there liabilities not bargained for?

Fair Values of Liabilities

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Example

- **Service Company in Eastern Canada**

- 2012 Revenues \$81,492,000
- 2012 Pre-tax Profit \$8,287,000

- **Government Contracts**

	A	B
Share revenue	21%	11%
Expires	2015	2016
Options	3 x 1 year	3 x 1 year
	Sole bid	Multiple bids
Benefit	Loaned equipment	Training grant

Fair Values of Liabilities

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- **Background**

Locations	Montreal Toronto Halifax	Union Non-Union Union
Growth	Government	1% - 2%
	Commercial	2% - 3%
Warranties	No provisions – just rework	

Fair Values of Liabilities

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- Financial Situation

Capital Assets	\$1,053,000
Current Assets	\$18,637,000
Bank Loan	\$10,000,000
Other Current Liabilities	\$3,762,000
Equity	\$5,928,000

Fair Values of Liabilities

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- **Intangible Assets**
 - Government Contracts
 - Renewals
 - Customer Relationships

Fair Values of Liabilities

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- **Hidden liabilities on Contract Expiry**
 - Employee terminations
 - Possible closure – Halifax
 - Replacement of loaned equipment

Analysis of Litigation

Analysis of Litigation

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- Settlement prospects
- Possibility of arbitration or mediation
- Extent and quality of documentary evidence available to respective parties, etc.
- Availability and credibility of “fact” and “expert” witnesses at trial or examinations-for-discovery

Analysis of Litigation

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- Controllable and uncontrollable costs of proceedings, to all parties (defendants and plaintiffs), including legal fees, expert charges, court costs, etc.
- Possibility/probability of appeal by either party to Court of Appeal (and Supreme Court, if appropriate)
- Size and interest costs included of possible award
- Length of trial and subsequent appeals, if any

Analysis of Litigation

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- **Factors impacting amount of damages**
 - Relative strengths of damage theories
 - Relative qualities of trial lawyers
 - Relative quality of discovery evidence
 - Relative quality of trial evidence
 - Relative quality of damage experts
 - Relative quality of experts' reports
 - Judge (or master)
 - Appeal Court record
 - Cost to litigate

Potential Financial Statement Omissions

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- Vacation pay
- Insurance
- Professional fees
- Interest costs capitalized that should have been expensed
- Selling and general administrative costs expensed that should have been capitalized.

Potential Financial Statement Omissions

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- Employee bonuses
- Customer rebates
- Warranty costs
- Product liabilities

Potential Financial Statement Omissions

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- Leases with non-arm's length parties
- Repayment obligations on government grants, loans, subventions
- Advertising commitments
- Un-accrued items
- Customs duties on foreign purchases

Potential Financial Statement Omissions

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- Bribes
- Kickbacks
- Deceptive advertising
- Falsification of customs invoices
- Submission of misleading applications for lines of credit, government grants or subsidies
- Conspiracy regarding employment insurance

Potential Financial Statement Omissions

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- **Types of risky products**
 - Chemical & toxic products
 - Consumer goods
 - Office equipment
 - Children's/juveniles' products
 - Building supplies
 - Recreational products
 - Scaffolding & cranes
 - Hand & power tools
 - Automotive equipment

Potential Financial Statement Omissions

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- **How to value**
 - Mitigation aspects?
 - Economic loss?
 - Psychiatric damage?
 - Mental distress?
 - Aggravated damages?
 - Liability for punitive damages?
 - Adequate product liability insurance?

Potential Financial Statement Omissions

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Embedded Taxes on:

- **Depreciable Assets**
 - Fair market values
 - Original costs
 - Un-depreciated capital cost
- **Non-depreciable capital properties**
 - Fair market values
 - Adjusted cost bases

Potential Oppression Remedy Beneficiaries

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- Shareholders
- Creditors
 - *Downtown Eatery (1993) Ltd. v. Ontario (2002)*
54 OR (3d) 161, CA
- Trustee-in-bankruptcy (as creditor's representative)
 - *Re Margaritis (1977), 23 CBR (NS) 150 (Ont.CA)*

Non-performance Risks

Non-performance Risks

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- The prices of traded Credit Default Swaps, a form of liability insurance that “pays off” in the event of default, show such risks are often based on changes in sentiment without a variation in the borrower’s credit rating.
- Non-performance risks also consider any collateral or credit enhancements involved such as third party guarantees.

Non-performance Risks

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- To affect the Fair Value of a liability they must be an attribute of the instrument and inseparable from it.
- If the guarantee is payable directly to the holder and not to the issuer it is not part of the liability itself but a separate instrument not included in the liabilities' Fair Value.

Non-performance Risks

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- Reflecting non-performance risk in the Fair Values of an entity's liabilities means that their impact is the opposite of the financial situation.
- Deterioration of the entity's credit standing results in a higher discount rate for the future cash flows associated with a liability.
- This results in a reduction of its value as an asset.

Non-performance Risks

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- **If the carrying amount is Fair Value the result is an imaginary reported gain in the income statement.**
- **Conversely a credit improvement results in a imaginary reported loss.**

Provisions

Provisions

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- Under IFRS a provision is recognized when there is a probable outflow of resources to settle the obligation.
- Probable means more likely than not.
- Even if it is not probable an obligation will result in an outflow of resources; the facts are disclosed when a reliable estimate can be made.

Provisions

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- IAS 37 takes the view that a sufficiently reliable estimate can almost always be made.
- In the very rare circumstances when it cannot, the obligation must be disclosed as a contingent liability.

Provisions

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- A contingent asset is disclosed when it is probable that the benefits will be realized.
- This is only if it is virtually certain.
- In some circumstances a third party (such as an insurer) may reimburse part of the costs required to settle a provision or agree to pay the amounts directly.

Provisions

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- The entity is usually liable for the whole amount if the third party does not settle.
- Therefore the total is the figure recognized.
- The reimbursement is recorded only when receipt is virtually certain.

Provisions

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- Probable means more likely than not, therefore any percentage in excess of 50%.
- The others are guidance not bright-lines.
- A provision is measured as best estimate of the expenditure required to settle the obligation at the balance sheet date.
- It is the amount an entity would pay a third party to relieve it of its obligation.

