What is goodwill?

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1 Introduction

In 2002, HP acquired Compaq. This acquisition gave rise to the purchase price allocation shown in Table 1. The total consideration paid by HP was more than $ 24 billion. In a purchase price allocation, all tangible and intangible assets have to be identified and recorded. The tangible assets are relatively small, with $ 3 billion in property, plant and equipment and $ 1.7 billion in inventory. In contrast, the total value of the intangible assets is some $ 19.5 billion. The identifiable intangible assets amount to approximately $ 5 billion, and the goodwill that remains is $ 14.5 billion. This goodwill cannot be recovered from the current customers, since they are identified separately, nor from existing technological developments, nor from the brand name Compaq (which is the single 'intangible asset with an indefinite life'). Thus, it needs to come from further developing the customer base, or from capitalizing on the product trademarks. Furthermore, the existing synergetic benefits in the Compaq organization may be a large part of the goodwill.

Cash and cash equivalents	3,615
Accounts receivable	4,305
Financing receivables	1,241
Inventory	1,661
Current deferred tax assets	1,475
Other current assets	1,146
Property, plant and equipment	2,998
Long-term financing receivables and other assets	1,914
Amortizable intangible assets:	
Customer contracts and lists, distribution agreements	1,942
Developed and core technology, patents	1,501
Product trademarks	74
Intangible asset with an indefinite life	1,422
Goodwill	**14,450**
Accounts payable	(2,804)
Short-and long-term debt	(2,704)
Accrued restructuring	(960)
Other current liabilities	(5,933)
Other long-term liabilities	(1,908)
In-process research and development	735
Total purchase price	**24,170**

Table 1. Purchase price allocation of HP's payment of $ 24.2 billion for Compaq (in $ million).

In the HP-Compaq merger, 20% of the purchase price is allocated to previously unrecognized assets, and 60% to the goodwill asset. The U.S. standard FAS 142 defines goodwill as 'the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.' The international standards IFRS 3 defines goodwill as 'future economic benefits arising from assets that are not capable of being individually identified and separately recognized.' Both definitions do not give much substance to the concept of goodwill. Thus, the following question arises: what does the goodwill asset – in the case of HP totalling $ 16 billion – exactly represent? How do firms view goodwill? As an asset to be managed? An accounting construct? Or as an accounting nuisance? Something which leads to impairments and thus lower profits, or an amount that has to be justified from time to time?

In his research and teaching, Jan Bilderbeek always has taken a broad view on business, financial management, and accounting. Rather than focusing on details or subfields, he stresses that managing an organization requires sound thinking, realistic choices, and a recognition of all stakeholders' interests – even though it may not always be possible to meet all of those interests. I still remember being told as a student in his lectures on financial management that the first rule of management should be 'Don't be stupid' – don't build a big head office when your operations are making losses; a focus on shareholders doesn't automatically result in satisfied customers; don't develop new corporate logos to tackle corporate culture; and don't go buying other companies just to be larger than your competitor. In that respect, the concept of goodwill is directly related to sound company management: given that all other tangible and intangible benefits have been identified, how is the acquirer going to recover the extra amount it paid for the remainder of the target's value – a value which did not exist when the target was a separate entity?

In this contribution, we will discuss the goodwill concept as it is treated in the financial reporting standards, and in the literature. We also include the results of several pilot interviews with financial directors and controllers of companies that recently paid substantial goodwill for an acquisition.

2 Goodwill in standards

2.1 The nature of goodwill

Goodwill arises in business combinations, and therefore its nature is discussed in the standards on business combinations (FAS 141 and IFRS 3) rather than those on intangible assets and goodwill (FAS 142 and IAS 36). The following definitions apply:

> 'The excess of the cost of an acquired entity over the net amounts assigned to assets acquired and liabilities assumed.' (FAS 141)
>
> 'Future economic benefits arising from assets that are not capable of being individually identified and separately recognised.' (IFRS 3)

Note that FAS 141 uses the measurement as the definition. However, in the basis for conclusions of FAS 141, the nature of goodwill is discussed. FAS 141.b102 states that the amount that in practice has been recognized as goodwill includes the following components:

1. excess of fair values of the assets of the target over its net assets. This is not part of goodwill, since it reflects unrecognized gains that were already present.
2. fair values of assets that had not been recognized by the target. These mainly are the intangibles that need to be recognized in a purchase price allocation process; as such, this is not part of goodwill.
3. the fair value of the going concern element of the target: the ability to earn a higher rate of return than from an assembled collection of net assets that are acquired

separately. This is the internally generated goodwill of the target, and it is part of the goodwill of the combination.

4. the fair value of the expected synergies, which are unique to the combination. This is also part of the combination's goodwill.
5. overvaluation of the consideration for the target, especially in case of share-based payments. This is a measurement error, and not part of goodwill.
6. overpayment or underpayment by the acquirer, in case of a bidding war, or a sale in distress. These are losses or (in the case of underpayment) gains for the acquirer, and not part of goodwill.

