A Proposal for Goodwill Accounting

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The Current Accounting for Goodwill

Plugging to Goodwill

Accounting never accounts with a plug

Except....

.... for the accounting for goodwill

Goodwill is thus a mystery:

What is it?

What is being impaired?

This Paper

- Proposed accounting that connects goodwill to the economics of the business transaction
- Goodwill thus gets definition:

  … Initial recognition: What the acquirer is buying

  … Subsequent recognition: What is being impaired
- The proposal harmonizes with an accounting for intangibles assets more generally

The Concept Behind the Current Accounting

IFRS 3 and FASB Statements 141 (ASC 805) and 142 (ASC 305)

The acquirer is buying:

Balance sheet assets and liabilities (at fair value)

plus

Identified assets not on the balance sheet (at fair value)

plus

A plug

The Oddities

- Goodwill is a mystery
- Identified intangible assets acquired are recognized but not identified intangible assets in the acquirer
- The price premium paid, a focus in acquisitions, is not in the accounting
- Fair value of net assets acquired is not their fair value

The Conceptual Problem

Assets do not generate value individually but jointly

So the acquirer is buying the fair value of assets used jointly, not individual assets at their fair value.

An Accounting Property

There is also an Income Statement

The value of assets used jointly is given by earnings

The earnings include those from assets not on the balance sheet

The Proposed Accounting for Goodwill

The Concept Behind the Proposed Accounting

The acquirer is buying balance sheet net assets

plus

Earnings that the on-balance-sheet net assets and off-balance sheet assets produce jointly

plus

Potential growth in those earnings

plus

Added earnings from the combination (synergies)

The Four Components of Value in the Purchase Price

Buying a Balance Sheet, Earnings, Earnings Growth, and Synergies

Book Value of the target: recorded net assets

plus

Value in the target’s current earnings from net assets used jointly

plus

Value from expected growth in earnings of the target

plus

Added value from combining the target with the acquirer

Fair Value in the Target from Assets Used Jointly

$$P_t = B_t + \sum_{\tau=t+1}^{\infty} \frac{OI_\tau - r.NOA_{\tau-1}}{(1+r)^\tau}$$

$$= B_t + \frac{(OI_t - r.NOA_t)}{r-g}$$

$$= [B_t + \frac{(OI_t - r.NOA_t)}{r}] + Value\ of\ Growth$$

1

2

Implementation: Building Block 1

1. Fair value is target without growth:

$$B_t + \frac{(OI_t - r.NOA_t)}{r}$$

Implementation: Building Blocks 1 and 2

1. Fair value is target without growth:

$$B_t + \frac{(OI_t - r.NOA_t)}{r}$$

2. Price of growth acquired:

$$Price\ of\ target\ pre\text{-}acquisition - B_t + \frac{(OI_t - r.NOA_t)}{r}$$

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3. Value of combination:

$$Price\ paid - Price\ of\ target\ pre\text{-}acquisition$$

(the price premium)

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(the price premium)

Goodwill = 2 + 3

Some Examples

(USD billions)

.		PG- Gillette 2005		MSFT- Activision Blizzard 2022		MRK- Prometheus Bio 2023
Book value of net assets acquired		3.6		17.6		0.7
+						
Added value of earnings acquired		19.3		24.4		(1.5)
		22.9		42.0		(0.08)
+						
Value of growth acquired	25.4		4.0		5.9	
+						
Value of combination	8.7	34.1	22.7	26.7	5.7	11.6
Purchase Price		57.0		68.7		10.8

Journal Entry for the Acquirer

MSFT - Activision Blizzard:

	Dr.	Cr.
Assets acquired (at book value)*	17.6	
Added fair value of assets acquired	24.4	
Goodwill – Value of Growth acquired	4.0	
Goodwill – Value of Combination	22.7	
Cash (or Common Stock)		68.7

*Individual net assets added to the same net assets in the acquirer's balance sheet

Comparisons with GAAP

$ millions

Year	Acquirer	Target	Purchase price	GAAP Goodwill	Proposed Goodwill	Value of Growth Acquired	Value of Combination
2006	Anadarko Petroleum Corp	Western Gas Resources Inc	4773.0	104.0	3051.4	2013.2	1038.3
2007	LSI Logic Corp	Agere Systems Inc	3720.2	1584.3	2989.4	2095.6	893.7
2005	Adobe Systems Inc	Macromedia Inc	3538.5	2022.7	2822.7	2200.8	621.8
2012	Hologic Inc	Gen-Probe Inc	4051.4	1652.5	2281.5	1630.9	650.6
2007	Teleflex Inc	Arrow International Inc	2104.0	1042.0	1347.8	955.6	392.2
2004	Ferrellgas Partners LP	Blue Rhino Corp	414.8	137.3	156.7	67.9	88.8
2004	Tektronix Inc	Inet Technologies Inc	545.9	220.9	225.9	70.0	155.9
2010	Microsemi Corp	White Electronic Designs Corp	170.9	45.6	46.1	7.2	38.8
2006	Oshkosh Truck Corp	JLG Industries Inc	3314.6	1809.3	1709.6	570.8	1138.8
2014	Tyson Foods Inc	Hillshire Brands Co	8408.9	4804.0	4143.0	453.7	3689.3
2010	Boeing Co	Argon ST Inc	797.6	549.0	290.3	-19.7	310.0
2011	Danaher Corp	Beckman Coulter Inc	5652.4	3745.8	1306.9	-552.0	1858.9

Subsequent Carrying Values

Subject to depreciation or amortization:

Assets acquired (at book value)

Subject to impairment:

Added fair value of assets acquired

Goodwill – Value of Growth acquired

Goodwill – Value of Combination

Example: PG impaired Gillette acquisition goodwill because of lower expected profit from Gillette products

A Modification

Accounting for uncertainty of future benefits

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Do not book components if the investment does not meet the "probability of future benefits threshold" as with the criteria for Development capitalization under IAS 38.

The accounting for goodwill is thus unified with the accounting for intangible assets

The Empirical Analysis

- The proposed goodwill number predicts impairments of GAAP goodwill
- The proposed goodwill number predicts returns subsequent to the acquisition:

  High goodwill predicts lower returns over subsequent 36 months

  Low goodwill predicts higher returns over subsequent 36 months

The proposed goodwill number thus indicates over- and underpricing of the acquisition