# THE ECONOMIC SIGNIFICANCE OF THE ACCOUNTING TREATMENT OF INTANGIBLES

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#### INTRODUCTION

"I'll tell you how I came to think of it," said the Knight. "You see, I said to myself, 'The only difficulty is with the feet: the head is high enough already.'

Now, first I put my head on the top of the gate--then the head's high enough--then I stand on my head--then the feet are high enough, you see--then I'm over, you see."

"Yes, I suppose you'd be over when that was done," Alice said thoughtfully; "but don't you think it would be rather hard?"

"I haven't tried it yet," the Knight said gravely: "so I can't tell for certain--but I am afraid it would be a little hard."

#### Through the Looking Glass

There are at least two general economic concepts which are quite fundamental to the practice of accounting, the concept of periodic income and the concept of wealth. From an economic point of view, income is devoted to consumption expenditure and saving while the term 'wealth' implies a store of real assets. Income is a flow through a period of time; wealth is a stock as at instant of time. The aim of accounting practice is to measure periodic income, to show its disposition and to show the effect of retained income upon wealth.

In displaying changes in wealth the balance sheet is used as a devise and assets appearing on it

may be conveniently divided into three main categories, Real or Physical assets, Deferred Expenditure (benefiting the activities of future accounting periods), and Intangibles. It is the third of these categories which is the main concern of this paper.

There are however few implicit assumptions that need to be stressed in this connection. First, that the same accounting method is being consistently employed; second, that accounting is made for a continuing entity with definite and limited boundaries; third, that money is a stable store of value. These are necessary if accounting measurements are to be objectively reliable.

The central theme of this thesis is to make a systematic study of the economic significance of the special accounting treatment to which intangibles are subjected. The argument is developed on the following lines.

Intangibles are treated in accounts in a special way. They are assumed to be of a very doubt-ful character and consequently they are written-off in a short period of time. The treatment of intan-gibles in accounts manifests itself in certain and measurable economic phenomena such as the liquidity position of the firm, the pricing policy of public

utilities, the business cycle and the valuation of national wealth.

In this thesis no reference is made to quantitative values except in so far as they illustrate a point or strengthen an argument. This however, does not mean at all that such an analysis is not possible, only it is outside the scope of the present endeavor. It is the aim here to show effects in theory rather than in actual application.

The extent of the effects may be small or insignificant as to have no material influence on the economic conditions of the community. In most probabilities this would be the situation; yet it is the writer's conviction that the attempt is worth the effort.

An apology is due at this stage. Reference to English accounting procedure is very frequent, and only occasional reference is made to American practice. In no way does this underestimate the reliability or value of the latter; it is only the writer's longer acquaintance with English practice and the fact that any procedure will serve the purpose of this analysis that set the limit of the enquiry in regard to the accounting treatment of intangibles.

As it is in the purpose of the thesis to discuss intangible property, it seems essential to define the term and to study the bases upon which assets are classified into intangible and tangible.

In accounting literature many attempts at defining the term are made, each accountant defining the term with a special concept in mind. However, if a careful study of the many definitions given be made, it would obviously show that special criteria served as the motive behind the definitions.

To understand clearly what is meant by the term, and to formulate a definition that will be used consistently throughout this thesis, a critical approach to the many current definitions and conceptions of the term and the underlying principles and criteria would be appropriate.

#### Physical Existence as a Criterion

One of the bases for distinction between tangible and intangible property which is most commonly employed, is the materiality of the property in question. Thus intangibles are sometimes defined as "... those items of property whose values do not exist in, or not represented by, things capable of being touched, weighed, handled, and measured in terms of physical units. Goodwill, trade-marks, patents, copyrights, franchises, etc., are included."(1) Spicer and Pegler classify assets

<sup>(1)</sup> Yang, J.M., Goodwill and Other Intangibles (New York: The Ronald Press Company, 1927), p.4.

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into tangible and intangible but include in the latter sundry debtors. "Assets are also classified as tangible or intangible, the former comprising those assets which can be touched (Latin tangere -- to touch), e.g., stock, cash, plant, etc., and the latter, those assets which have no physical form, e.g., goodwill, patents, sundry debtors, etc."(2) A survey of definitions will show that receivables, securities, contracts and organization expenses are sometimes included in the one, and sometimes in the other class. Organization expenses are sometimes denied the qualification 'asset', and are classified under a distinct heading to denote that they are merely deferred charges. Pickles and Dunkerley classify preliminary expenses of a limited company as fictitious assets.(3) This classification is especially true when the organization expenses are small in value. Holmes lists as intangible assets, copyrights, formulas, franchises, goodwill, leaseholds, licenses, patents, trade-marks and trade-names (4) and excludes receivables, securities and organization expenses.

<sup>(2)</sup> Spicer, Ernest E. and Pegler, Ernest C., Bookkeeping and Accounts (London: Pitman & Sons, Ltd., 1950), p.27.

<sup>(3)</sup> Pickles, William and Dunkerley, G.W., Accountancy (London: Pitman & Sons, Ltd., 1951), p. 134.

<sup>(4)</sup> Holmes, Arthur W., Auditing Principles and Procedure (Chicago: Richard D. Irwin, Inc., 1951), pp. 448, 450, 452, 454, 455, 456, 457.