The two components of goodwill are the going concern element of the target and the synergies in the combination. The going concern element arises from the synergies of the target's existing assets, and from factors such as the ability to earn monopoly profits and barriers to entry. It is emphasized that the first, second, and fifth component should be excluded as much as possible from goodwill. So according to FAS 141, 'true' goodwill is equal to synergy effects. Note that this reasoning goes further than the definition of goodwill as a residual value, as FAS 141 does.

IFRS 3 concurs with FAS 141 in the measurement of goodwill, but defines it differently: future economic benefits from assets that are not capable of being individually identified and separately recognised. Although this definition seems more substantial, it still comes down to defining a residual, since it relates to the benefits that cannot be attributed to individual assets. Like FAS 141, IFRS 3.bc130 lists a number of components that could be part of goodwill when mesaured as a residual:

1. the fair value of the going concern element of the target
2. the fair value of the expected synergies
3. overpayments by the acquirer
4. errors in measuring the target's assets (and liabilities), or the cost of the business combination

The first two components are defined as in FAS 141.b102, and are also considered 'true' goodwill. We can conclude that both FAS 141 and IFRS 3 view goodwill as synergy. This is possible because both standards stress the importance of identifying all separate assets that are acquired in a business combination. The list of intangible assets that need to be recorded in a purchase price allocation procedure consists of five groups: marketing-related assets, customer-related assets, artistic-related assets, contract-based assets, and technology-based assets (see the appendix to this paper). These assets include many items that used to be associated, if not equated, with goodwill. For example, in APB Opinion no 17, goodwill is defined as 'among those intangible assets and conditions which give rise to above-average strength in terms of technical skill and knowledge, management, marketing research and promotion which cannot be separately identified and valued.' (paraphrased by Chauvin and Hirschey, 1994, 162) However, in forcing the identification of separate assets for as much of the total purchase price as possible, what is left under the heading goodwill is not allowed to have any substance. Instead, its value comes from actions (in the form of synergies), not assets.

2.2 Locating goodwill in the combination

The business combination standards deal with the initial identification of goodwill. Once it is recorded, goodwill is not depreciated on a regular basis, but annually tested for impairment. However, due to the consistent interpretation of goodwill as a residual, it cannot be readily 'found' in the business combination. To be able to perform the impairment test, the recorded goodwill has to be allocated somewhere in the business combination. [1] According to FAS 142 (Intangible assets), goodwill is 'naturally associated' with certain activities within the combination:

> 'Goodwill shall be asssigned to reporting units of the acquiring entity that are expected to benefit from the synergies of the combination even though other assets or liabilities of the acquired entity may not be assigned to that reporting unit.' (FAS 142.34)

> '... keeping track of acquisition-specific goodwill for impairment purposes would be almost impossible once an acquired entity was integrated with the acquiring entity. ... synergies occur below the combined entity level and (...) management is often held accountable for acquisitions at a lower level.' (FAS 142.b86)

> '... goodwill by its nature will be associated with the operations of an entity at different levels–possibly different levels within the same overall entity. ... a reporting unit [should] be the level of internal reporting that reflects the way an entity manages its business or operations and to which goodwill naturally would be associated.' (FAS 142.b102)

Similarly, IAS 36 struggles with the question how goodwill can be attributed to organizational activities (it uses the concept of cash-generating unit as the smallest group of assets that generates cash flows independently):

> 'For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units or groups of units. Each unit or group of units to which the goodwill is so allocated shall (...) represent the lowest level within the entity at which the goodwill is monitored for internal management purposes...' (IAS 36.80)

> '... because acquired goodwill does not generate cash flows independently of other assets or groups of assets, it can be tested for impairment only as part of impairment testing the cash-generating units to which it relates... there should be a link between the level at which goodwill is tested for impairment and the level of internal reporting that reflects the way an entity manages its operations and with which the goodwill naturally would be associated. Therefore, (...) goodwill should be tested for impairment at a level at which information about the operations of an entity and the assets that support them is provided for internal reporting purposes.' (IAS 36.bc139)

Thus, both standards invoke 'natural assocations' as the basis for allocation of goodwill within the organization. Again, this is the consequence of defining goodwill as a residual, which is not identifiable as such but arises from synergies within the business combination's activities. To emphasize this point, both standards stress that the

[1] Watts (2003, p 218) suggests that this approach is fundamentally impossible: 'Assessment of the value of a firm and its implied goodwill is extremely subjective... Assessing the value and implied goodwill of reporting units is even more difficult. Not only are values and estimates of implied goodwill unverifiable; if there are any significant synergies at all among the units, then there is no meaningful way to allocate future cash flows, value, and goodwill among units. Synergies imply joint costs and benefits and, as mangerial accounting texts recognize, allocation of joint costs and benefits for valuation purposes is arbitrary and meaningless.'

allocation of tangible or even intangibles assets is not required for an entity to generate goodwill. By its nature, goodwill must be associated with certain activities, and should therefore have a 'logical' place in the organization, reflecting 'the way an entity manages its business or operations' (FAS 142.b102).

