

Workers as an Asset vs. Cost

Abstract This chapter describes the shifting perspective of human capital over time and how it is now increasingly considered an important business asset to be quantified. It discusses the current and potential uses of human capital measurement, introduces and defines basic terms that are essential to understanding human capital valuation, and generally sets the stage for the subsequent chapters.

Keywords Human capital valuation · Human capital defined
Intangible assets · Reporting human capital value

2.1 INTRODUCTION

What do an organization's workers represent? How someone answers this question is often a good indicator of their functional area of expertise. Accounting would typically answer in terms of operating costs. Finance is likely to reference productivity and efficiency metrics. Human resource professionals tend to emphasize turnover, tenure, and diversity when describing workers. Managers and leaders generally associate workers with performance objectives. To construe the assembled workforce—the firm's human capital—as a quantifiable business asset requires some integration from each of these areas along with input from the disciplines of economics and organizational behavior and strategy. You will gain a greater appreciation of this point as you read each chapter.

2.2 HISTORY OF PERSPECTIVES ON HUMAN CAPITAL

Human capital is broadly defined as the useful skills and knowledge individuals acquire to increase individual productivity and produce economic value.¹ There are a wide range of human capital definitions that further flesh out this basic definition. For example, when referring to a firm's assembled workforce in aggregate, the Society for Human Resource Management has suggested human capital is an asset representing "the collective sum of the attributes, life experience, knowledge, inventiveness, energy and enthusiasm that its people choose to invest in their work."²

One of the earliest references to human capital is found in Adam Smith's *Wealth of Nations*:

Fourthly, of the acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. Those talents, as they make a part of his fortune, so do they likewise of that of the society to which he belongs. The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labour, and which, though it costs a certain expense, repays that expense with a profit.

Nobel laureate Gary Becker is credited with bringing the study of human capital to the mainstream with what has come to be known as human capital theory.³ He studied investments in human capital, such as schooling and on-the-job training and medical care "that influence future monetary and psychic income by increasing the resources in people." The view represented by human capital theory suggests learning and experience directly increase worker productivity.⁴ Signaling theory extends this notion to construe learning and experience as signals to potential employers of other valued but unobservable qualities.⁵ For instance, attainment of a degree signals the general ability to persist at a difficult and long-term goal and provides employers a visible means from which to infer variation among potential employees.

The above lenses, human capital theory and signaling theory, incorporate a view of human capital from the individual level and societal level. Individuals seek a return on their investment in their own human capital and invest accordingly. At the broader level, human capital is a source

of economic growth, which justifies the formation of social policy pertaining to human capital and societal level investment in education. This book considers human capital between these two levels of analyses—specifically focusing on the aggregate human capital within a firm and the value of this assembled and trained workforce.

2.3 A CALL TO INCLUDE HUMAN CAPITAL ON THE BALANCE SHEET

In a knowledge economy, human capital is a company's greatest asset. Yet you will not find it reported as an asset on the balance sheet, other than embedded in goodwill if the business was acquired at an amount in excess of the value justified by its tangible assets. Even then, an enhancement to goodwill captures the value of human capital at only one historic point in time. It does not account for additional investments by the company in workforce hiring, training, and development. At the same time, the *expenses* associated with these additional investments—the direct expenses associated with workforce compensation, hiring, training, and development—are explicitly accounted for on the financial statements, along with future obligations for retirement benefits and paid time off.

Many people have pointed out the conceptual disconnect in accounting practices that recognize and report human capital expenses but fail to recognize and report the full value of human capital assets. The disconnect is also quantifiably apparent in the significant gap between the market value of businesses and their book value—the value supported by regulatory accounting disclosure. The May 2016 Global Intangible Financial Tracker Report published by Brand Finance, an annual analysis of large public companies throughout the world with over 57,000 companies included, showed tangible business assets comprised only 53% of business market value in 2015. Intangible business assets, of which human capital is arguably a significant portion, represented the remainder.⁶

Nonetheless, historically and currently, the reporting of human capital as a business asset is not an accepted practice under standardized financial reporting standards throughout the world, including Generally Accepted Accounting Principles (GAAP), the standards that guide financial reporting in the USA. Companies are permitted to provide non-standardized, supplemental financial measures and information disclosure in their external reporting as a way to provide additional insights into interested parties such as investors. However, the reporting of human

capital value is not particularly common even in that form, though this is slowly evolving.