The cause for the difference in opinion regarding the definition of the term when the same criterion is employed, seems to rest in the meaning of the criterion itself. Some conceive of the term 'material property' as comprising assets that have a separate and independent physical existence, that can be seen, touched or handled. Some other writers use the term to mean such property having a separate physical existence and rights to receive such property in the future, thus including receivables, contracts and securities. Among accountants using the term in the former sense are Spicer and Pegler, while Holmes, Yang and Hatfield use the term in the latter sense.(5)

As far as accounting practice is concerned, securities and receivables are treated as tangible assets because they represent enforceable rights whose value is normally realizable in money. In this treatment there is an implicit assumption that tangibility depends not so much on materiality as it depends on liquidity and certainty of the value of the asset. Taking this as a basis for classification Carter defines intangibles as ".... those the real value of which may be extremely doubtful and might quite conceivably be

<sup>(5)</sup> Spicer and Pegler, op. cit., p. 27; Holmes, <u>loc. cit.</u>, Yang, <u>loc. cit.</u>; Hatfield, Henry Rand, <u>Accounting: Its Principles and Problems</u> (New York: D. Appleton and Company, 1929), p.111.

nothing, such as Goodwill, Patents and Trade-marks, or items which are merely debit balances not written off. (6) Furthermore Carter uses the terms Intangible and Fictitious interchangeably; (7) Pickles and Dunkerley classify assets into tangible and intangible but make special emphasis ".... that the latter are not necessarily fictitious. Goodwill, for example, provided it is represented by actual value, is definitely a fixed asset, not withstanding its intangibility." (8)

However, if liquidity and certainty of value be taken as the criteria for classification of assets, new problems would unavoidably arise. Taking as an example a highly specialized fixed asset which, other things being equal, is not marketable, it would be difficulty to classify it as a tangible asset. The value of this and of similar assets is so closely attached to the business itself, that realizability would not serve as a good criterion for its classification. Furthermore, one might conceive of cases where trade-marks or trade-names, which are representative of intangible assets, can be objects of independent valuation and might command

<sup>(6)</sup> Carter, Roger N., Advanced Accounts (London: Pitman & Sons, Ltd., 1950), p. 2.

<sup>(7)</sup> loc. cit.

<sup>(8)</sup> Pickles and Dunkerley, Loc. cit.

immense value on the market.

#### Assignability as a Criterion

Accountancy is a tool of management and hence when a certain asset is classified as intangible, it should be so designated because of the managerial convenience resulting from such designation.

The assignability of costs to individual items of property has been suggested as a basis for classification of assets into tangible and intangible. This proposal looks on the classification itself as an attempt to assign the total value of a business to the individual items of property comprising the business. Thus freight and installation costs are charged directly to the asset or assets installed. Such costs as cannot be assigned to a special physical property would form part of the intangible assets. Costs incurred in promoting an organization, especially when the costs are high, are treated as intangible assets. As Yang puts it, ".... intangibles are the residuum, the balance of the legitimate values attaching to an enterprise as a totality, over the sum of the legitimate values that are assignate ble to the specific items of material property." (9)

There are special problems attached to the

<sup>(9)</sup> Yang, op. cit., p. 6.

valuation of the so-called intangible assets and therefore they are subject to a special accounting procedure described in detail in a later chapter.

Definition of Intangibles

To avoid the wide difference of opinion regarding the definition of the term and to provide a useful basis for discussion, the following operational definition formulated by the American Institute of Accountants will be adopted and consistently followed throughout this paper.

"Intangible assets are defined as meaning patents, copyrights, secret processes and formulas, goodwill, trade-marks, trade-brands, franchises, and other like property." (10)

For the logical sequence of the argument, the thesis is introduced by a chapter on some individual items of intangible property, a chapter on their economic characteristics and a third on accounting procedure and theory. The last three chapters are concerned with the economic implications of the treatment of intangibles in accounts.

<sup>(10)</sup> American Institute of Accountants, "Report of Committee on Terminology", Journal of Accountancy, XXXV (1922), 466. Quoted by Hatfield, loc. cit.

#### CHAPTER I

#### SOME INTANGIBLE ASSETS

In this chapter an attempt is made to trace the development of the meaning of the more common forms of intangible property and to formulate or adopt definitions of individual items of such property.

As it is the opinion of the writer that the accounting treatment of individual items of property, although varied, bears the same significance when considering its effects on the individual firm or the economy as a whole, establishment of relationships as between goodwill and the rest of the intangible items discussed below is attempted.

## A. GOODWILL

The term 'Goodwill' has gradually grown up with the growth of industry and trade. In its simplest forms, the term relates to the good repuration of the entrepreneur, as an efficient and honest worker, and to the advantageous location of a store convenient to customers. However, it was not recognized as an asset in courts until the year 1743. (1)

<sup>(1)</sup> Dawson, Sidney Stanley, The Accountant's Compendium (London: Gee & Co., 1904), p. 190.

The earliest reported legal definition is probably that of Lord Eldon in Crutwell v. Lye in the year 1810. "Goodwill", says Lord Eldon, "is nothing more than the probability that the old customers will resort to the old place." (2) In this case however, the business was that of a transport agent, where the value of goodwill depended basically on location. Some years later, Vice-Chancellor Wood in the case of Churton v. Douglas interpreted the definition given by Lord Eldon. He said: "Lord Eldon did not mean to confine the rights involved in the term goodwill to the advantage of occupying premises to which customers were in the habit of going. Goodwill must mean every advantage. (affirm t mative advantage, if I may so express it, as contrasted with the negative advantage of the vendor not carrying on the business himself) that has been acquired by the old firm by carrying on its business, everything connected with or carrying with it the benefits of the business." (3)

In the case of the Commissioners of Inland
Revenue v. Muller, Lord Macnaghten defined goodwill as
a ".... thing easy to describe, very difficult to

<sup>(2)</sup> Quoted by Cropper, L. Cutberth, Accounting (London: MacDonald and Evans, 1937), p. 62.

<sup>(3)</sup> Quoted by Dawson, loc. cit.

define. It is the benefit and advantage of the good name, reputation, and connection of a business. It is the attractive force which brings in custom. It is the one thing which distinguishes an old-established business from a new business at the first start....

For my part, I think that if there is one attribute common to all cases of goodwill it is the attribute of locality, for goodwill has no independent existence. It cannot subsist by itself. It must be attached to a business. Destroy the business and the goodwill perishes with it, though elements remain which perhaps may be gathered up and be revived again." (4)

The stress in these early legal concepts of the term was primarily on the advantages derived by a business from location of the store and the good reputation of the entrepreneur.