3 Literature review

3.1 Definition of goodwill

The definition of goodwill in the literature is straightforward at first glance. In general, definitions are along the line of a premium, or excess, of purchase price over value of individual assets. However, defining goodwill as the difference between purchase price and total asset value, is really a way of measuring it (Falk and Gordon, 1977, 444). As Bryer (1995, 286) states:

> 'All sides of the goodwill debate agree that goodwill is *measured* as the difference between the market value of an entity at any point in time and the fair value (either the replacement cost, recoverable amount or net realizable value) of its net assets, including any separately identifiable intangible assets (such as trademarks, copyrights, patent rights).'

3.2 Interpretations of goodwill

Since most papers provide a goodwill definition following the measurement approach, it is more instructive to take a look at the interpretation of goodwill rather than list the various definitions.

Measurement inability

The most extreme position seems to be that goodwill only exists because we cannot identify and measure all intangible assets correctly. Surprisingly, this position comes from older sources.

> 'If we were omniscient it would be possible to name all of the intangible assets (as well as the tangible assets) and to calculate for each its net present value. This would mean that we would also have values for all assets such as "special skill and knowledge," "high managerial ability," etc., – i.e., if they existed. There would be no Goodwill item as such.' (Gynther, 1969, 248)

In this interpretation, goodwill is a convenience item for accountants who do not accurately identify and value all assets of a firm or business combination, although both authors concede that practical limits can justify the use of a residual 'goodwill' item.

Surplus profit

Bryer (1995) quotes a source from 1891 that discusses goodwill as the cost of surplus profit. This interpretation requires a 'normal' rate of return on capital for the line of business of the target firm, and the return of the target firm must lie above that normal rate. APB Opinion no 17 from 1970 (paraphrased by Chauvin and Hirschey, 1994, 162) states that 'goodwill represents the value derived from a firm's ability to generate above-normal earnings.' The interpretation of goodwill as surplus profit is also discussed by Falk and Gordon (1977) and Ma and Hopkins (1988), with both papers noting that it really is a way of measuring goodwill (with the added complexity of determining which part of the profit is surplus).

Firm qualities

In APB Opinion no 17, goodwill is defined as 'among those intangible assets and conditions which give rise to above-average strength in terms of technical skill and knowledge, management, marketing research and promotion which cannot be separately identified and valued' (paraphrased by Chauvin and Hirschey, 1994, 162). Goodwill is seen as the value of specific firm qualities. An early American authority on goodwill, Leake, defined goodwill as 'any or all such property as business connections associated with names, persons and places of business, trade marks, patents and desings, copyrights, and the right to exercise monopolies' (as cited by Nelson, 1953, 491). This interpretation is difficult to separate from discussions on sources of goodwill. However, the question 'what is goodwill' is often answered in such terms, for example by Grinyer et al. (1990, 229):

> '... a successful ongoing business is worth considerably more than would have to be paid for an identical set of physical resources if starting the business from scratch. Sales potential has been created by earlier advertising, selling effort and a history of product quality and of reliable and reasonably priced service to customers. Furthermore, the firm has established organizational structures, relationships with employees, operating skills and other attributes which take money and time to put in place. The worth of all such valuable intangible assets that are not separately identified on the balance sheet could collectively be termed 'goodwill'.'

Related arguments can be found in e.g. Falk and Gordon (1977, 448-449), Chauvin and Hischey (1994, 167), and Bryer (1995, 286). Mueller and Supina (2002, 233) even limit goodwill to brand capital, it seems: 'The concept of *goodwill* or *brand capital* is commonly employed by analysts in business and marketing to measure the asset value of a company name or brand name.' (emphasis in original) Tearney (1973, 44) takes the interpretation of goodwill as firm characteristics to its logical conclusion:

> '... an investigation should be undertaken of an acquired company's operations to enable identification of all assets purchased in the combination. The implementation of this approach should eliminate the necessity of using the term "goodwill." Whenever an acquired entity does possess excess profitability (theoretical goodwill), the underlying reasons for this excess could be identified, valued and recorded, rather than ignored and arbitrarily labeled "goodwill."'

Thus, according to Tearney (1973), goodwill has no place at all in accounting standards, and it should be eliminated by identifying the reasons why an acquirer is willing to pay for the "goodwill".

The essential feature of interpreting goodwill in terms of firm qualities is that goodwill is equated with certain observable firm characteristics, rather than with external views of the firm held by the customer or as *unobservable* firm characteristics to be realized by synergies.