For instance, the Institute of Management Accountants, a global association for accounting and finance professionals, has called for voluntary external reporting and use of internal reporting. And some companies are reporting metrics and qualitative indicators of worker value, even if not human capital value per se, toward signaling sustainable business performance—i.e., their ability to remain viable as a going concern over the long term. Independent ratings of corporate sustainability and social performance, by companies such as MSCI that track firm performance for institutional investors, provide indirect information on human capital value by reporting on categories that pertain to the firm’s human capital, such as employee relations and diversity. In parallel with a growing awareness of human capital value, the science of workforce analytics has emerged to bring a more precise, quantitative and empirically driven lens to a wide range of human capital issues—thanks to advances in technology that have made the necessary data and analytical capacity more widely accessible.

2.4 DEFINING THE TERM VALUE

When we refer to human capital value, the “value” label means different things to different people and under different circumstances. In general, as alluded to above, “book value” is the historic cost of a business asset based on the price paid, whereas “market value” is the current price at which the asset can sell, which sometimes differs from the value determined under the accounting definition of “fair value.” For the remainder of this book, we will focus on market value as our basis of value unless otherwise stated. However, the definition of market value is better understood by contrasting it with the definition of fair value. Therefore, we will briefly explore each definition.

The International Valuation Standards Council (IVSC) is an independent council of representatives from across the globe, formed to establish globally accepted asset valuation standards. The IVSC defines market value as:

The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.⁷

More information pertaining to related definitions is found on the IVSC website at <https://www.ivsc.org/> by searching their online Standards and Glossary. There you will also see two definitions of fair value, both of which suggest something less than the full market exposure inherent in the definition of market value, though the second definition of fair value is closer to the open-market assumption underlying market value:

The estimated price for the transfer of an asset or liability between identified knowledgeable and willing parties that reflects the respective interests of those parties. For use in financial reporting under *International Financial Reporting Standards*, fair value has a different meaning: In IFRS 13 “Fair Value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”

Finally, fair value is also an officially defined term used by the Financial Accounting Standards Board (FASB), which is the independent board that establishes financial accounting and reporting standards for companies that follow US Generally Accepted Accounting Principles (GAAP). When used in this context, fair value is defined by FASB standard as a market-based measurement of value similar to the International Financial Reporting Standards or similar to market value:

This Statement [Statement of Financial Accounting Standards No. 157] clarifies that the exchange price [fair value] is the price in an orderly transaction between market participants to sell the asset or transfer the liability in the market in which the reporting entity would transact for the asset or liability, that is, the principal or most advantageous market for the asset or liability. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the definition focuses on the price that would be received to sell the asset or paid to transfer the liability (an exit price), not the price that would be paid to acquire the asset or received to assume the liability (an entry price).⁸

You can read the FASB standard in full and the latest updates to the standard through the FASB website (<http://www.fasb.org/home>) by searching their online FASB Reference Library. In sum, Fair Value and Market Value are sometimes aligned in a practical sense despite the former

having a narrower definition pertaining to a more limited market or specific party in some cases. This book focuses on market value—the price that might be obtainable in the wider market.

2.5 DEFINING THE CONCEPTS OF INTANGIBLE AND TANGIBLE ASSETS

In an accounting framework, a tangible asset is generally any business asset that has a physical form such as machinery, buildings and land, and inventory. The opposite of a tangible asset is an intangible asset or those assets that are not physical in nature, which includes such things as patents, trademarks, copyrights, and goodwill.⁹ For instance, Forbes 2016 ranking of the world’s most valuable brands shows that well-established trademarks such as Google, Coca-Cola, and Disney are more valuable than the actual current revenue generated by the brand.¹⁰ One way to estimate the economic value of aggregate intangible business assets is to deduct the value of the tangible assets, which are more easily identified and quantified, from total market value. The remaining value is attributable to intangible assets. This follows the basic premise that the true value of a business is determined upon its sale.