## Definition of Goodwill

Many attempts at definition of the term have been made, and the definitions have greatly varied not only in their wording but also in their intent. Definitions were given restricting the meaning of the term to the advantageous location of the business or the good reputation of an entrepreneur. The definition

<sup>(4)</sup> ibid., p. 191.

given by Lord Eldon in Crutwell v. Lye in 1810 is a good example of the narrow conception of the term. Other broad definitions were given which rendered the meaning of the term vague. The definition given by Dr. Johnson, an executor of a brewer, is so formulated to include every possible potentiality to make profits. He said: "We are not here to sell a parcel of boilers and vats, but the potentiality of growing rich beyond the dreams of avarice." (5)

Hatfield restricts the meaning of the term to the established connections of the business.

"Goodwill, which may be taken as the typical form of intangible assets, re-presents the value of business connections, the value of the probability that present customers will continue to buy in spite of the allurements of competing dealers." (6) The same attitude has been held by Justice J. Warington in the Hill v. Fearis case. To him "The goodwill of a business is the advantage, whatever it may be, which a person gets by continuing to carry on, and being entitled to represent to the outside world that

<sup>(5)</sup> Quoted by Whithers, Hartley, Stocks and Shares (London: Elder & Co., 1911), p. 73.

<sup>(6)</sup> Hatfield, <u>Accounting: Its Principles and Problems</u>, p. 112.

he is carrying on a business, which has been carried on for some time previously."(7)

Pickles and Dunkerly, while recognizing the difficulty of the appraisal of the term hold the same view and define the term as "an intangible, but not necessarily fictitious, asset representing the value—however difficult its appraisement may be—to its owner of benefits arising from the business in question, such as the sole right to enjoy the profits of the business, and where goodwill has been acquired, the sole right of succession to the advantages of the business which have been built up in the past."(8)

Couchmann(9) and Guthmann(10) both relate goodwill to the value of the business as a whole, and hold that whenever a business in toto is worth more than the total of the individual items of property

<sup>(7)</sup> Warrington, J., in <u>Hill v. Fearis</u> (1905), 1 Ch. 466. Quoted by Spicer and Pegler, <u>Bookkeeping and Accounts</u>, p. 152.

<sup>(8)</sup> Pickles and Dunkerley, Accountancy, p. 624.

<sup>(9) &</sup>quot;It is that value more or less intangible and indefinable which causes any business to be considered worth more than the investment which it represents." Couchmann, Charles, The Balance-Sheet, (New York: The Century Co., 1924), p. 131.

<sup>(10)&</sup>quot; The capitalized value of earning power in excess of the normal return on the net investment in tangible property." Guthmann, Harry G., The Analysis of Financial Statements, (New York: Prentice Hall Inc., 1935), p. 145.

represented by net worth, the business would have an element of goodwill in it.

aspect of intangible values, namely, competition.(11)
Other writers recognized the variable nature of goodwill and held that "the precise content of goodwill
will vary with the particular business."(12) A
similar concept of the term, is the definition of
Lord Justice Lindley in one of the English cases.
He said: "Goodwill regarded as property has no meaning except in connection with some trade, business
or calling. In that connection I understand the work
to include whatever adds value to a business by reason
of situation, name and reputation, connection, introduction to old customers, and agreed absence from
competition, or any of these things, and there may
be others which do not occur to me"(13)

<sup>(11) &</sup>quot;It represents the intangible element of value in an ordinary business and is applied generally in those cases where there is competition with other like business ventures." Grunsky, Carl Ewald and Grunsky, Carl Ewald Jr., Valuation, Depreciation and the Rate Base (London: John Wiley & Sons, 1927), p. 27.

<sup>(12)</sup> Cropper, loc. cit.

<sup>(13)</sup> Quoted by Kester, Roy B., Accounting Theory and Practice, (New York: The Ronald Press Co., 1918), II, 357.

#### Conclusion

The term 'Goodwill' is a master valuation account covering many different intangible elements of value and consisting of a combination of one or more of these elements depending on the type and nature of the individual business undertaking. These intangible elements of value grow out of all kinds of past efforts in an attempt to make profits, usually protected under various names and include such attitudes as friendship which involves recognition of a person's ability, habits formed upon the constant recurrence of such favorable judgment or choice in the form of patronage of customers, locational benefits. good credit, established connections, trade-marks and trade-names, personal integrity of the entrepreneur, patent rights, organization, current contracts and agreements and the like.

#### B. Trade-marks and Trade-names

The use of trade-marks dates back to the very earliest times. Various inscriptions and bricks bearing names were found dating back to early Egyptian and Greek times, and such marks continued to be in use up till the present time. Even protection against imitation and infringement of such marks was granted as early as 1512 by the Council of Nuremburg. The decree

of the said council provides, "Whereas, a certain foreigner, who sells engravings under the Council Chamber, has, among others, certain ones bearing the signatures of Albert Durer therefore, it is ordered that he shall obliterate all such signatures, and keep no more such engravings in future, and if he shall neglect so to do, he shall be brought before the Council of fraud....An edict of Charles V of May 16, 1544, concerning Flemish tapestries, provided that 'any master workman who makes or causes to be made any such tapestry, shall work upon one end and upon the bottom of the said tapestry a mark or symbol, and such signs as the city may require, that it may be known by the said marks of what city and of what master the said tapestry is a product."(14)

However, no adequate relief against infringement was granted by English Courts until 1838 and in New York state not until 1845.(15) Since the year 1875 the right of using trade-names was regulated in England, first under the Trade Marks Registration Act

<sup>(14)</sup> Rogers, Edward S., Good-Will, Trade-Marks and Unfair Competition (Chicago: A. W. Shaw Company, 1919), p. 39.

<sup>(15)</sup> ibid., pp. 47, 48.

of 1875 which was reviewed and ammended. The act now in force is the 1905 Trade-Marks Act. In the United States of America, the use of trade-marks and names is regulated by the statute of February 20, 1905.