Continued customer patronage and reputation

Within the accounting literature, tax definitions of goodwill have received little attention. This is undoubtedly due to the national orientation of tax rules. Nevertheless, United States case law provides some interesting perspectives on goodwill. In the Newark

Morning Ledger case, the U.S. Supreme Court (1993) ruled on the issue whether an acquired list of newspaper subscribers was an identifiable intangible asset for tax purposes. In this ruling (which found that this indeed is the case), a number of goodwill definitions are presented which are not readily found in the accounting literature (U.S. Supreme Court, 1993, paragraph III A):

> '... the advantage or benefit, which is acquired by an establishment, beyond the mere value of the capital, stock, funds, or property employed therein, in consequence of the general public patronage and encouragement which it receives from constant or habitual customers, on account of its local position, or common celebrity, or reputation for skill or affluence, or punctuality, or from other accidental circumstances or necessities, or even from ancient partialities, or prejudices.' [quoted from a source from 1841]
>
> '... that element of value which inheres in the fixed and favorable consideration of customers, arising from an established and well-known and well-conducted business.' [quoted from a source from 1915]
>
> '... the expectancy of continued patronage.' [quoted from a source from 1962]

The last definition is used in the ruling as a working definition of goodwill. While maintaining that definition, the ruling finds that the nature of customer-based assets is such that they can have limited useful lifes, and thus can be subject to depreciation for tax purposes.[2]

The definition of goodwill as 'favorable consideration' or 'continued customer patronage' is not encountered often in the recent. Nelson (1953, 491) defines goodwill in related terms, although he takes a broader view on the 'favorable consideration': 'Goodwill ... refers to favorable attitudes towards an enterprise. Thus, it would include the favorable attitudes of customers, employees, credit grantors, investors, suppliers, governmental regulators, policiticans and the general public. Other descriptive terms for goodwill are reputation and customer habit.'[3] Hendriksen (1982, 407) gives 'the valuation of intangible attitudes towards the firm', including attitudes from employees, suppliers and customers as an interpretation of goodwill. The essential difference in this approach is that goodwill is defined as something that is conferred upon the firm from the outside, whereas the firm qualities approach defines it in characteristics of the firm as such.

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[2] While not relevant to the remainder of the paper, it is interesting to note that U.S. courts have used the concept of 'mass asset' or 'indivisible asset' in dealing with customer-based assets: 'a purchased terminable-at-will type of customer list is an indivisible business property with an indefinite, nondepreciable life, indistinguishable from – and the principal element of – goodwill, whose ultimate value lies in the expactancy of continued partonage through public acceptance... The mass-asset rule prohibits the depreciation of certain customer-based intangibles because they constitute self-regenerating assets that may change but never waste.' (U.S. Supreme Court, 1993, paragraph III B). The mass-asset rule requires short life-times of customer relationships that are not individually identifiable, whereas a wasting asset requires clearly identifiable customer relationships that end after a defined period of time. The Newark ruling found that individual journal subscriptions represent an asset with an identifiable, but limited life, whereas for example the customer base of a street vendor consists of non-identifiable individual customer relationships. In the latter case, the 'expected patronage' remains part of goodwill.

[3] Nelson (1953) gives a unique interpretation of goodwill as 'momentum': buying a going concern enables immediate access to reputation, thus giving a 'push' to starting a new enterprise. This interpretation is difficult to distinguish from reputation (or continued patronage) as such, and it has not gained much ground.

Synergies

As described in section 2.1, the current accounting standards view goodwill as synergies. This view requires the identification of all distinguishable tangible and intangible assets, with the remainder termed goodwill, to be realized through synergy effects. Ma and Hopkins (1988) interpret goodwill explicitly starting from the concept of synergy. They discuss three types of goodwill:

1. internally generated goodwill: this consists of the present value of expected synergistic benefits from the interaction of assets within the firm, and the present value of expected synergistic benefits from the interaction of the firm with its environment. 'Internally generated goodwill is economically meaningful, in the sense that the synergies ... arise from, or are otherwise related to, the employment of [the firm's] assets in its operations.' (p 78)
2. goodwill on acquisition 1: this is essentially the internally generated goodwill, that exists because the acquired firm is a going concern. It assumes that the acquired entity will remain an independent entity with respect to its operations.
3. goodwill on acquisition 2: the combination allows for different synergies. Both parties can benefit from the other's knowledge, access to suppliers etc, and the interaction with the environment for the combination changes, e.g. larger size enables lower borrowing costs.

The last interpretation of goodwill is what is recorded in the accounts, since the price that is paid for the target depends on the synergies the buyer expects to realize. Ma and Hopkins (1988) suggest that it is difficult to give an economic interpretation to this goodwill, for example because the original synergies existing in the target may disappear to enable synergies with the buyer's operations, whereas the internally generated goodwill is meaningfully interpreted.