Human capital is a specific type of intangible asset in that it is “unrecognized” for financial reporting purposes, as noted earlier. That is, unlike intangibles such as trademarks and patents, it is not permitted by accounting standards to have formal ascribed value in the financial statements. Instead, the value of human capital quietly exists within the general category of goodwill and, in some cases, in optional supplemental reporting. This treatment of human capital stems from long-held practices carried over from the industrial era, in which tangible assets reigned supreme in the creation of goods and services, unlike the contemporary knowledge-based economy in which businesses increasingly rely on intangible assets. It also stems from a belief that the quantification of human capital value is too difficult and subjective.

However, the Institute of Management Accountants (IMA), in a 2014 report titled *Unrecognized Intangible Assets: Identification, Management, and Reporting*, calls for greater attention to reporting of unrecognized intangible business assets, and especially human capital, noting that these assets have grown to represent the major source of corporate value.¹¹ IMA also notes the importance of intangible assets to

long-term business sustainability. “While these type of assets fail to meet the criteria for recognition under current reporting standards, the identification, assessment, management, control, retention, and nurturing of these assets is necessary for an organization to maintain its capacity to operation.”¹² Yet another reason, they suggest, to close the information gap on reporting of intangible assets.

2.6 EXTERNAL AND INTERNAL USES FOR VALUATION OF HUMAN CAPITAL

There are many entities that are interested in a company’s financial status and sustainability, including the company itself (owners, shareholders, managers, and governance board) and others with a vested interest such as creditors, investors, employees, and labor unions. Independent rating agencies also scour this type of information in order to provide a source of consolidated data to the parties already mentioned and others. Essentially any smart investor and strategic decision-maker are likely to desire this information.

As discussed earlier, valuation of the assembled workforce is generally not permitted in financial accounting and reporting other than as a supplement to the required reporting. However, its valuation has a role in tax accounting in that the assembled workforce can be identified for amortization purposes after the merger or acquisition of a business. In this circumstance, a business owner might allocate a portion of the total acquisition price of the business to the assembled workforce in order to use its specific tax treatment. Identification of the value of the assembled workforce is also sometimes needed as an interim step in isolating the value of other intangible assets that require different treatments for accounting or reporting purposes. Because financial reporting and tax accounting standards vary across the globe and shift overtime, this book will not attempt to enumerate the regulatory standards. Instead, reference is made to standards only when relevant to illuminate the conceptual logic of human capital valuation.

Even though reporting of human capital value is not a regulatory requirement, financial statement users in practice cannot truly make well-informed decisions without information pertaining to the organization’s human capital. For instance, if a business were to suddenly lose their workforce, not only would the value instantly decrease, but also

the business may cease to exist altogether. Similarly, the value of the assembled workforce itself can be the driving factor in the acquisition of a business, particularly when workers are highly specialized or when labor markets are extremely tight for the skill set involved. As the Institute of Management Accountants points out in its 2014 report, statutory reporting requirements often lag the needs of the market. Through discretionary reporting, however, firms can provide valuable information on human capital value to serve stakeholder needs.

In addition, assembled workforce value is relevant in situations that require isolating tangible asset value from total market value, as needed for real estate (*ad valorem*) tax purposes in which intangible assets are generally exempt, and for some lending and insurance purposes that rely only on tangible asset value. Human capital value may also be used to estimate damages in lawsuits pertaining to breach of employment contract or aggressive “poaching” of a competitor’s talent.

Finally, as alluded to initially, human capital value is relevant for internal organizational reporting purposes. It provides quantitative information to aid managerial decision-making in areas such as succession planning to protect asset value and it serves as a potential indicator of return on investment for human resource management decisions. Internal reporting may also make good use of qualitative information pertaining to human capital, and metrics pertaining to efficiency and quality. These additional human capital indicators are discussed in Chap. 9.

2.7 BRIEF OVERVIEW OF APPROACHES TO VALUE

In general, the same three established and accepted valuation approaches that are used to value businesses, real estate, and most types of assets—the cost, income, and market approach to value—are also used to value a firm’s aggregate human capital. Translating these valuation techniques to the domain of human capital presents some unique challenges that will be discussed throughout. Chapters 3 through 6 detail the application of these three fundamental approaches to the valuation of the assembled workforce.