Provisions

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- **This may cause timing issues:**
 - The threshold for liability recognition (usually greater than 50%) is lower than that for a contingent asset (typically greater than 95%).
 - The result is that the liability is normally recognized immediately but the reimbursement not until the case is settled.

Provisions

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Likely Outcome	Contingent Liability/Loss	Contingent Asset/Gain
Virtually Certain > 95%	Recognize	Recognize
Probable 50% - 95%	Recognize	Disclose
Possible 5% - 50%	Disclose	No disclosure required
Remote < 5%	No disclosure required	No disclosure required

Provisions

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Example

- A manufacturing plant was damaged by a super storm.
 - Physical damage estimate \$3,500,000
 - “Loss of profits” during downtime \$880,000
- Insurance policy covers wind but not water damage plus 90% of extra operating costs (lost profits).

Provisions

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- Immediate provision for physical damage.
- Loss of profit charged as incurred.
- Proceeds for damage credited only when insurer accepts terms of policy apply.
- Loss of profit claim recognized when insurer accepts policy applies.
- Delay between recording \$4,380,000 loss provision and insurance receipts of \$1,230,000 (physical) and \$792,000 (loss of profits).

Provisions

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- The “expected value” or the “net present value” of the outflow are the normal measures.
 - Expected value – when a large population of items is being measured; a probability is assigned to each value and the sum of the probability weighted amounts equals the figure recognized.

Provisions

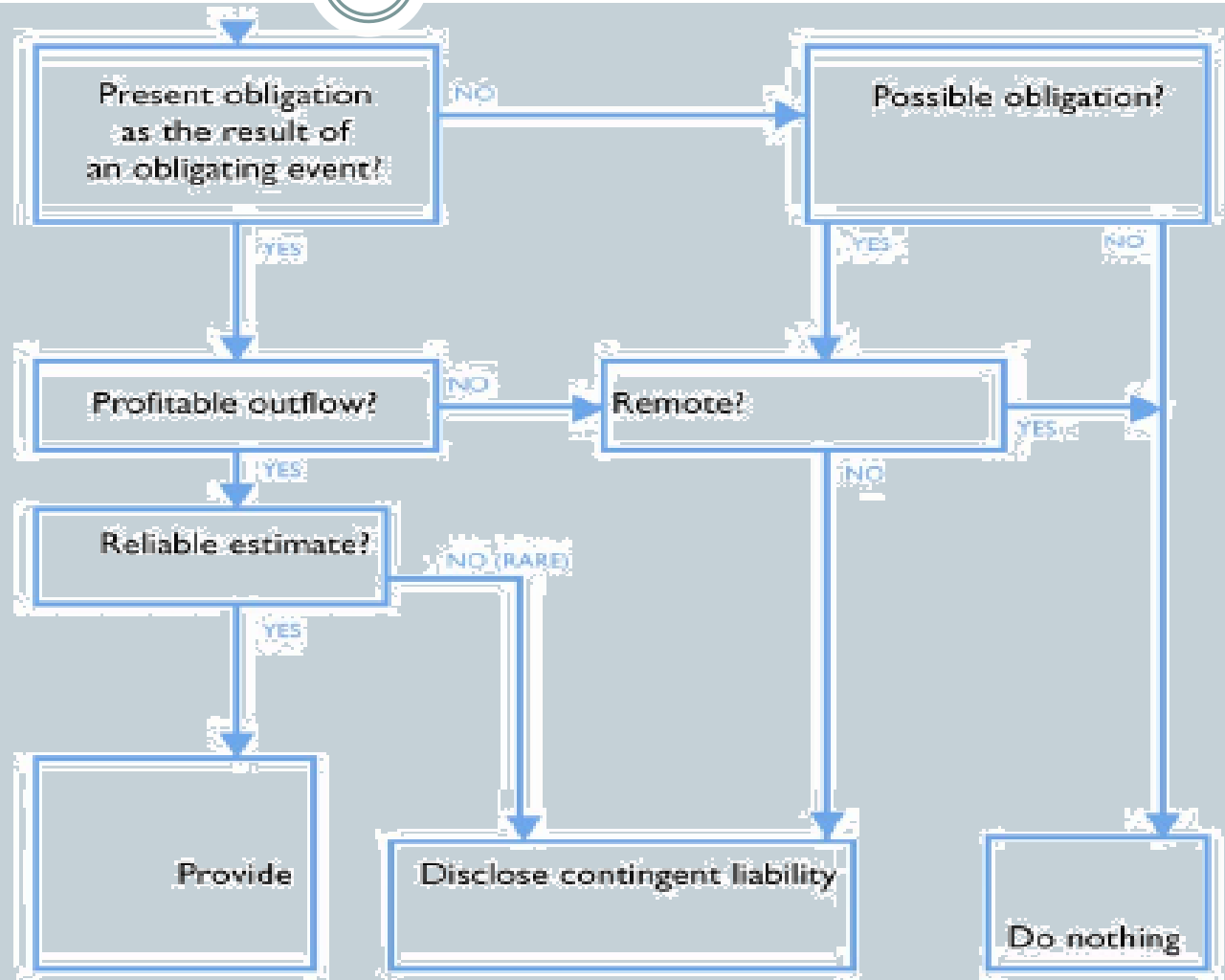
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- Net present value – where the effect of the time value of money is material mainly for long-term obligations.
- The discount rate should be pre-tax and reflect current market assessments of the time value of money and risks specific to the entity.

Provisions

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Accounting for Provisions



Source: BDO Dunwoody LLP

Restructurings and Onerous Contracts

Restructurings

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- Restructurings are programs planned and controlled by management that materially change either the scope of a business or the way it is conducted.
- Costs are not recognized until they become a constructive obligation.
- They include only the necessary direct expenditures and none of those associated with an ongoing activity.

Onerous Contracts

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- Provisions are not recognized for future operating losses as they are not a present obligation resulting from a past event.
- However “onerous contracts” are recognized when the unavoidable costs of meeting the obligations exceed the benefits.