The synergy approach has been used in the financial accounting literature by Henning et al. (2000), who identify the components of goodwill along the lines of FAS 141 and IFRS 3. They investigate the following components:

1. the write-up of the target firm's assets: the difference between book value and fair value of the target's assets. Fair value is reconstructed from reports and filings;
2. the going concern premium: the difference between the target's pre-acquisition market value six days prior to the first announcement and the fair value of its assets;
3. the synergy value expected by the market: the combined cumulative abnormal returns to target and acquirer 11 days around the announcement;
4. the residual goodwill: the purchase price minus the total of the target's book value, write-up, going concern premium and synergy value.

In external reporting, goodwill is the sum of the last three components, since it equals the purchase price minus the fair value of the acquired firm. Of these components, the going concern premium and the synergy value are identified by FAS 141 and IFRS 3 as 'core' or 'true' goodwill. The write-up of the target firm's assets presumably includes the identification of previously unrecognized or undervalued (in)tangible assets, and any residual goodwill is overpayment by the acquirer.

Residual

The requirement of identifying intangible assets to the fullest extent and naming the remainder goodwill does not necessarily imply a synergy interpretation, as the standards currently suggest. Instead, it can be viewed as a balancing account:

> 'Generally, however, it is not possible to allocate the total value of the firm over the specific assets... The unallocated value is, therefore, recorded as goodwill – a master valuation account.' (Hendriksen, 1982, 409).
>
> 'The term "goodwill' is necessary for the accountant because he attempts to disaggregate the purchase price for an organized whole only by isolation of elements which are classifiable according to traditional accounting procedure and which can be valued arbitrarily in terms of some historic costs or external market values. These measurements imperfectly reflect any contribution to or sum of enterprise value; the hotion of goodwill as a residuum is necessary to neutralize the effect of this invalid method of decomposition.' (Miller, 1973, 285)

In this view, goodwill is simply a residual, without any distinct qualities. It 'lacks real-world interpretation and cannot be measured independently' (Hendriksen, 1982, 407).

This was also noted by the dissenting opinion in the Newark case cited previously. This opinion first notes that the current interpretation of goodwill as the expectancy of continued patronage amounts to 'nothing more than the probability, that the old customers will resort to the old place,' and concludes that excluding customer-based assets amounts to '[scrapping] the accepted and substantive definition of 'goodwill' as an expectation of continued patronage, in favor of a concept of goodwill as a residual asset of ineffable quality... Goodwill would shrink to an accounting leftover.' (U.S. Supreme Court, 1993, dissent, paragraph II A).

3.3 Sources of goodwill

'[W]hat factors have been combined to create the favorable conditions formally called "goodwill"? Is it personnel, research and development, production techniques, marketing channels or some combination of them all?' (Tearney, 1973, 41)

Obviously, there is substantial overlap between some of the interpretations of goodwill and the sources of goodwill. What is perhaps more surprising is that they sometimes contradict. For example, in defining goodwill as synergies, the current standards presumably will not equate marketing or customer-related activities as sources of goodwill, since these are intangible assets to be identified during the purchase price allocation process. It is somewhat suprising, then, to see the following statement in the standards (in a discussion surrounding the amortization question):

> '... if goodwill is an asset, in some sense it must be true that goodwill acquired in a business combination is being consumed and replaced by internally generated goodwill, provided that an entity is able to maintain the overall value of goodwill (*by, for example, expending resources on advertising and customer service*).' (IFRS 3.bc140, emphasis added, the wording in FAS 142.b85 is almost identical)

This would suggest that a source of goodwill is advertising and customer service activities. To what extent they can be distinguished from the marketing- and customer-related intangible assets that are to be recognized in case of a purchase price allocation is not clear directly, but even more importantly it is unclear what advertising and service activities have to do with synergies.

Older definitions of goodwill tend to stress the literal interpretation of goodwill: the positive reputation that leads customers to show good will towards the firm. However, although the customer is the cash inflow source of goodwill, the question of interest is of course why he or she is willing to continue buying from this firm. Also, goodwill is related to cash outflows: efficient production technologies, economies of scale etc. As summarized by Bryer (1995, 286), 'goodwill *exists* because the entity is believed, for a variety of reasons (good customer relations, good employee relations, superior technology, superior management, superior location, monopoly power, etc.), to offer a higher return on its capital than alternative investments with the same risk.' Note that this definition does not involve any synergy aspects: goodwill is defined as something an *entity* achieves, not a combination.

Falk and Gordon (1977) identify 17 characteristics that can be considered sources of goodwill, including large cash reserves of the target, increased ability to borrow at lower costs, economies of scale, assurance of supply of materials and services, managerial talent, and established brand name. Most of their sources relate to the firm's internal operations, rather than the relationship with the customers.

Technological and marketing activities are often put forward as sources of goodwill. For example, Chauvin and Hirschey (1994, 167) select as 'important exogenous determinants of goodwill' advertising expenditures, r&d expenditures, market share, tangible and intangible assets: 'High market share is also considered as a potential source of goodwill as it reflects, at least in part, superior ability to increase short-term cash flows and economic stability. To the extent that high market share reflects exceptional efficiency and high product quality, market share data also capture the goodwill effects of good management and organizational structure.' Note that market share is more an indicator of goodwill than a source, as is the level of tangible assets.

