Purchase Price Allocation for Account Reporting

Joseph C. Ho
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Revision

- **Types of valuation** – asset or business
- **Purpose of valuation** – many
- **Basis of value** – fair value, market value

Fair value = market value in most case
but fair value also **used for non-market value** for account reporting

- **Approach to value**
  – market, income and cost or asset-based (depends)
- **Reporting standards**
  – international, local
- **Qualified valuer**
  – knowledge, experience, licenced, able to sign the report

Contents

Terms to Remember - 1

- Purchase Price Allocation (PPA)
- Generally Accepted Accounting Principles (GAAP)
- Financial Accounting Standards Board (FASB) US-based
- International Accounting Standards Board (IASB) London-based
- Securities and Exchange Commission (SEC) US
- Norwalk Agreement (2002) between FASB and IASB to make their standards fully compatible

Terms to Remember - 2

- Cash Generating Unit (CGU)
- Value-in-use Vs Fair Value
- Statement of Financial Accounting Standards No. 157, Fair Value Measurement (SFAS No. 157)
- Statement of Financial Accounting Standards No. 141, Business Combinations (SFAS No. 141)
- Then, Statement of Financial Accounting Standards No. 141R, Business Combinations (SFAS No. 141R)
- Statement of Financial Accounting Standards No. 142, Goodwill, and other Intangible Assets (SFAS No. 142)

Terms to Remember - 3

- Purchasing accounting
  – determine the total purchase price paid for an entity and allocate that purchase price to the various assets acquired
- Intangible Asset (IA):

  Asset (excluding financial asset) that lack physical substance
  - Marketing-related intangible assets, trademarks
  - Customer-related intangible assets, customer lists
  - Artistic-related intangible assets, books, music
  - Contract-based intangible assets, licensing, lease
  - Technology-based intangible assets, patent, software
- Intellectual property (IP) include copyrights, trademarks, patents, industrial design and trade secrets
- Tax Amortization Benefits (TAB)

Terms to Remember - 4

- The **IASC Foundation**

  - an independent, not-for profit private sector organisation working in the public interest. One of its principal objectives is to develop a single set of high quality, understandable, enforceable and globally accepted international financial reporting standards (IFRSs) through its standard-setting body, the IASB.

- **IASB**

  - the independent standard-setting body of the IASC Foundation. Its members (currently 15 full-time members – one is Zhang Wei-Guo from China) are responsible for the development and publication of IFRSs.

Terms to Remember - 5

- More than 100 countries (including Hong Kong) have converged with IFRSs for all or some companies or are in the process of doing so.
- Key jurisdictions that have a convergence programme in place but have not completed their convergence include the United States (where the IASB and the US Financial Accounting Standards Board are working to align IFRSs and US GAAP), Canada (which plans to require listed companies to use IFRSs within five years) and Japan (which has a joint programme for convergence with the IASB).
- Further, Mainland China recently released its Chinese Accounting Standards System that brings about substantial convergence with IFRSs from 2007 for listed companies.

Terms to Remember - 6

HKICPA – Hong Kong Institute of Certified Public Accountants
– Under Chapter 50 Laws of Hong Kong – Professional Accountants Ordinance

- Hong Kong Financial Reporting Standards - includes all Hong Kong Financial Reporting Standards (HKFRSs), Hong Kong Accounting Standards (HKASs) and Interpretations approved by Council and currently in issue.

- HKASs shall be applied to all general purpose financial statements prepared and presented in accordance with HKFRSs.

- HKFRS 3 published in 2004. Then, HKFRS 3 Revised 2010 applied to annual reporting on or after 1 July 2009. HKFRS set out recognition, measurement, presentation and disclosure requirements dealing with transactions and events that are important in general purpose financial statements.

- Also, HKASs –
  - 16 – Property, Plant and Equipment
  - 36 – Impairment of Assets
  - 38 – Intangible Assets
  - 40 – Investment Property

Development - 1

Relationship between IFRSs and HKFRSs

- **Preface to Hong Kong Financial Reporting Standards**
  - Council has mandated the Financial Reporting Standards Committee (FRSC) to develop financial reporting standards to achieve convergence with IFRSs issued by the International Accounting Standards Board (IASB). Within this remit, Council permits the FRSC to work in whatever way it considers most effective and efficient and this may include forming advisory sub-committees or other forms of specialist advisory groups to give advice in preparing new and revised HKFRSs. In 2001, Council adopted the policy of achieving convergence of HKFRSs with IFRSs. HKFRSs were fully converged with IFRSs with effect from 1 January 2005.
  - Council understands that close co-ordination between the HKICPA's and IASB's due processes is important to the success of achieving convergence of HKFRSs with IFRSs. Council has aligned the HKICPA's due process, including the timing of issuing exposure drafts, standards and interpretations, as closely as possible with the IASB's due process as a result of its convergence policy.