Onerous Contracts

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- The amount recorded is based on net cost to exit the contract which is the lower of:
 - The cost of fulfilling the contract.
 - Any penalties arising from failure to complete it.

Onerous Contracts

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Example

- A firm enters into a 10-year “take-or-pay” contract to buy natural gas from Alberta for a fertilizer plant in Ontario.
- Total cost \$4.20/MCF.
- Originally bought 120% to 140% (of contract amount).
- Gas becomes available from Ohio at \$3.00/MCF.

Onerous Contracts

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- Contract has 5 years to expiry.
- It is now onerous as local pricing is based on \$3.00/MCF.
- Cost of original gas exceeds benefits by 10% (\$1.20/MCF differential).
- Charge earnings with provision of the present value, at entity's WACC (Weighted Average Cost of Capital) at differential pay (minimum) portion of original contract during remaining life.

Asset Retirement Obligations

Asset Retirement Obligations

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- Both IFRS and old Canadian GAAP are principle-based frameworks.
- Conceptually many of the general principles are the same.
- IFRS does not have a direct equivalent to CICA 3110 *Asset Retirement Obligations* (AROs).

Asset Retirement Obligations

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- AROs and every other environmental liability falls within IAS 37 as “decommissioning liabilities”.
- Essentially a constructive or legal obligation to remove the asset and/or restore a site to a minimum required standard.
- Most organizations are subject to legal requirements associated with the retirement of long-lived physical assets.

Asset Retirement Obligations

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- Recognized only if the outflow of resources is probable and there is a reliable estimate of the amount, they are recognized.
- Important for determining when an obligation exists.
- Under IFRS ARO is discounted cash outflows at current interest rate.

Asset Retirement Obligations

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- Often, based on costs of remediation by third parties including profit margins.
- An acceptable IFRS methodology is a risk free interest rate with risks accounted for in the cash flows through various scenarios.

Asset Retirement Obligations

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- If the discount rate is adjusted for risk it must not include those already considered in the cash flows.

Asset Retirement Obligations

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- Entities must recognize the Fair Value of each ARO in the period in which it is incurred unless the amount cannot yet be reasonably estimated.
- The Fair Value is the payment that a willing third party of comparable credit standing would demand to assume all of the duties, uncertainties and risks inherent in the ARO.
- It is calculated under Fair Value Framework.

Asset Retirement Obligations

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- Unit of account is the total legal obligation on retirement of the asset – the ARO is recorded at Fair Value when the requirements are met.
- When a new ARO layer is established, for example due to a change in the timing or amount of expected cash flows, it is a separate unit of account.

Asset Retirement Obligations

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- Valuation Premise - none is applicable for an ARO because Fair Value assumes liabilities are transferred to a market participant.
- Principle Market - AROs are unlikely to have a principal market as they are not actively traded and there is little or no observable data on the prices paid to transfer them.

Asset Retirement Obligations

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- Most Advantageous Market - the market in which the minimal amount is paid to transfer the ARO.
- Generally management develops a hypothetical market.

Asset Retirement Obligations

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Valuation Methods

- All three valuation approaches must be considered.
- Quoted prices in active markets are used if available.
- Often an expected present value technique is applied with risks in the cash flows.

Asset Retirement Obligations

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Market Approach

- Uses publicly available information from market transactions involving comparable items.

Income Approach

- Uses market participants' data /inputs to develop discounted cash flows projections.

Cost Approach

- Uses a reliably established estimation of the amount required for necessary remediation work.

Asset Retirement Obligations

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- Changes in the measurement of an existing decommissioning restoration or similar liability are accounted for based on the model used for the asset.
- The most common are:
 - Alterations in the estimated timing or amount of the outflow of resources required to settle the obligation.
 - A change in the discount rate.

Asset Retirement Obligations

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Cost Model

- If the asset is measured using the cost model the changes in the liability are added to or deducted from its depreciated cost in the current period.
- The amount deducted should not exceed the asset's carrying amount.

Asset Retirement Obligations

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Fair Value Model

- If the related asset is measured using the revaluation (Fair Value) model of IAS 40 *Investment Property* then the change in the liability first reduces any revaluation reserve with only the balance flowing through profit and loss.

Unresolved Contingencies

Unresolved Contingencies

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Example

- Barrel manufacturer in Windsor operating since 1870
- Production continues without problem.
- Site is now much more valuable for residential use.

Unresolved Contingencies

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- Book Value \$300,000
- Market Value \$4,500,000
- Remediation Cost \$1,650,000
- ARO ?

Unresolved Contingencies

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- As long as plant gives a return of WACC on adjusted book value no change.

Market Value	\$ 4,500,000
Remediation Cost	(1,650,000)
Selling Expenses (7%)	<u>(315,000)</u>
	2,535,000
Tax (15%)	<u>(380,000)</u>
Adjusted Book Value	\$ <u><u>2,155,000</u></u>

Unresolved Contingencies

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<u>Decision Tree</u>		<u>\$'000</u>
Continuation	60%	-
Disposal	40%	1,402,000
(\$1,650 less \$248 tax saving)		
Probable time		3 years
WACC	10%	
ARO		\$359
(\$1,402 x 40% x 0.641)		

Unresolved Contingencies

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- Contingent liabilities are dealt with under IAS 37.
- There are significant problems in valuing them due to numerous uncertainties.

Unresolved Contingencies

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- Generally provisions are recorded in the financial statements and contingent liabilities, often relating to litigation, are only disclosed in the Notes.
- Accounting tends to be very conservative.
- An old adage is “when in doubt book the liability”.
- Not the case for unresolved contingencies.

Unresolved Contingencies

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- Read the Notes carefully before investing or lending money to an entity.
- Significant risks are often not recorded.
- When they are neither "probable" nor "reasonably estimable."
- There may also be undisclosed remote risks such as early stage legal claims.

Unresolved Contingencies

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- Product warranties a virtually universal service are assumed to give rise to probable liabilities that can be reasonably estimated.
- Warranty costs likely to be incurred on goods sold are estimated and recorded as an expense.
- The recorded provision is measured by the Cost Approach.