Hayn and Hughes(2006) suggest that predicting goodwill write-offs is similar in spirit to predicting bankruptcies. This implies looking at financial characteristics to predict goodwill impairments, notably return on assets, change in return on assets, presence of operating losses, and percentage change in sales. These financial characteristics are likely influenced by the same factors that are sources of goodwill, but they cannot be taken as sources as such.

3.4 Synergies: views on goodwill from non-accounting studies

Since goodwill is a residual, and unidentifiable by definition, the new standards invoke the term 'synergy' to couple goodwill to cash generating units or reporting units. As indicated, the standards on business combinations (FAS 142 and IFRS 3) actually equate goodwill with synergy: the fair value of the expected synergies are part of the combination's goodwill. Therefore, it is instructive to look at other fields that have researched synergy. The term synergy is so common these days that it is not defined in papers anymore (in fact, it is a keyword in the management literature). The standards also do not define synergy. Yet the term as such is far from unequivocal. It is usually categorized rather than defined. Lubatkin (1983) identifies three types of synergy: scale (or technical) economies from efficient use of resources, pecuniary economies from increased market power towards buyers and/or suppliers, and diversification economies from lower borrowing costs. Chatterjee (1986) lists the following three types of synergy: financial synergy (from a lower cost of capital), operational synergy (from lower production costs), and collusive synergy (from increased market power).

The pecuniary economies of Lubatkin (1983) and the collusive synergy of Chatterjee (1986) relate to customer and supplier relationships. However, they also relate to *changes* in the firm's position because of the combination. A customer relationship is an intangible asset to be identified in a combination, but should it be valued at the current (pre-merger) conditions, or should the new position of the combination be taken as the basis? If the combination's collusive synergies enable higher prices, should the customer relationship be valued at the current prices, or at the new prices? The difference is due to synergies, and thus equals goodwill, but it is also related to the customer relationship.

In the accounting literature, Ma and Hopkins (1988, 77) state that '[the] use of an asset in combination with other assets is often assumed to lead to an interaction affecting favourably the productivity of the other assets as well as its own productivity. This is the so-called synergy from asset interaction, which resuits in superior earnings.'

Larsson and Finkelstein (1999) review the literature on the performance of firms after a merger or acquisition, and find that it is studied in the fields of strategic management, economics, finance, accounting, organizations and human resources. They draw up an integrative model, whereby synergy realization is a function of the combination potential, organizational integration, and employee resistance to the combination. Combination potential consists of similarities (enabling efficiency through lower costs) and complementarities (enabling cross use of assets and knowledge), and reflects the sources of goodwill. Synergy realization can be interpreted as the *management* of goodwill through improved capacity utilization or efficiency increases, improved bargaining power and access to markets and know-how (Larsson and Finkelstein, 1999, 20).

.The different realization modes of synergies presented by Larsson and Finkelstein (1999) are quite varied. In general, the strategic management literature takes a simpler approach in both the sources of synergy (where relatedness is seen as the main driver) and in the realization than Larsson and Finkelstein do. The synergy realization is frequently measured by stock market reactions around the announcement day (Seth, 1990), which is of course an estimate of goodwill potential rather than realization. Other studyies look at overall operating performance development. Even in the latter case, the choice of measure does not always seem to capture synergy realization accurately: the development of the sales margin is often used as an indicator of synergy realization (St. John and Harrison, 1999; Homburg and Bucerius, 2005). However, synergies can be realized while the sales margin is constant or even falling, simply by increasing sales volume enough to compensate for any lost margin. Davis and Thomas (1993) suggest estimating synergy directly, but their approach is limited to establishing the existence of positive or negative synergies at the industry level, rather than estimating synergy at the level of the individual firm.

In a case study of a bank merger, Sherman and Rupert (2006) analyze if and when synergies were realized. Synergies in the form of economies of scale are realized through closing acquired branches operating in the same neighborhood, and information system synergies come from a greater utilization of the existing information technology infrastructure. On the other hand, a bad match between company cultures can lead to underperformance. Sherman and Rupert (2006) employ DEA to identify the performance of the branches of the merged bank. Thus, their methodology is focused on maximizing the performance generated from existing resources (in their case teller, platform and manager FTE's, and four minor operating expenses categories). Any realized synergies would require better utilization of the resources.

St. John and Harrison (1999, 130) state: 'Relatedness, when managed properly, should result in tangible and intangible synergies... Slack resources that might not be used otherwise may be put to good use... and scarce resources may be bargained for by a larger, more powerful organization... the combination of businesses [may allow] perferential access to the types of strategic assets that underpin the firm's cost or differentiation advantage... Firms tend to diversify over time in order to make use of underutilized resources such as excess capacity, idle workers, underchallenged engineers, and excess capital, systems and infrastructure.' (p 136:) 'Synergy is realized when two business units are more profitable or more competitive together than they would have been alone... Synergy is value creation over the long term, reflected in superior operating profitability that is sustained over a multiyear period'. According to St. John and Harrison (1999), realizing synergy is conditional on implementing coordination mechanisms. However, in their operationalization this is reduced to the sharing of resources and activities (facilities, technologies, personnel, programs, research, supplies).