    - following publication of the finalised IFRS or Interpretation of IFRS, considering the changes made, if any, by the IASB and adopting the finalised IFRS or Interpretation of IFRS in Hong Kong with the same effective date;

Development - 2

- **Version 1**
  - HKFRS 3 (August 2004)
  - IFRS 3 (April 2004)
  - SFAS No.141 (June 2001)

- **Version 2**
  - HKFRS 3 (Revised) (May 2010)
  - IFRS 3 (Revised) (2008)
  - SFAS No. 141R (Dec 2007)

Differences

- The revised requires an acquirer to recognize all of the assets acquired and all of the liabilities assumed, as well as any minority (that is, noncontrolling) interest (in acquisitions of less than 100 percent of the target company's stock), at their respective fair values at the acquisition date.

- It deals with so-called bargain purchases, that is, acquisitions where the sum of the fair values of the identifiable net assets acquired exceeds the consideration paid. These so-called "negative goodwill" situations arise where goodwill is measured on a residual basis as the excess of the consideration paid over the fair values of the identifiable net assets acquired, is negative. In other words, goodwill is measured as the difference at acquisition date between the fair value of any investment in the business held before the acquisition, the consideration transferred and the net assets acquired. Negative goodwill will appear in P&L, not balance sheet.

- Acquisition-related costs are generally recognised as expenses (rather than included in goodwill).

- Contingent consideration. Contingent consideration must be recognised and measured at fair value at the acquisition date. Subsequent changes in fair value are recognised in accordance with other IFRSs, usually in profit or loss (rather than by adjusting goodwill).

When PPA is Required

For the allocation of an overall business purchase price for financial accounting purpose.

Conditions

- **Business combination**
  - whereby one company (the acquirer), when purchasing a second company (the target), a going-concern business, assigns new values to the target's assets and liabilities based on the price paid.

- Purchase price allocations are performed in conformity with the **purchase method** of merger and acquistion accounting. This is a deal-based.

From a Valuer's Perspective

- More accurately reflect components of a company's Worth

- Give investors more information about a company's intangible value

- Give more job (valuation) opportunities – PPA (by stages), Impairment Test on CGU / Goodwill, Intangible Asset

How?

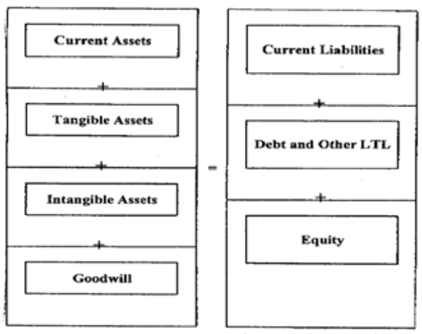
- **Fair value** – accounting term, guidance on measuring fair value is distributed across many IFRSs, and it is not always consistent.

- Fair value may or may not equal to market value from a valuer's perspective

- Fair value is the **amount** for which an asset could be **exchanged**, or a liability settled, between **knowledgeable**, **willing parties** in **an arm's length transaction**.

- Market value is the **estimated amount** for which a property should **exchange** on the date of valuation between a **willing buyer and a willing seller** in **an arm's-length transaction** after proper marketing wherein the parties had each acted **knowledgeably**, prudently, and without compulsion.

Theory - 1



Theory - 2

- A procedural valuation by allocating the purchase price to the acquired assets and liabilities at their fair values as at the acquisition date.

- Fair value approach is required.

- Similar to Asset-based Approach, but on the reverse side

Theory - 3

- The overall business purchase price of a target company should be properly pertain, on a separate basis, to working capital; Plant, Property, and Equipment; and identifiable intangible assets; and the difference between the sum of the fair value of each asset and the total purchase prices shows up as goodwill. In other words, valuer is required to structure the overall business purchase price of the target company by appropriately allocating the overall business purchase price of the target company into different category of assets of a balance sheet to serve the requirements of the applicable accounting standards as at acquisition date.