Unresolved Contingencies

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- Many other costs are similar to warranties.
- Businesses may offer coupons, prizes, rebates, air miles, free hotel stays, free rentals, and similar items associated with sales activity.
- Each requires an estimated provision.
- Details may vary but the basic procedures and outcomes are similar.

Unresolved Contingencies

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- When acquiring physical assets be sure that they are "clean" of environmental liabilities particularly if toxic materials have been handled on the site.

Unresolved Contingencies

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- Acquirer must assess the probability, timing and amount of costs that may be incurred to correct environmental problems past, current or future and ensure compliance with all relevant legislation and regulations on an ongoing basis.

Unresolved Contingencies

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- The value of a business may be virtually erased by the costs of a clean up.
- Large profits may have been earned previously but the acquirer inherits the environmental liabilities (including decontamination) caused by an owner well back in the chain of title.

Unresolved Contingencies

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- In many jurisdictions environmental legislation is far reaching and often based on the "deep pocket" theory.
- Usually the previous owner with the most resources will be required to pay for all the cleanup and reclamation.

Unresolved Contingencies

92

- Auditors are not required to express an opinion on the adequacy of an entity's environmental practices or compliance with pertinent laws and regulations.
- They must obtain sufficient evidence to make reasonable assurance that all items in the financial statements affected by environmental considerations are fairly presented.

Unresolved Contingencies

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- This gives no assurance that the costs of cleanup are fully accounted for.
- It is the starting point for the assessment of this type of exposure.
- Some cases may require a consulting engineer or environmental specialist.

Unresolved Contingencies

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- Accounting standards have difficulty with risks that have not yet occurred and may never develop.
- Best methodology is based on a “decision tree” with estimated probabilities.
- If current use is “highest & best” it has a low probability.
- When use of a site changes that action gives rise to significant costs and probability.

Retirement Obligations

Retirement Obligations

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- IAS 19 requires entities to recognize in the balance sheet the net total of the following as the defined benefit liability or asset:
 - Present value of all defined benefit plans' obligations.
 - Fair Value of all plan assets.
 - Actuarial gains.
 - Actuarial losses not yet recognized.
 - Past service cost not yet recognized.

Retirement Obligations

97

- All retirement obligations are discounted future payments.
- Often the discount rate is the expected return, sometimes 6% plus
- If it is above the firm's average actual (3-year) rate of return on pension assets there may be a possibly large Hidden Liability.

Retirement Obligations

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Example

	<u>\$'000</u>
Present value of the obligation	(1,100)
Fair value of plan assets	<u>(1,010)</u>
	(90)
Unrecognized actuarial gains	50
Unrecognized actuarial losses	(110)
Unrecognized past service cost	(70)
Unrecognized liability on adoption of IAS 19	<u>(90)</u>
Defined Benefit Liability	<u>(310)</u>

End of Part 1

Valuing Hidden Liabilities

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PART 2



Earn-outs

Earn-outs

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- When entering into a business combination the parties may not always agree on the exact value of the business particularly if there are uncertainties as to the:
 - Success of various activities.
 - Worth of particular assets.
 - Outcome of uncertain events.

Earn-outs

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- To complete the deal they agree to an interim value.
- Additional future payments (earn-outs) will be made by the acquirer.
- The economic risks relating to the uncertainties about the future of the business are shared.

Earn-outs

104

- Future payments may be in cash, shares or other assets and are normally contingent upon:
 - The achievement of specified events.
 - Future financial performance over a specified period.

Earn-outs



- Earn-outs can be an invitation to litigation so should be used with caution.
- When a provision leads to a dispute it is usually because the parties failed to account adequately for the many factors that can influence the calculation.

Earn-outs

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- Specify the applicable accounting principles.
- The use of IFRS is common but the parties might want to deviate from it.
- Consider whether to deduct items such as returns, shipping costs, duties or taxes in calculating "revenue."
- Determine if earnings for the earn-out are before or after interest, taxes, depreciation & amortization, or sometimes and R&D Project.

Earn-outs

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- **Other common influences:**
 - Sales of products or services at reduced prices to the buyer or an affiliate.
 - Bundling of the seller's products with those of others without a proper price allocation.
 - The extent of the buyers' support.

Earn-outs

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- If based on earnings will the buyer:
 - Make expenditures that the seller believes unfairly impact profits during the period (such as for long term R&D).
 - Improperly allocate central or administrative costs to the business.
 - Charge fees for “services”.

Earn-outs

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- **The agreement must cover what happens if:**
 - The buyer sells the business.
 - The business merges with another entity.
 - Due to integration into another operation revenue and earnings cannot be readily traced.
 - A product line is discontinued.
 - The seller dies, becomes disabled or is terminated.

Earn-outs

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- Under IFRS 3 *Business Combinations* all items of consideration transferred must be measured and recognized at Fair Value on closing.
- This includes earn-outs that will be consideration, transferred if some future specified event occurs.
- There is inherent uncertainty in any contingent item.
- Measuring Fair Value can be complex and has much diversity in practice.

Earn-outs

111

In valuing earn-outs first:

- Determine the classification of the payments.
 - Liability
 - Equity
- Understand the consequences with:
 - Potential additional expenses.
 - Volatility in earnings.
 - Greater liabilities.

Earn-outs

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- Potential consequences for buyer if payments differ from those expected:
 - Financial covenants.
 - Management remuneration.
 - Return on investment.
 - Taxes.

Earn-outs

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Triggers

- Revenues or earnings above an agreed threshold over a fixed period.
- Approval of a patent, license or contract.
- Successful completion of specified negotiations.
- Cash flows from specified assets over a period.
- Remaining an employee for an agreed period.

Earn-outs

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- While negotiated as part of a business combination the acquisition accounting may not reflect reality particularly if payments are made to those who remain as employees.
- Depending on exact terms, such amounts may be treated as remuneration for services subsequent to the transaction rather than as part of the consideration.