Seth (1990) lists the following sources of value creation in mergers: market power (increased firm size leads to control over price, quantity or nature of products sold), economies of scale (purchasing, inventory management, advertising, distribution, service networks, r&d, financing), economies of scope (lower cost of joint production, requiring shareable inputs; reuse of input such as know-how), coinsurance (lower bankruptcy costs), diversification risk reduction.

3.5 Conclusion

There is no discussion on the measurement of goodwill. Goodwill equals firm value minus the fair value of its assets. The interpretation of goodwill has one generic strand: excess profits, implying that the cash flows that assets generate normally should be equal to their value (whereby the cash flows are discounted for their riskiness). If assets generate more than their value (book value, or purchase price), excess profit exists, which is called goodwill. As such, goodwill is not limited to business combinations.

However, in recent years, the interpretation of goodwill has narrowed. No longer are excess profits as such seen as goodwill, since part of the excess profit is attributable to certain firm characteristics. Until the beginning of the 1990s, these characteristics were considered sources of goodwill, but now they are defined as separate intangible assets. Thus, in the current regulations goodwill is literally a residual asset. However, does it deserve the derisory nomen 'accounting leftover' it received from the U.S. Supreme Court, or can firms and managers measure, monitor and manage this residual?

4 Some observations from the field

A number of controllers and financial managers are interviewed on their views on goodwill. The interviews are semi-structured in that a number of questions are formulated beforehand, but they serve more as a guide than an interview structure (Lillis, 1999). Topics that are included are the nature of goodwill, the usefulness of IFRS-based accounting numbers, the quality of the regulations, the impact of IFRS on accounting procedures within the firms, and the impact of IFRS on the relationship with auditors, investors and lenders. Not all aspects are pertinent to our research question, but they serve to have a complete discussion on the topic. We group our preliminary observations under a number of headings: the image of goodwill, managing and reporting of goodwill, performance management.

4.1 Image of goodwill

Asked for a direct definition of goodwill, respondents generally answered with the measurement approach to goodwill: the difference between the purchase price and the value of assets. In te words of one interviewee:

> In a general sense, without thinking in accounting terms: goodwill is the value [price] that you want to pay extra on top of the book value.

A description involving any asset-like quality of goodwill was not offered. Upon further discussion, interviewees made a link with concrete items such as (improvements in) profit margins, or sales per employee as indicators of goodwill, or sources of goodwill. However, the first reaction was generally linked to the notion of future profits and enterprise value.

4.2 Measuring goodwill (ppa)

The identification of intangibles and 'true' goodwill is an accounting exercise, and defining goodwill as an accounting leftover is not representative of company practice, according to the interviewees.

> In reality it's the other way around. First we determine the gross goodwill. You have decided what price you want to pay, and during the phase in which you make an offer intangibles are not an issue at all. Only in the phase after that you ask 'We paid this much in goodwill, how should we allocate it?'

Distinguishing goodwill from other intangibles poses substantial difficulties. With respect to the customer asset, a choice that is sometimes made is to take the current customer profitability and retention rate to estimate the value of the customer asset. Any increase in this, from improving sales reveneus, or margins, or lowering retention rates is a part of goodwill.

4.3 Managing goodwill

Goodwill is not managed as such. It is not an asset that is seen as 'lying on the shelf'. Since it is not an independent asset, but an accounting construct, it is impossible to manage independently. When asked how this could be done, respondents suggested looking at efficiency ratios, or sales per employee, or other measurable items, and take them as indicators of goodwill. However, managing the goodwill asset as such does not happen. Monitoring or measuring it also is not common. First of all, as respondents repeatedly indicated, it is almost impossible to identify purchased activities after a limited period, since the aim normally is to integrate the activities in existing operations to achieve synergies. Furthermore, the units where goodwill is allocated (cgu's) are chosen as high as possible because of the work involved in carrying out ppa-exercises and impairment tests.

4.4 Performance measurement

Goodwill is never included in managerial performance measures. Managers get clear and concrete performance measures, which next to the ones already mentioned include sales growth, or operating results, or qualitative aspects. The conceptual problem of goodwill as a left-over makes it impossible to include it in performance measures. Rather than goodwill targets, managers get targets that reflect the synergies that were envisioned at the time of the merger: savings in purchasing, savings because of operational effeciency improvements and managerial innovations in the acquired entities, and the increase in sales at the customers of these entities.