The cost approach is covered in Chaps 3 and 4. It is considered the primary method for valuing an assembled workforce and was accordingly given the most attention. The income and market approaches are covered in Chaps. 5 and 6, respectively. The remaining three chapters of the book focus on ancillary valuation considerations (sustaining human

capital, Chap. 7, and the role of social capital, Chap. 8) and other quantitative views of human capital (Chap. 9).

The cost and market approaches are based on the economic principle of substitution, which equates the value of human capital to the cost to create or acquire a substitute workforce of comparable utility. The income approach is based on the economic principle of anticipation of future benefits, which suggests that under certain circumstances, valuation of human capital is possible through analysis of the expected net income stream attributable to the assembled workforce.

So even though human capital value is generally viewed as difficult to quantify, keep in mind that imperfect measurement has not kept other assets from regulatory and voluntary reporting. For instance, the current inventory of a business requires estimates of price, tangible assets such as buildings and equipment are subject to depreciation estimates, and accounts receivable require judgments on credit risk. The view underlying this book is that even an imperfect measure of human capital is highly useful as long as the value is based on reasonable assumptions that are explicitly identified.

2.8 CRITICAL THINKING QUESTIONS

1. Companies, managers, and leaders often state that people are their most valuable asset. A Dilbert cartoon made light of this cliché by having the manager realize he has been wrong all these years and instead employees are ninth on their list of valuable business assets. It turns out carbon paper ranks as eighth on the list. As funny as this is in a comic, it is only funny because it is so relatable. Do you think employees would feel more valued if companies actually measured and reported the value of the assembled workforce? Could doing so lead managers to treat employees differently, perhaps better? Is there a downside to explicit measurement and reporting of value for the assembled workforce—would some employees prefer not to be quantified as an asset?
2. This chapter discussed the disconnect in accounting practices that treat human capital as an expense and not an asset. Investments in tangible assets, on the other hand, are generally treated as an asset that is gradually depreciated over time rather than expensed all at once. Discuss the implications of this accounting difference for firm's that prefer to show higher short-term profits. Is a firm

in this case more likely to cut discretionary spending on human capital, which is recorded as an expense, or tangible assets that are recorded as an asset? What could this mean for the firm's long-term sustainability?

3. As an investor, discuss how you might use information on the value of a firm's human capital to influence your investment decision. In assessing human capital as an important factor of production, it has a distinction from tangible inputs that are directly controlled or owned by the organization. Ownership and control reduces the risk associated with the organization's ability to capture the future benefits generated by an asset. Human capital, on the other hand, resides in the individual workers and organizations do not have the same assurance over its future benefits as they might with owned assets—i.e., workers can generally leave the organization at will. What information about the workforce beyond the value of the assembled workforce might therefore be useful in assessing your investment risk?

NOTES

1. Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
2. Weatherly, L. A. (2003, September). The value of people: The challenges and opportunities of human capital measurement and reporting. *Society for Human Resource Management Research Quarterly*.
3. Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *The Journal of Political Economy*, 70(5), 9–49.
4. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). Chicago, IL: University of Chicago Press for the National Bureau of Economic Research (Original work published 1964).
5. Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
6. Brand Finance. (2016, May). *Global Intangible Financial Tracker*. http://brandfinance.com/images/upload/gift_report_2016_for_print.pdf. Accessed on 2 Feb 2017.
7. The International Valuation Standards Council. *Glossary*. https://www.ivsc.org/standards/glossary#letter_m. Accessed 1 Feb 2017.
8. Financial Accounting Standards Board. (2010). *Statement of Financial Accounting Standards No. 157*. <http://www.fasb.org/jsp/FASB/>

[Document_C/DocumentPage?cid=1218220130001&acceptedDisclaimer=true](#). Accessed 1 Feb 2017.

9. Investopedia. *Tangible Asset*. <http://www.investopedia.com/terms/t/tangibleasset.asp#ixzz4EsKTYpzC>. Accessed 1 Feb 2017.
10. Forbes. (2016). *The world's most valuable brands*. http://www.forbes.com/powerful-brands/list/#tab:rank_header:revenue. Accessed on Feb 1 2017.
11. IMA. (2014). *Statement of management accounting: Unrecognized intangible assets identification, management and reporting*. Montvale, NJ: Institute of Management Accountants.
12. Ibid.



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