Earn-outs

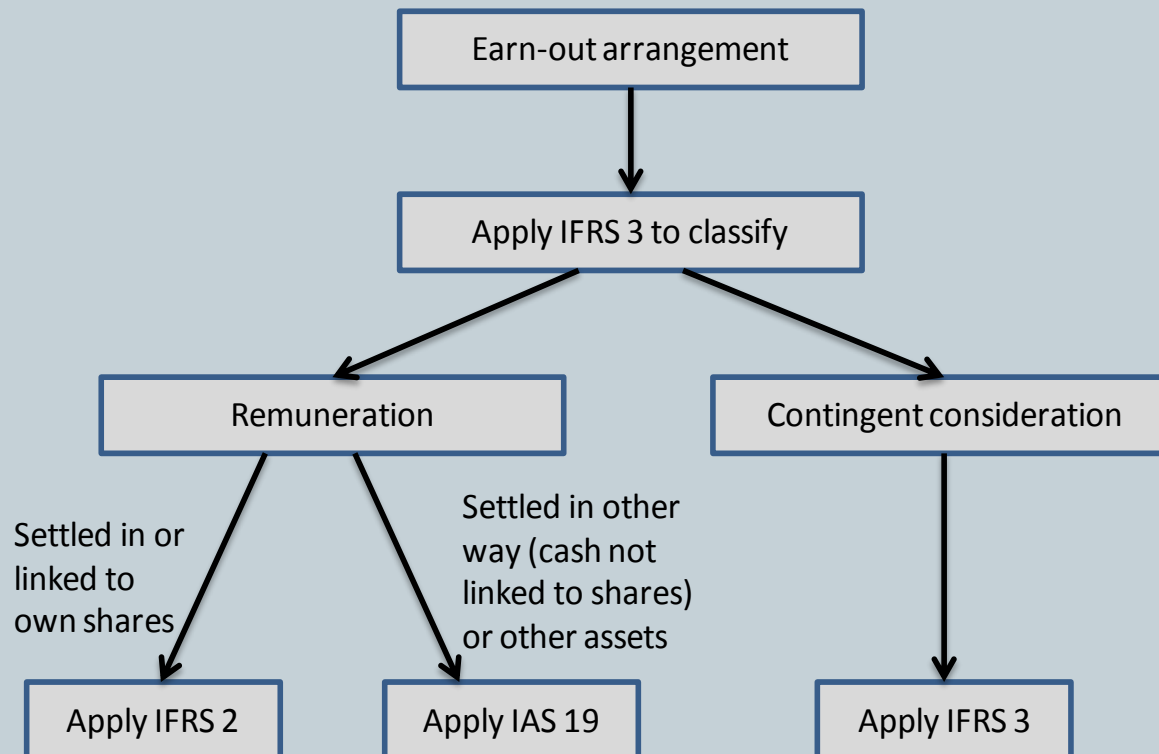
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- Alternatively payments may be treated as contingent consideration, a present obligation of the acquirer to deliver cash, shares or other assets in the future.
 - Included as part of the consideration when calculating goodwill.
 - Recognized as a liability or equity on closing.

Earn-outs

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- Effects of changes in the value of liabilities until settlements are recognized in income.



Earn-outs

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- Treatment of additional payments may have a significant effect on overall financial position and an entity's subsequent reported performance.
- Affect many accounting based measures:
 - Debt covenant compliance.
 - Employee remuneration plans.
 - Return on investment.

Earn-outs

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- Where tax is tied to the accounting results there may be tax effects.
- Differences between accounting and tax treatments may require detailed documentation tracking them and the amount of any deferred taxes.

Earn-outs

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	Classification	
	Remuneration	Contingent consideration
Date of acquisition	Not recognized	<ul style="list-style-type: none">• Included in consideration transferred and goodwill calculation• Creates a liability or equity
Post acquisition	Expensed in income statement	<ul style="list-style-type: none">• Settlement of liability or equity• Changes in liability until settlement recognized in income statement

Earn-outs - Remuneration

Earn-outs – Remuneration

121

- Key drivers in many industries is customer relationships held by key employees or the employees' specific skills.
- Retention is critical to continued success until the relationships or skills are transferred.
- It may involve additional payments linked to continued employment.
- Often they are former owners.

Earn-outs – Remuneration

122

- A key consideration is aligning former shareholders' interest with the business'.
- One way is linking future payments to continued employment and performance.
- These arrangements will likely be treated as a post-combination expense even though the primary business purpose is an addition to the sale price.

Earn-outs – Remuneration

123

- If an employee was a shareholder, careful analysis is needed if additional payments are remuneration or contingent consideration.
- This depends on the arrangement.

Earn-outs – Remuneration

124

- **Consider:**
 - Contract of sale.
 - Employment agreements.
 - Other documents.
- **Question:**
 - Why are the terms the way they are?
 - Who initiated the terms?
 - When were they agreed upon?

Earn-outs – Remuneration

125

- Payments linked to continuing employment result in their being considered remuneration.
- IFRS 3 includes several indicators to consider when negotiating the arrangement.
- Any assessment requires judgment.

Earn-outs – Remuneration

126

Lead to conclusion as remuneration	To consider when negotiating terms of additional payments to selling shareholders that remain employees	Lead to conclusion as contingent consideration
Payments forfeit on termination	Continuing employment	Payments are not affected by termination
Coincides with or exceeds payment period	Duration of required employment	Shorter than payment period
Not reasonable compared to other key employees of the group	Level of other elements of remuneration	Reasonable compared to other key employees of the group

Earn-outs – Remuneration

127

Lead to conclusion as remuneration	To consider when negotiating terms of additional payments to selling shareholders that remain employees	Lead to conclusion as contingent consideration
Other non-employee selling shareholders receive lower additional payments (on a per share basis)	Incremental payments to other non-employee selling shareholders	Other non-employee selling shareholders receive similar additional payments (on a per share basis)
Selling shareholders remaining as employees	Number of shares owned when all selling	Selling shareholders remaining as employees owned substantially all shares shareholders receive same level of additional employees owned only a small portion of (in substance profit-sharing) consideration (on a per share basis) shares

Earn-outs – Remuneration

128

Lead to conclusion as remuneration	Indicators to consider when negotiating terms of additional payments to selling shareholders that remain employees	Lead to conclusion as contingent consideration
Formula for additional payment consistent with other profit-sharing arrangements rather than the valuation approach	Linkage of payments to valuation of business	Initial consideration at low end of range of business valuation, and formula for additional payment linked to the valuation approach
Formula is based on performance, such as percentage of earnings	Formula for additional payments	Formula is based on a valuation formula, such as multiple of earnings, indicating it is connected to a business valuation

Earn-outs – Remuneration

129

- Consider alternative arrangements:
 - Payment for non-compete agreements.
 - Employees retaining ownership interest with subsequent purchases.
- Different standards determine the accounting when classified as remuneration.
- If payment is shares or linked to their value IFRS 2 *Share Based Payments* applies.
- Otherwise, it is IAS 19 *Employee Benefits*.