5 Analysis and discussion

Goodwill is defined in the regulations as an accounting left-over, but one which is 'naturally associated' with the operations of a firm, and which is perhaps even 'monitored for internal management purposes.' Our preliminary results suggest that this is a far cry from the actual management of goodwill. Yes, the correct image of goodwill is a difference (if not a left-over), but firms' attention is not on the difference as such, but on the sources of value that justify paying this difference in the case of an acquisition. Consequently, firms and auditors have substantially different views on how to report on and account for goodwill. Since the regulatory view on goodwill is so far from managerial practice, it is questionable whether it adds to the quality of reporting.

What explains these differences? After all, the basis for conclusions of the standards refer to field visits and discussions with firms and managers that ultimately led to the current regulations. For one, the regulators seem to have visited a sample of firms that was at the very least not representative of the population. What's more, they seem to have clung to a theoretical model which is almost detached from reality. Yes, a firm's value is derived from a number of qualities: managerial competence, brand name, sourcing arrangements. However, to assume that the revenue generated from a deal with a customer can be allocated to each of these qualities simply does not reflect the nature of a customer transaction.

In all, the IFRS take on goodwill does not reflect the image of goodwill in practice. This is problematic since IFRS takes a view on goodwill that on the one hand suggests increases tangibility, in viewing goodwill as an asset that is monitored, and on the other hand strips away all concrete representations (which are now intangible assets). Although firms understand the difference, and see the importance of synergies as a way of achieving goodwill, it is difficult to reconcile with requiring ongoing valuation or even management of goodwill as suggested by the regulations.

6 Literature

Bryer, R. A. (1995), 'A political economy of SSAP22: accounting for goodwill', *The British Accounting Review*, 27(4), 283-310.

Chatterjee, S. (1986), 'Types of synergy and economic value: the impact of acquisitions on merging and rival firms', *Strategic Management Journal*, 7, 119-139.

Chauvin, K. W. Hirschey, M. (1994), 'Goodwill, profitability, and the market value of the firm', *Journal of Accounting and Public Policy*, 13(2), 159-180.

Davis, R., Thomas, L. G. (1993), 'Direct estimation of synergy: a new approach to the diversity-performance debate', *Management Science*, 39(11), 1334-1346.

Falk, H., Gordon, L. A. (1977), 'Imperfect markets and the nature of goodwill', *Journal of Business Finance & Accounting*, 4(4), 443-462.

Grinyer, J. R., Russell, A., Walker, M. (1990), 'The rationale for accounting for goodwill', *The British Accounting Review*, 22(3), 223-235.

Gynther, R. S. (1969), 'Some 'conceptualizing' on goodwill', *The Accounting Review*, 44(2), 247-255.

Hayn, C., Hughes, P.J. (2006), 'Leading indicators of goodwill impairment', *Journal of Accounting, Auditing & Finance*, 21(3), 223-265.

Hendriksen, E. S. (1982), *Accounting theory*, 4th ed., Homewood, Richard D. Irwin.

Henning, S. L., Lewis, B. L., Shaw, W. H. (2000), 'Valuation of the components of purchased goodwill', *Journal of Accounting Research*, 38(2), 375-386.

Homburg, C., Bucerius, M. (2005), 'A marketing perspective on mergers and acquisitions: how marketing integration affects postmerger performance', *Journal of Marketing*, 69(January), 95-113.

Larsson, R., Finkelstein, S. (1999), 'Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: a case survey of synergy realization', *Organization Science*, 10(1), 1-26.

Lillis, A. M. (1999), 'A framework for the analysis of interview data from multiple field research sites', *Accounting and Finance*, 39, 79-105.

Lubatkin, M. (1983), 'Mergers and the performance of the acquiring firm', *Academy of Management Review*, 8(2), 218-225.

Ma, R., Hopkins, R. (1988), 'Goodwill - an example of puzzle solving in accounting', *Abacus*, 24(1), 75-85.

Miller, M. C. (1973), 'Goodwill - an aggregation issue', *The Accounting Review*, 48(2), 280-291.

Mueller, D. C., Supina, D. (2002), 'Goodwill capital', *Small Business Economics*, 19, 233-253.

Nelson, R. H. (1953), 'The momentum theory of goodwill', *The Accounting Review*, 28(4), 491-499.

Seth, A. (1990), 'Value creation in acquisitions: a re-examination of performance issues', *Strategic Management Journal*, 11, 99-115.

Sherman, H. D., Rupert, T.J. (2006), 'Do bank mergers have hidden or foregone value? Realized and unrealized operating synergies in one bank merger', *European Journal of Operational Research*, 168(1), 253-268.

St. John, C. H., Harrison, J.S. (1999), 'Manufacturing-based relatedness, synergy, and coordination', *Strategic Management Journal*, 20, 129-145.

Tearney, M. G. (1973), 'Accounting for goodwill: a realistic approach', *Journal of Accountancy*(July), 41-45.

U.S. Supreme Court (1993), *Newark Morning Ledger Co. v. United States,* 507 U.S. 546, available at laws.findlaw.com/us/507/546.htm.