In the case of Larabee v. Lewis, Justice Crawford defined a trade-mark as "the name, symbol, figure, letter, form, or device used by a manufacturer or merchant to designate the goods he manufactured or sold by another, to the end that they may be known in the market as his, and to secure such profits as result from a reputation for superior skill, industry or enterprise."(16)

The name of an individual may be registered as a trade-mark. However, registration is not necessary for its validity; it only provides firm legal evidence in case of infringement. "A name so used is called a trade name."(17) The only legal difference between a trade-mark and a trade-name is that the former applies to a product while the latter applies

<sup>(16)</sup> Larrabee v. Lewis, 67. Ga. 562, 563. Quoted by Yang, Goodwill and Other Intangibles, p. 57.

<sup>(17)</sup> Leake, P.B., Commercial Goodwill: Its History, Value, and Treatment in Accounts (London: Pitman & Sons, Ltd., 1930), p. 11.

to a business.

A difficulty arises where the surname of an individual is used as a mark for goods produced by him. In the case of Brinsmead v. Brinsmead, it was held by the judge that the defendant "Brinsmead could not be restrained at the instance of the plaintiffs from putting his own name on pianos made by him, although the fact of his doing so might bring him some advantage in connection with the sale of the pianos made by him in consequence of his surname being the same as that of the plaintiff firm."(18)

Although it would seem as a matter of first impression that the name of a person is as good a distinctive mark as anything, yet names that are very common would present endless difficulties, and it would not be fair at all to restrict one's use of his own name. The case of Brinsmead v. Brinsmead is a good example of a possible difficulty.

Geographical names also are not very distinctive and present practically the same problems that are presented by the use of personal names as trade-marks.

<sup>(18) 29</sup> T. L. R. 706, C. A. (1913) Quoted: <u>ibid.</u>, p. 12.

The Supreme Court of the United States has adopted the following definition, similar to the definition given by Justice Crawford in the Larrabee v. Lewis case. "A trade-mark is a word, letter, device or symbol or some combination of these used in connection with an article, and either inherently or by association pointing distinctly to the origin or ownership of the article to which it is applied."(19)

There is no much difference of opinion on the definition of the term, and definitions given by English as well as by American courts are similar in almost all respects.

## Relation of Trade-Marks and Trade-Names to Goodwill

"The name is the means by which I am able unmistakably to fix the good-will which I have toward this particular article of merchandise. It is not dependent upon a place, it designates a thing...And there is no possibility of creating or perpetuating a good-will without some identifying means."(20) A trad-mark or name, is the only means by which a consumer can differentiate the various types and qualities of goods, especially where competition as to quality

<sup>(19)</sup> Quoted by Rogers, op. cit:, p. 75.

<sup>(20)</sup> ibid., p. 19.

is keen, and differentiation between different products is difficult. On the other hand, it is the only method which a manufacturer can employ, to distinguish his merchandise from other similar merchandise and transmit the goodwill of his business to the consumer of the goods to which his trade-mark is attached. They are "what make goodwill effective."(21)

English Law prevents the assignment of a trade-mark or trade-name independent of the goodwill of the business. (22) The reason for the prevention of the independent assignability of trade names and marks is that such assignment might promote deception of the consumer from the point of view that goods of a quality completely different from the one already known by the consumer might be stamped with the mark or name thus gaining an advantage on the account of the consumer, while if the business was totally sold, then there would be reasonable assurance that the same quality of goods will bear the same label or mark.

<sup>(21)</sup> ibid., p. 29.

<sup>(22)</sup> Article 22 of the Trade-Marks Act of 1905 provides that "A trade-mark when registered shall be assigned and transmitted only in connection with the goodwill of the business concerned in the goods for which it has been registered and shall be determinable with that goodwill."

Although it is primarily a part of the goodwill of business, a trade-mark as such might become the direct object of valuation especially when, in a complex economic society, the producer becomes so remote from the consumer that the only recognition the consumer would have towards the goods would be the name or mark by which the product is known. In such cases, the goodwill of the business would primarily, if not totally, consist of the brand name, other elements of intangible value being negligible. The location of the business and the reputation of the entrepreneur might be of an insignificant value compared with the value of the name, by which the product is known. Examples of this would be the many internationally known brands such as Coca Cola, Arrow Shirts, Parker Pens, Quink Ink, Palmolive Soap, etc., where the trade-names themselves are of tremendous value. The point to stress here would be that the trade-mark or name used by a business might form a major part of its goodwill, and therefore the goodwill will be valued in terms of the name or mark used.

## C. Patents and Copyrights

A patent is an "...exclusive privilege granted by the Crown to the true and first inventor of a new manufacture, or method of making articles according to his invention. (23) In England today the patent privilege is still de jure an act of grace of the Crown de facto it is obtained as a matter of right. consists of a grant from the government to a patentee of an exclusive right to use or sell an invention for a period of time. The duration of a patent is limited to seventeen years in the United States, (24) and sixteen years in the United Kingdom(25) at the expiration of which time this 'exclusive privilege' ceases. A patent differs from a trade mark in that it gives its possessor an exclusive right to use a device or sell an article, while the trade-mark gives its possessor an exclusive right to use a symbol or a mark to distinguish the products he sells from other similar products. Another major difference is that a trade-mark, unless consistently used. lapses and the owner's right to it lapses also; a patent continues to be valid all through the term of its duration whether it was used or not.

To be patentable, a thing should be new and useful, and the application should be made by the person who invented the idea and first disclosed the

<sup>(23)</sup> Dawson, op. cit., p. 348.

<sup>(24)</sup> Holmes, Auditing Principles and Practice, p. 450

<sup>(25)</sup> Patents and Designs Acts 1907, Part I., Section 1-(1); ammended in 1919, section 6-(1).

invention to the patents office. (26)

"Copyrights are monopolistic privileges, similar to patents, granted by the government for the reproduction and sale of printed or otherwise produced writings, drawings, musical compositions, maps, works of art, etc."(27)

In the United States copyrights are granted for a period of twenty eight years and are renewable once.(28) In the United Kingdom the term of the copyright covers the lifetime of the author and an additional seven years, or for forty two years whichever is longer.(29) The International Convention for the Protection of Literary and Artistic Works grants a term which covers the life of the author and fifty years after his death.(30) In essence, copyrights are but patents for literary and artistic work.