Keys to Success

- Determine the purchase price – more than cash
- Equity valuation of the acquirer (a closely held) to determine its stock's value if purchase price includes the payment of its stock
- Identify all acquired assets, tangible and intangible
- Identify if the sum of the fair values of the assets may exceed the purchase price
- Be prepared to deal with indefinite life / unknown life of assets
- Goodwill is a procedural residue value, by calculation, not by valuation

Procedures

- Determine Purchase Price and Total Asset Base
- Identify Components of Total Asset Base
  - Current Assets
  - Tangible Assets
  - Intangible Assets
  - Goodwill (remainder)
- Allocate Value to Company's Asset Components (Valuation on asset-by-asset)
- Reconciliation of Asset Conclusions

Identified Assets

- **Current Assets**
  – cash, inventory, account receivables
- **Marketable Securities**
- **Non-marketable Securities**
  - Investment (subsidiaries or associates)
- **Property, plant and equipment**
- **Identified IA**:
  - Software
  - Assembled workforce
  - Trademark
  - Trade Name
  - Agreements (exclusive or non-compete)
  - Technology
  - In-process Research
  - Customer Relationship
  - Goodwill

Valuation Approach - 1

- **Income Approach**
  - Project Cash Flows Attributable to Asset Over its Useful Life – Similar to Discounted Cash Flow Analysis
- **Market Approach**
  - Identify Transactions of Similar Assets and Use as a Guideline to Value
- **Cost Approach**
  - Cost to Replace an Asset

Valuation Approach - 2

- **Current Assets**
  – cash, inventory, account receivables
- **Marketable Securities**
- **Non-marketable Securities**
  - Investment (subsidiaries or associates)
- **Property, plant and equipment**
- **Identified IA**:
  - Software
  - Assembled workforce
  - Trademark
  - Trade Name
  - Agreements (exclusive or non-compete)
  - Technology
  - In-process Research
  - Customer Relationship
  - Goodwill

Valuation Approach - 3

- IA
  - **Cost or Income**
    - Cost to re-create - record
    - Relief from Royalties – royalty rate, discount rate
    - Before and after DCF – growth rate, discount rate and remaining life
    - Multi-period Excess Earnings (NPV) – growth rate, discount rate and remaining life
  - **Market? No way.**

Valuation Approach - 4

- Discount rate
- Different asset has different rate
- IA higher than fixed asset or working capital, in most cases, cost of equity is used for IAs are funded by equity
- Usually:
  - Working capital – short term lending rate
  - Fixed assets – market return, the lowest – financing rate
  - Workforce, customer relationship, trademarks and trade name – WACC for young companies
  - Patent – WACC or high risk adjustment
  - Others – market or relevant risks

Valuation Approach - 5

- Determine Goodwill Value
  - Goodwill = Amount Paid in Excess of Identified Assets
  - Value of Goodwill = Total Asset Base – Identified Assets
  - Goodwill is the Value Remaining
  - Reasons for Goodwill include Expected Synergies,
  - Factors Difficult to Quantify
  - Negative Goodwill: Value Assets>Purchase Price

Outcome 1

From CATIC ShenZhen Holdings Limited Annual Report 2008

41 業務合併(續)

(b) 收購廣東國際大廈(續)

自收購日期至二零零八年十二月三十一日，收購業務為本集團帶來人民幣124,476,000元之收益及人民幣102,414,000元之虧損淨額。已收購資產淨值及商譽詳情如下：

41 BUSINESS COMBINATIONS *(continued)*

(b) Acquisition of GIB Company *(continued)*

The acquired business contributed revenues of RMB124,476,000 and net loss of RMB102,414,000 to the Group for the period from the date of acquisition to 31st December 2008. Details of net assets acquired and goodwill are as follows:

		人民幣千元 *RMB'000*
於二零零七年預付之收購代價	**Purchase consideration prepaid in 2007**	
–已付現金	– cash paid	300,000
–有關收購之直接成本	– direct costs relating to the acquisition	16,950
總收購代價	**Total purchase consideration**	316,950
–已收購之可識別資產及負債公允價值淨額（見下文）	– Fair value of net identifiable assets and liabilities acquired (see below)	(317,054)
應佔已收購資產淨值超出收購代價之金額	Excess of share of net assets acquired over purchase considerations	(104)