Earn-outs – Remuneration

130

Example

- Major Corp. acquires Small Co. for \$9 million cash.
- An additional payment of \$3 million if its cumulative earnings reach \$6 million over three years.
- All former shareholders become employees.

Earn-outs – Remuneration

131

- At the date of acquisition the Fair Value of Small Co.'s net assets is \$8.5 million.
- The Fair Value of the additional payment is estimated at \$2.5 million.
- Over the next three years the cumulative earnings of Small Co. (before the additional payments) are \$10.5 million.

Earn-outs – Remuneration

132

- At the end of year three Major Corp. pays \$3 million as the conditions were met.
- The next table illustrates the impact on the financial position and reported results of classifying the payments either as remuneration or contingent consideration.

Earn-outs – Remuneration

133

	Classification	
	Remuneration	Contingent consideration
Goodwill	\$500,000	\$3 million
Liability to vendors	\$0	\$2.5 million
Reported profits over three years	\$7.5 million	\$10 million

Earn-outs – Contingent Consideration

Earn-outs – Contingent Consideration

135

- On closing, the obligation to make additional payments is either a liability or an equity instrument.
- Management assesses whether it meets the requirements to be equity.
- If the answer is no, it is a liability.

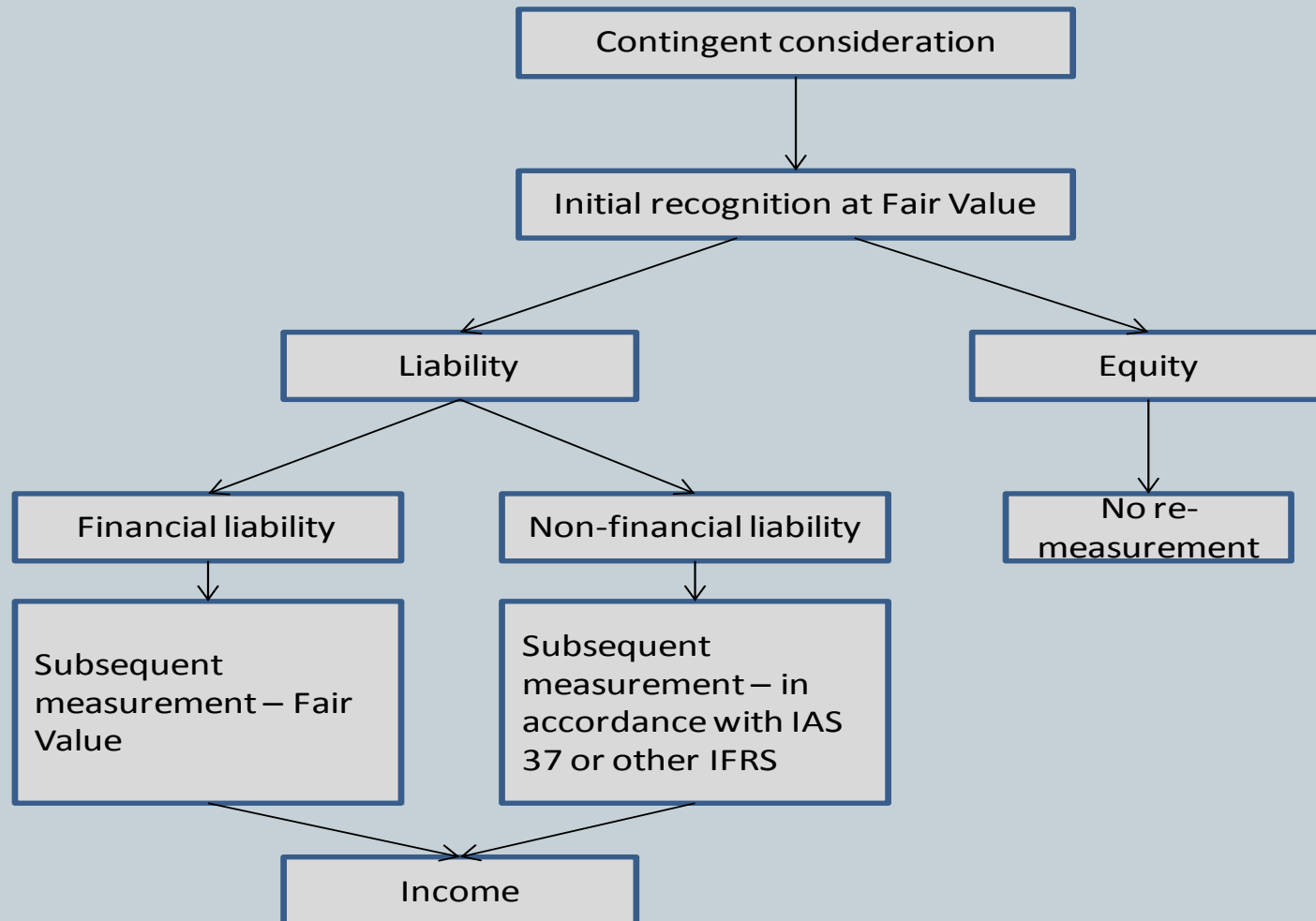
Earn-outs – Contingent Consideration

136

- Then identify the liability.
- Determine how it is subsequently measured and where changes in value are recognized.
- Most contingent arrangements are classified as financial liabilities and are measured at Fair Value.
- There is added volatility in reported results until the arrangement is settled.