<sup>(26)</sup> Patents and Designs Acts 1907 Part I, Section 1 -(1).

<sup>(27)</sup> Holmes, op. cit., p. 454.

<sup>(28)</sup> ibid., p. 454.

<sup>(29)</sup> Dawson, op. cit., p. 95.

<sup>(30)</sup> International Convention Revising the Berne Convention for the Protection of Literary and Artistic Works, June 1948, (London: His Majesty's Stationery office, 1949), Article 7, Section (1).

#### Relation to Goodwill

It seems obvious that a patent affects the supply of a commodity only, and in this respect does not have any direct relation to goodwill. However, when the patent enables a business to be the sole seller of a particular commodity for a number of years, habits will be formed by the consumer to the effect of fostering the goodwill of the business. The association of the patented product with the trade mark under which it is sold will be so close as to suggest the same thing to the consumer. Other similar products manufactured and sold under other trade-names or marks, after the expiration of the patent's term, normally suggest to the average consumer, inferior quality goods

The reputation which the patentee acquires during the term of his patent is an element of goodwill; yet, there is a major difference existing between goodwill and a patent. The former is primarily based on competition; goodwill is possible only when the consumer has the freedom to choose between alternative products. Once such freedom ceases to exist, goodwill can in no way be present. On the other hand, a patent suggests exclusion, and hence cannot co-exist with goodwill. It adds value to good-will after the

expiration of the term of its existence.

#### D. Going - Value

"Going value may be defined as the value created in connection with the gradual development of the business during the post-organization and post-construction period. It represents the sacrifice of return incurred by utility owners through the investment of capital in physical plant necessarily constructed in advance of its full utilization by the community, the outlay for maintenance of the surplus plant while the business is being developed, and the initial cost of selling service to customers." (31)

The term going value has its origin and application in the valuation of public properties, and is largely restricted to this type of property. It is an allowance in valuation for losses sustained during the period preceding the time when the utility has developed on a paying basis. "Going value is created by the outlay of cash or the sacrifice of return in the process of developing the business of every public utility. Its amount may be measured ap-

<sup>(31)</sup> Case Studies in Business, "Going Value as an Element in the Valuation of Public Utility", Harvard Business Review, I, Oct. 1922 - July 1923, p. 362.

proximately by an analysis of the costs necessarily incurred under good management in the process of developing the business. Compensation for this outlay must in justice be given to the owners of the utility either through current amortization of the going value asset, through deferred amortization, or through capitalization. The choice of method will depend upon the nature of the particular utility business and consideration of public policy."(32) In the case of Des Moines Gas Co. v. City of Des Moines the United States Supreme Court recognized this element of value in a public utility. "That there is an element of value in an assembled and established plant, doing business and earning money, over one not thus advanced in self-evident. This element of value is a property right and should be considered in determining the value of the property upon which the owner has the right to make a fair return when the same is privately owned though dedicated to public use."(33)

Other definitions were given, all agreeing as to the major concept of the term. Thus it has been decided by U. S. courts that "The going value of a

<sup>(32)</sup> ibid., p. 360.

<sup>(33)</sup> June 14, 1915, 35 Sup. Ct. Rep. 815, Quoted: ibid., p. 360.

where it is not in the little and it that he

utility is to be determined only on a basis of offsetting annually against actual gross earnings all
bona fide operating expenses, including repairs, maintenance, taxes, reasonable annual depreciation charge,
and a fair return on the investment, during all the
years since the inception of the utility, provided the
project is properly conceived and an undue period has
not been required to develop the business on a paying
basis, the amount of excess of annual deficits over
surpluses at the time of the valuation being capitalized
as 'going value'."(34) Grunsky and Grunsky define the
term as meaning "The increment of value which is due to
the fact that a business has been established and brought
upon a paying basis."(35)

As to how much this 'increment of value' should be, is where opinions have been quite at variance. However, individual cases are usually studied independently and court decisions in this connection depended mainly on the particular conditions of the utility in ques-

<sup>(34)</sup> Belleville v. St. Clair County Gas & E., Co.(III), P.U.R., 1915 F, 235. Quoted by Morgan, Charles, Regulation and Management of Public Utilities, (Cambridge, Massachusetts: Houghton Mifflin Company, The Riverside Press, 1923), p. 283.

<sup>(35)</sup> Grunsky and Grunsky, loc. cit.

tion. (36) It is outside the scope of this thesis to trace the various developments of the concepts of the term. The most outstanding of these interpretations and the relation of going value to goodwill will be briefly discussed in this chapter.

#### The Cost-Basis of Valuation

In the valuation of utility undertakings, it is sometimes argued(37) that the value of a going concern consists of the unexpired capital outlay on the plant, and that apart from this, no other values exist. Going value being allowed for when valuing the utility as an entity. The capital outlay being computed by deducting from the cost, adjusted to price fluctuations

<sup>(36)</sup> In several cases the valuations of going value actually allowed have been as follows: (H.B.R. vol. 1, p. 361).

<sup>300,000</sup> dollars, where the valuation of other assets was 2,240,000 dollars. Des Moines Gas Co. v. Des Moines, Supra.

<sup>800,000</sup> dollars where the valuation of other assetts was 12,000,000 dollars. City of Denver v. Denver Union Water Co., Denver Union Water Co. v. City of Denver: U.S. Supreme Court Mar. 4, 1918 1,500,000 dollars where the investment in plant was 8,500,000 dollars. Re Appalachian Power Co. West Virginia Public Service Commission, 1919.

<sup>(37)</sup> Leake, op. cit., p. 105; Justice Savage in Brunswick and T. Water District v. Maine Water Co., 99 Me. 371, 376. Quoted by Yang, op. cit., p. 63.

of the physical property, an annual charge spread over the estimated life of the equipment in use. It is contended, however, that the expenses incurred in the installation of the machinery is included in the capital outlay.