Outcome 2

From CATIC ShenZhen Holdings Limited Annual Report 2008

Annual Report 2008 年度報告

綜合損益表
Consolidated Income Statement

截至二零零八年十二月三十一日止年度 For the year ended 31st December 2008

		附註 Note	二零零八年 2008 人民幣千元 RMB'000	二零零七年 2007 經重列 Restated 人民幣千元 RMB'000
收入	Revenue	6	4,077,074	3,357,210
銷售成本	Cost of sales	33	(3,013,557)	(2,582,646)
毛利	**Gross profit**		1,063,517	774,564
銷售費用	Distribution costs	33	(274,007)	(166,085)
行政費用	Administrative expenses	33	(562,748)	(340,544)
其他收入	Other income	31	56,515	24,440
其他收益－淨額	Other gains-net	32	33,935	43,183
經營溢利	**Operating profit**		317,212	335,558
本集團所佔聯營公司可辨認資產、負債及或然負債淨公允值超出投資成本之差額	Excess of the Group's share of the net fair value of an associate's identifiable assets, liabilities and contingent liabilities over the cost of the investment	14	–	60,065
本集團所佔附屬公司可辨認資產、負債及或然負債淨公允值超出投資成本之差額	Excess of the Group's share of the net fair value of a subsidiary's identifiable assets, liabilities and contingent liabilities over the cost of the investment	41(b)	104	–

Outcome 3

From CATIC ShenZhen Holdings Limited Annual Report 2008

收購產生之資產及負債如下：

The assets and liabilities arising from the acquisition are as follows:

		公允價值 **Fair value** *人民幣千元* *RMB'000*
現金及現金等價物	Cash and cash equivalents	23,711
存貨	Inventories	1,965
應收款項	Receivables	100,511
土地使用權(*附註7*)	Land use rights *(Note 7)*	506,843
物業、廠房及設備(*附註10*)	Property, plant and equipment *(Note 10)*	297,077
在建工程(*附註12*)	Construction-in-progress *(Note 12)*	417
投資物業(*附註11*)	Investment properties *(Note 11)*	542,190
應付款項	Payables	(345,553)
遞延稅項負債(*附註17*)	Deferred tax liabilities *(Note 17)*	(224,422)
借貸	Borrowings	(480,000)
資產淨值	Net assets	422,739
少數股東權益(25%)	Minority interests (25%)	(105,685)
已收購可識別資產淨值	Net identifiable assets acquired	317,054
年內收購附屬公司之現金及現金等價物	Cash and cash equivalents in subsidiary acquired during the year	23,711

Outcome 4

From I.T. Limited Annual Report 2008/2009

33 BUSINESS COMBINATION – CONSOLIDATED

On 1 March 2008, the Group acquired the remaining 49% of the equity interest in Top Alliance Enterprises Limited, a then jointly controlled entity of the Group, at a cash consideration of HK$1,780,000. The acquired business contributed revenues of HK$28,297,000 and net profit of HK$3,407,000 to the Group for the period from 1 March 2008 to 28 February 2009.

Details of net liabilities acquired and goodwill are as follows:

	HK$'000
Purchase consideration:	
– cash paid	1,780
Fair value of net liabilities acquired (shown as below)	18,622
Investment in a jointly controlled entity disposed of (Note 18(a))	(16,078)
Goodwill (Note 16)	4,324

The goodwill is attributable to the workforce of the acquired business and the significant synergies expected to arise after the acquisition by the Group.

The assets and liabilities arising from the acquisition are as follows:

	Acquiree's carrying amount HK$'000	**Fair value** HK$'000
Cash and cash equivalents	3,076	3,076
Furniture and equipment	1,029	1,029
Inventories	5,327	5,327
Trade and other receivables	2,392	2,392
Prepayments and other deposits	2,135	2,135
Amount due to a related company	(18,745)	(18,745)
Amount due to a shareholder	(11,479)	(11,479)
Accruals and other payables	(2,357)	(2,357)
Net liabilities acquired	(18,622)	(18,622)
Inflow of cash to acquire business, net of cash acquired:		
– cash consideration		(1,780)
– cash and cash equivalents in subsidiaries acquired		3,076
Net cash inflow on acquisition		1,296

Outcome 5

XYZ Company
Purchased Price Allocation by using the
Business Enterprise Residual Method
As at 30 November 2007

	Notes	HK$
Purchased Price of Entire Equity Interest	1	688,000,000
Allocated to		
Non-current Asset in Support	2	
Net fixed assets in support		58,751,876
Investments in jointly controlled entities		47,692,331
Rental deposits		19,672,763
Deferred income tax assets		17,368,545
Net Working Capital	3	(9,568,326)
Non-current Liabilities	4	54,459,295
Intangible Assets		
Contract Intangible - Franchise Shops	5	30,656,116
Residual value attributable to Goodwill	HK$	468,967,400

Note: Figures may not add total after rounding

Notes
1 From the Company
2 From the unaudited balance sheet provided on 30 November 2007
3 By deducting current liabilities from the current assets
4 The licence payable to I.T and the shareholder loan to Sunport Holdings were excluded

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