Earn-outs – Contingent Consideration

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Earn-outs – Contingent Consideration

138

- Contingent consideration is equity when:
 1. The arrangement has no contractual obligation to:
 - ✦ Deliver cash or another financial asset to the seller.
 - ✦ Exchange financial assets or financial liabilities with the seller under conditions that are potentially unfavourable to the acquirer.

Earn-outs – Contingent Consideration

139

2. The arrangement will or may be settled by issuing equity instruments and is either:
 - ✦ A non-derivative with no contractual obligation to deliver a variable number of own equity instruments.
 - ✦ A derivative settled by exchanging a fixed amount of cash or financial asset for a fixed number of own equity instruments.

Earn-outs – Contingent Consideration

140

- Most contingent arrangements do not meet the criteria to be classified as equity even when settled in shares.
- They tend to not have a fixed number of shares to be issued.

Earn-outs – Liabilities/Equity/Taxation

Earn-outs – Liabilities

142

- All contingent consideration - liability or equity - is recognized.
- Remember, liabilities are recorded at Fair Value on closing.
- Amounts may not be the same as probable future cash flows as they reflect all expected outcomes.

Earn-outs – Liabilities

143

- Reported results can be counterintuitive especially when contingent consideration is recorded as a liability.
- If the subsidiary performs better than expected the liability increases resulting in an additional expense.

Earn-outs – Liabilities

144

- If no further payments are made the liability is reversed through the income statement resulting in an imaginary gain.
- Not meeting the conditions also triggers a test for impairment of goodwill.

Earn-outs – Liabilities

145

Example

- Major Corp. also acquires Midget Inc. for \$1,000,000 with additional \$500,000 if subsequent earnings reach a cumulative \$1,500,000 in five years.
- Exceeding \$1,200,000, 20% below the target additional payment is \$380,000.
- Fair Value of net assets of Midget \$900,000.
- The Fair Value of the earn-out \$195,000.

Earn-outs – Liabilities

146

- On closing, it is not probable that any additional payment will be made.
- Over the next five years the cumulative earnings of Midget (before the additional payments) are \$2,000,000.
- At the end of year five Major Corp. pays \$500,000 as the target was met.

Earn-outs – Liabilities

147

Goodwill at date of acquisition	\$295,000
Liability recognized on closing	\$195,000
Reported results for the five years	\$1,695,000
Settlement of contingent consideration	Liability reduced to nil
Total goodwill after payment	\$295,000

Earn-outs – Liabilities

148

- If none of the conditions for payments were met the liability of \$195,000 would be reversed as an imaginary gain.
- An goodwill impairment test would be performed on Midget.
- If an impairment charge of \$100,000 is recognized that amount cannot be offset against the imaginary gain.

Earn-outs – Liabilities

149

- How shareholders are informed about contingent consideration can be a challenge for management.
- Prepare analyses of alternative outcomes on closing to understand the consequences for future payments or possible impairment.

Earn-outs – Liabilities

150

- The subsequent effect on performance may affect all aspects of the business where accounting-based measures are used.
 - Loan covenants.
 - Management remuneration.
 - Return on investment.

Earn-outs – Liabilities

151

- How a contingent consideration is settled affects debt covenants and debt/equity ratios.
- Discuss with bankers to clarify how they will be taken into account.
- Income statement effect is counterintuitive.

Earn-out Equity

152

Example

- Major Corp. buys the outstanding equity of Medium Ltd. for 2 million shares.
- It also agrees to issue an additional 100,000 shares if NuPro (under development at the acquisition) receives regulatory approval within two years.

Earn-out Equity

153

- Fair Value of shares is \$10.25 each.
- Fair Value of net assets is \$18,250,000.
- Fair Value of Earn-out is \$410,000 shown as equity.
- Goodwill is \$2,660,000.
- If earn-out is not paid \$410,000 goes to profit.
- If earn-out is paid at \$12.50 share Goodwill increases by \$840,000.

Earn-out Taxation

154

- Income tax consequences must be considered at an early stage.
- In most countries contingent consideration is incorporated in the tax base of the investment only when it is paid.
- The tax base of the asset (investment) and the liability differ from the accounting base on closing.

Earn-out Taxation

155

- It does not generate a deferred tax asset (on the liability) or a deferred tax liability (on the investment) due to exemptions in IAS 12 *Income Taxes*.
- Additional disclosure is required regarding the unrecognized deferred tax liabilities.
- While the liability is outstanding, changes in it usually do not have any tax effect.

Earn-out Taxation

156

- If the actual payment differs from the liability recognized on acquisition, the tax base will still be different.
- This may generate a deferred tax asset or liability depending on the entity's future plans and the likelihood of realising appreciation of the investment.

Fair Value of Contingent Considerations

Fair Value of Contingent Considerations

158

- Fair Value of a liability is the amount for which it could be settled between knowledgeable willing parties in an arm's length transaction.
- The impact on earnings of subsequent changes in contingent consideration determine the correct value at closing.

Fair Value of Contingent Considerations

159

- Each arrangement identifies appropriate methods reflecting the payout structure and associated risks.
- This requires more analysis and due diligence than for straight acquisitions.
- These estimates introduce new challenges and continue until the contingency is settled.

Fair Value of Contingent Considerations

160

- The challenges stem from the processes and methodologies required to quantify the risks and rewards associated with such arrangements.
- Many criteria are specific to the target or are not directly observable in the market.

Fair Value of Contingent Considerations

161

- The most reliable results in all circumstances are obtained from a probability-weighted payout.
- It requires considering the range of possible outcomes, their payouts and probabilities.
- The present value at closing of the probability-weighted payout is its Fair Value.

Fair Value of Contingent Considerations

162

Example

- Major Corp. acquires Handy Ltd. for \$5 million plus an additional amount:
 - If the trailing twelve months (TTM) earnings in two years time are \$1 million or less, nothing.
 - If the TTM earnings in two years are between \$1 million and \$2 million twice the actual amount.
 - If the TTM earnings in two years is greater than \$2 million three times the actual amount.