#### Going Value and Established Business Connections

A more liberal interpretation of 'going value' is that it results from having established connections. According to this view, the term 'going value' is used to express the capitalized value of early losses incurred for the purpose of developing the utility. The period during which such losses are incurred is termed by Morgan the 'maturation period'."(38)

Although monopolistic in character, a utility cannot normally escape this preliminary period of development. In the Wisconsin practice, (39) all legitimate losses incurred at any time are amortized and included in the valuation of utilities, for rate-making.

#### Capitalized Value of Excess Earnings

A third interpretation of the term is based on the valuation of a utility for public purchase, on the assumption that rates have already been determined.

<sup>(38)</sup> Morgan, op. cit., p. 119.

<sup>(39)</sup> ibid., p. 284.

attends and characterizes a business as a going industry and has developed and become attached thereto in the course of time. "(40)

#### E. Franchises

A franchise is a privilege granted by the community to a private person or corporation for use of the public property. (41) In other instances a franchise has been defined as "any privilege or right granted by legislative authority to engage in a particular business. (42)

In ordinary business undertakings, persons are free to invest their property in profitable business without a special governmental sanction. Businesses which are public in nature, need public recognition, and therefore, a special permit to operate. Such a permit or grant assumes the form of a franchise.

The economic nature of a franchise varies from a mere permit to construct and operate a business in a particular locality for a short period of time, to a practical guarantee of monopoly for an indefinite period

<sup>(40)</sup> Justice Marshall in Appleton Water Works v. Railroad Comm., 154 Wis. 121, 155. Quoted by Yang, op. cit., p. 71.

<sup>(41)</sup> Kester, op. cit., p. 355.

<sup>(42)</sup> Grunsky and Grunsky, op. cit., p. 66.

of time. The strength of the franchise depends on the particular circumstances and conditions existing at the time the franchise was granted and the provisions and stipulations of the particular grant.

The value of the franchise, however, is derived from the large earning power of the company owning it and the prospects for the continued enjoyment of such high profits. The mere existence of a franchise does not add value to the enterprise; it is valueless unless it proves to be a cause for more than normal profits. If profits are regulated and brought down to a normal rate, through the regulation of rates charged by the utility, the franchise will lose its significance and value. One can conceive of cases where the franchise may have a negative value.

#### Relation to Goodwill

In substance, a franchise is a right granted by a public body to construct, operate and enjoy the profits derived therefrom. It is only a guarantee to continue to earn a reasonable rate of income; it gives its possessor no other advantage. In this sense it becomes closely allied to 'going value', which in a sense is the goodwill of a utility.

This is no way means that a franchise and goodwill are similar. They are completely distinct

from the legal as well as from the economic points of view. The franchise is only the right to keep good-will as distinct from goodwill itself. The ascertainment of value in both cases is similar with one major difference. In the case of a utility competition is usually protected against, while in private business undertakings the existence of competition may affect materially the value of goodwill.

#### CHAPTER II

#### ECONOMIC CHARACTERISTICS OF INTANGIBLE PROPERTY

The accounting treatment of intangible property does not provide the sole basis for their valuation or evaluation. Therefore, to complete the picture and to provide a more solid basis for discussion, a study of some economic aspects of intangibles together with the source of their value is attempted in this chapter.

#### Excess Profits as a Source of Value

Whenever the net return on the capital invested in the physical elements of an enterprise exceeds the normal rate of return(1) on that capital, there will be other elements of value in the same not represented by the cost of any physical portion thereof. Such values being apart from the actual investment in physical properties are usually regarded as intangible values.

<sup>(1)</sup> A normal rate of return is an expected rate of profit which is "high enough to attract capital into an industry, in view of the peculiar conditions and circumstances attending the industry in regard to costs and risks during the period of its development. Yang, Goodwill and Other Intangibles, p. 99, It is implicitly assumed therefore, that businesses of different nature and risk have different normal rates of return, depending on the period of development of the business and the amount of risk involved.

"Ordinarily the sum of all intangible values will be the capitalized net annual earnings, less the investment in the physical properties (if the accounting system throughout has been proper and the enterprise has met with no untoward experiences) or what may generally be a safer approximation, the capitalized net earning, less the cost of reproducing the physical properties."(2)

A commercial school, for example, has invested 10,000 pounds in the business. The total net earnings, after allowing for all legitimate charges and depreciation on school equipment amounted to 15,000 pounds, i.e., 150 percent on the investment. Assuming that an average annual net profit of 30 percent is reasonable on capital invested in similar businesses, and assuming that such returns are permanent, the capitalized value of the business would be 50,000 pounds. The total intangible values of this business would be 40,000 pounds. That is to say, if the possibility of competition is ruled out, a valuation five times the capital investment will be made in case the business is to be revalued either for sale or any other reason.

<sup>(2)</sup> Grunsky and Grunsky, Valuation, Depreciation and the Rate-Base, p. 58.

In general, such intangible values might result from various factors. A patent covering a certain process of manufacture might decrease costs materially and hence result in a surplus, thus contributing to the intangible values of the business. Excessive productive efficiency, foresight of the entrepreneur in perfecting the process of production and ability to attract and keep customers are but few possible causes contributing to the existence of a surplus in a business concern.

The term 'excess-profits' however, needs clarification. According to Leake the term means "the amount by which revenue, increase of value, or other advantage received exceeds any and all economic expenditure incidental to its production."(3) The term 'economic expenditure' includes current expenses, depreciation on wasting assets other than goodwill, salaries and other remunerations necessary to secure continued successful management, and a reasonable rate of interest taking into consideration the nature and degree of the risk undertaken.(4)

<sup>(3)</sup> Leake, Commercial Goodwill, p. 18.

<sup>(4)</sup> ibid, pp. 19, 20.

However, for practical purposes of valuation, a normal rate of return will be that rate, which the prospective buyer of a business expects to get on his investment after buying the business.