Fair Value of Contingent Considerations

163

- At the acquisition the projected twelve-month earnings of Handy in two years are:
 - High - \$0.8 million — 40%
 - Budget - \$1.5 million — 40%
 - Low - \$2.5 million — 20%

Fair Value of Contingent Considerations

164

- The probability-weighted payout is \$2.7 million made up of:
 - $(40\% \times \$0)$
 - $+ (40\% \times \$1.5 \text{ million} \times 2)$
 - $+ (20\% \times \$2.5 \text{ million} \times 3)$
- This total is then discounted for the two year period to estimate Fair Value.

Fair Value of Contingent Considerations

165

- The discount rate requires significant judgment reflecting, for example:
 - Time value of money 3.4%
 - Underlying risks 6.5%
 - Likelihood of non-payment 1.5%
 - 11.5%
- This makes the Fair Value \$2,172,000.

Fair Value of Contingent Considerations

166

- Fair Value is re-determined at the end of each reporting period requiring additional procedures in preparing interim and year-end financial statements.
- IFRS 13 *Fair value Measurement* indicates a liability can be measured based on the trading price of corresponding asset.

Fair Value of Contingent Considerations

167

- Based on this guidance Level 3 measurements of earn-out liabilities are often based on their value as an asset.
- In the absence of a real market a notional efficient market is assumed.
- As any arbitrage opportunity is captured, the Fair Value of the contingent consideration as a liability is the same as if it was an asset.

Fair Value of Contingent Considerations

168

- In a typical business combination the purchase price and forecast earnings are known allowing an internal rate of return (IRR) to be calculated.
- Forecast earnings typically involves risks.
- Actual cash flows are likely be higher or lower.

Fair Value of Contingent Considerations

169

- If cash flows are 10% higher the value of the entity will rise by a similar amount.
- The relationship between cash flows and value is generally linear.
- An earn-out is also a function of business performance but is non-linear.

Fair Value of Contingent Considerations

170

Example

- Major Corp. acquires NewCo for \$50 million cash plus simple earn-out based on first 12 months sales of new product just launched.

<u>Scenarios</u>	<u>\$'000</u>
Success (budget)	44,000
Survival (<20%)	35,200
Failure (>20%)	35,000

Fair Value of Contingent Considerations

171

Payment

- Success 5,000 +20% of excess
- Survival 5,000 -50% of shortfall
- Failure zero

Fair Value of Contingent Considerations

172

- Decision tree

<u>Scenario</u>	<u>Sales</u> \$'000	<u>Change</u>	<u>Payment</u>	<u>Probability</u>	<u>Product</u>
Success	48,400	10%	5,880	5%	294
	46,200	5%	5,440	10%	544
	44,000	0%	5,000	55%	2,750
Survival	41,800	-5%	3,900	5%	195
	39,600	-10%	2,800	5%	140
	37,400	-15%	1,700	5%	85
	35,200	-20%	600	5%	30
Failure	35,000		-	<u>10%</u>	-
				100%	4,038
Discount	1 year		12%		<u>(485)</u>
					<u>3,553</u>
Fair Value				Rounded	<u><u>3,550</u></u>

Fair Value of Contingent Considerations

173

- When determining an earn-out discount rate three kinds of risks are considered:

Associated with the underlying metric

- If the earn-out is based on revenues or EBITDA, this is typically the same as the firm's WACC.

Fair Value of Contingent Considerations

174

Related to the shape of the payoff

- Some binary earn-outs are less risky than WACC; others are option-like, paying a percentage of a metric (revenues or earnings) above a target and are much riskier.

Fair Value of Contingent Considerations

175

Counterparty risk

- Acquirer is responsible for making payments so the risk of non-payment is associated with its cost of debt.
- Estimating discount rates for non-linear payoffs is difficult.

Fair Value of Contingent Considerations

176

- Option-pricing models are often the best way to value this type of earn-out.
- The risk of the underlying metric revenue is included through a volatility estimate.
- The Fair Value of the earn-out is calculated as that of a call option.

Fair Value of Contingent Considerations

177

- A modified version of the Black-Scholes model may be used.
- The key input is volatility.
- It is measured relating to the underlying asset.

Fair Value of Contingent Considerations



- There are a couple of ways to do this:
 - Look at asset volatilities for companies comparable to the target.
 - Directly observe the volatilities of the revenues or EBITDA.
- Asset volatility is considered more reliable.

Fair Value of Contingent Considerations

179

- Many earn-outs are complex.
- Some specify that the seller gets a payment based on the amount by which some metric exceeds a target for example 50% of EBITDA over \$5 million.
- This payoff is a non-linear function of EBITDA with an asymmetrical distribution.

Fair Value of Contingent Considerations

180

- Valuing earn-outs needs multiple scenarios plus decision trees or an option-pricing model.
- Expected payments are based on the buyer's and the seller's expectations and their probabilities.
- Payments are probability-weighted and are discounted at a risk-adjusted rate.

Fair Value of Contingent Considerations

181

- Under an option-pricing model the earn-out formula is analogous to a call option instead of an all-or-nothing financing option.
- The methodology becomes complicated if path dependency exists.
 - Some specify contingent payments over multiple years with catch up provisions where disbursements in later years depend on past activities.
- This likely needs a Monte Carlo simulation.

Fair Value of Contingent Considerations

182

- All earn-out valuation methods are tailored to the unique factors affecting the underlying metric that triggers the payment.
- A critical step in the valuation is matching the expected distributions of the metric to an appropriate model.

Fair Value of Contingent Considerations

183

- For EBITDA or other earnings measures the expected distribution of future results is affected by:
 - Volatility of revenues.
 - Correlation with variable costs.
 - Level of fixed expenditures.
- The result may be approximately normal, bimodal, or some other pattern.

Fair Value of Contingent Considerations

184

- Anticipated revenues will have a very different pattern.
- Scenario-based models for EBITDA probabilities are significantly different from those of a revenue-based threshold.

Fair Value of Contingent Considerations

185

- Valuators think about two key things:
 - The full range of outcomes for the earn-out and their probabilities.
 - How to get realistic present values taking into account the risks associated with the resulting payments.
- Option-pricing theory is a good way.
- Get the auditor onside in advance and have skilled staff to review any complex structures.

Questions?

THANK YOU

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