In the example given above, a prospective buyer of the school expects to get 30 per cent net earnings, on his investment, and therefore the capitalized value of the business at that rate was taken at 50, 000 pounds. Ordinarily, in businesses of this nature where the capital outlay is relatively small and entry to the market is not restricted, competition is expected to cut profits down. An intending purchaser, therefore, taking into consideration this as a hazard might conclude that. while earnings of 30 per cent a year on the tangible property is reasonable, a higher rate of return must be taken on the uncertain intangible values. He may be justified in concluding that a 50 percent on intangible property should be allowed and hence the capitalized value of the school would be 34,000 pounds calculated as follows:

Total annual net profits

15,000.-

Less 30 percent on the value of the physical property standing at 10,000 pounds.

3,000.-

Net annual return on intangible values.

12.000.-

12,000 pounds capitalized at the rate of 50 per cent.

24,000.-

Therefore, the value of the business to this intending purchaser would be the sume of 24,000 pounds, being the capitalized value of excess profits, and the original capital outlay which is 10,000 pounds, instead of the original figure of 50,000 pounds.

As long as intangible property is assumed to be the result of the existence of a surplus in a business, it would be obvious that such intangibles are necessarily of either differential or monopolistic character. Contrary to the common conception of the case, patents, trade-marks, trade-names, goodwill and other similar property are valuable only in so far as they are not similarly possessed by every business enterprise. Once they become universally employed they cease to be of any value.

It is not uncommon however, that certain items of individual property such as trade-marks become a necessary adjunct of an ordinary business that they become an item of necessary cost of the operation of the business. In such cases the ownership of such rights does not give the business any differential or monopolistic advantage, but failure to possess such rights might be disadvantage-ous to the business.

Examples of such rights are trade-marks and trade-names. In the modern complicated business world, a commodity void of a trade mark might not be easily marketable, and hence a trade-mark becomes a necessary cost of the distribution of the product similarly owned and utilized by most entrepreneurs. Only in cases where such trade-names become definitely established and well known to the consumer that they would have any value of their own recognizable as an asset in the books of accounts, and then the value attached to the trade-name would be more of the nature of goodwill.

# Relation of Intangible Values to the Business in which they Originated.

A characteristic allied to the differential nature of intangible assets, is their rigid attachment to the business in which they have originated. Being the product of success in business rather than the objects of independent values, they do not belong in the general market. "Legal goodwill cannot be separated and dealt with apart from the business out of which it arises."(5) What contributes more to the absence of a general market for them is their intangibility. "They are not only incapable of separate disposal from the

<sup>(5)</sup> ibid, p. 14

business but assume no material form and possess no technical serviceability."(6)

It may be argued however, that fixed assets employed in a particular business do not belong, generally speaking, in the general market, especially as the same type of assets possess different values to different businesses. On the other hand, even when admitting this argument, it remains true that for purposes of valuation, similar assets on the market would serve as basis for comparative valuation, which to all practical intents and purposes is a satisfactory basis.

In another part of this thesis(7), it is argued that there is no definite relationship between the cost of development of an intangible asset and its value to the business. It might be added here that it is not only that the actual cost of their development is not indicative of their value, but that there is no market value to speak of. Hence cost or the market valuation rule conventionally applied in practical accountancy does not satisfactorily apply in the case of intangible property.

<sup>(6)</sup> Yang, op. cit., p. 16

<sup>(7)</sup> cf. infra, Chapter III.

# Special Valuation Problems Presented By Intangibles

A characteristic peculiar to all intangible property is the difficulty of their valuation and the imputation of such valuation to individual items of intangible assets. The determination of the surplus upon which such valuation is to be made, the number of years' purchase, the rate at which the surplus is to be capitalized and the determination of that portion of the surplus which is due to intangible property, are all problems which are to be faced when a valuation of intangibles is to be made.

Income of an enterprise is the joint product of all elements of value possessed and utilized by it. The measurement of the contribution made by each factor of production presents a special problem. In the case of marketable property, the value of each individual asset item will be determined by a study of the prices of similar assets on the market, allowing for depreciation and other legitimate charges. When no market exists for a specific property item, such as goodwill, trade-names, etc., rough estimates will have to be made on bases already discussed, usually in the form of a collective master valuation account conveniently called 'Goodwill'.

When it comes to the breaking down of this

account to its component parts, the problem becomes even more complicated. To say that a certain portion of excess earnings belongs to, or results from trade-names, while another part results from goodwill proper, is absurd. It would be the same as trying to impute portion of profits to machinery and other portions to labor, management, etc.

If imputations of profits is to be made to tangible items of property, the method that would reasonably be employed would be to study the effect of the withdrawal from, or introduction to, the business of such property. As tangible property is ordinarily controllable by management, such study would, at least theoretically, be possible.

On the other hand, intangible property is dependent to a large extent on factors that are completely external and are therefore outside the control of management. The taste of consumers and their willingness to buy the products of a certain business form a major part of the goodwill of the business. Management cannot introduce or withdraw from the business, and still keep the business going, any of these or of similar elements.

Another basis for imputation of excess profits would be a comparative study of the earning of this

business with other similar businesses not owing elements of intangible values, and try to make the imputations accordingly. The difficulty is in finding such
a business.

Comparison might be made between the earnings of the business at the present stage, with its earnings before it came into possession of a certain intangible property. A problem here arises when one intangible property possessed by the business helped create another intangible asset. An example would be a trade-mark as a source of good-will to the business.

As business earnings are also variable in nature, the value of intangible property would seem to be indefinite and indeterminable.

# Economic Characteristics of Goodwill

Friendship and good reputation and other human relations, though valuable in a sense do not lend themselves to economic valuation and cannot be expressed in terms of money. From this point of view, the definition made by Lord Justice Lindley in the case of Commissioners of Inland Revenue v. Muller cited in the first chapter is taken into consideration. Goodwill of a professional person such as a physician or a lawyer is valuable only to the person with whom it originated; once he stops to

exist, it ceases to exist. "The practice of a physician is a thing so purely personal, depending so absolutely on the confidence reposed in his personal skill and ability, that when he ceases to exist it necessarily ceases also, and after his death can have neither an intrinsic nor a market value."(8)

The reason why the goodwill of a professional is not economically valuable is twofold. First, it is not transferable. In a sense, it can be argued that the location of an office of a professional person might be valuable if another person of the same profession uses that office. However, while there is some truth in this argument, the advantage which is derived by the new occupant is doubtful, at least in the long-run. The question of the transferability of such goodwill is a question of degree, which, other things being equal, is low.

Another reason for its lack of value is that it has no exchangeable value; it cannot be expressed in terms of money. Economic goodwill should satisfy three conditions:

- 1. It should be persistent and of definite duration.
- 2. It should be useful to its possessor.
- It should be transferable and should have an exchange value.

<sup>(8)</sup> Mandeville v. Harman, 1866, 42 N.J. Eq. 185,194. Quoted by Yang, Goodwill and Other Intangibles, p. 24

Before something is to be valued, a reasonable degree of assurance should be present to the effect that the thing under valuation will continue to have approximately the same value, after such valuation is completed. Although definite assurances cannot be normally given, there should be nevertheless, enough conviction that, such values are not likely to change considerably. The conventional ways and means of valuation are practical and useful in this connection, although they sometimes are over-conservative.

As goodwill is a result of an exceptional factor, i.e., more than normal profits, it is assumed that it is useful to its possessor. When considering the definition of goodwill arrived at in the preceding chapter, it was assumed that keeping customers is an essential element of goodwill. Yet, a business which charges lower than profitable prices will have a very high twhover and thus in a sense, possess elements of goodwill. Such goodwill is fictitious and only imaginary. Unless special benefits not enjoyed by similar businesses accrue to an entrepreneur his business cannot be said to posses economic goodwill.

Assets appearing on a balance sheet of a business draw their value from two major factors. One is the benefits derived by the business owning them in the form of some contribution to its productive ability, and the second is their exchangeable value. The more fixed the assets are, the less exchangeable is their value. In all cases however, as long as the value of each asset is expressed in terms of money, they are assumed to have a market value. Goodwill, and to that effect all other intangible property, are the most fixed of all fixed assets and therefore are assumed to be the least exchangeable. Yet in cases of the sale of all the business such values are allowed for, and therefore are exchangeable.

Comparison of the goodwill of a business with that of a professional person will make obvious the necessity of transferability as a characteristic of economic goodwill.

# Economic Characteristics of Trade Marks

Through the force of habit and within relatively wide limits, the consumer will be always willing to
buy goods he used to buy, even at relatively high prices,
and will be very reluctant to change the 'quality' of such
goods. The only obvious means of identifying a quality
of manufactured goods is the trade-marks and names which
such goods bear. From this point of view, a trade-mark

helps to form such habits and attitudes and therefore gives the entrepreneur certain advantages which will permit him to make higher profits.

In a sense such marks are monopolies, at least in the popular sense of the term. Economically, one does not derive a monopoly by merely securing a right of this sort, it is essential that he should acquire sufficient control of the supply of the product in question that he can regulate its price. It is very doubtful that the owner of such a right can accomplish such a purpose, yet it primarily depends on the intensity of the recognition of the mark by the public.

However, one is justified in saying that the use of trade-marks in general gives the business a differential profit resulting from an increase in turnover.

Selling costs are also decreased by the use of trade-marks. A major portion of the selling costs of a manufacturer consists of advertising expenses which need to be incurred heavily only in the first stage of the establishment of the business, or the introduction of the article thus labelled into the market. Such costs however, are usually charged to the asset account directly and henceforth depreciated annually with the asset trade-

mark. (9) In the long-run, therefore when a brand becomes known, the major part of the selling expenses which is advertisement will definitely decrease.

Economic Characteristics of Patents and Copyrights

The patent system as a method of securing exclusive right to use an invention is an attempt to encourage invention by assuring a pecuniary reward to the inventor. Such a reward is paid by the society in proportion as this invention is useful to it. If the reward is given in the form of a monopolistic position in the market, then the reward will be equal to the met revenue that the patentee can exact from society, and

<sup>(8) &</sup>quot;The proper view to take of advertising expenditure is that it is an investment. It is the purchase price of the most valuable of all commercial property, a business good will and a public friendliness." Rogers, Edward, Goodwill, Trade-Marks and Unfair Competition, p. 117.

<sup>&</sup>quot;The producer of a nationally advertised foodstuff, outlined his plan in this way: 'We figure that it takes five years to get a foothold in a market. This number is merely our guess at the average time. In some cases it takes three or four, in others longer. We figure that our total advertising expenditure for five years back represent an investment in good will at par. At the beginning of 1914 we charged off 1908 advertising and held the rest on the books as a goodwill asset. We realize that this plan is entirely arbitrary.'" ibid., p. 28

the usefulness of the invention to it will be equal to the price which the society is willing to pay.

Thus the patent system is an attempt to include the production of inventions under the same framework of pricing as the production of other economic goods and services and to do that by limiting the use of the invention.

The economic nature of a patent varies from the exclusive right to use a very minor improvement to a minor manufacturing process, to an exclusive right to sell a useful and much needed commodity. Between these two extremes infinite gradations of 'exclusive rights' may be enjoyed by different patentees.

A patent is not necessarily synonymous to monopoly. It is definitely not a monopoly if the patent covers a minor manufacturing process, as the same product or very close substitues may be sold in the market at competitive prices. However, if the patent covers a whole article, and therefore its supply becomes necessarily controlled, the patent cannot escape securing a certain degree of monopoly on the product in question.

Patents covering parts of manufacturing processes are expected to result in internal economies, and the pooling of such patents under one control might Although competition is theoretically possible because of the absence of legal restraints for the production of similar products, yet such competition would not be practically possible because of the difference in the cost of production, between the business owning such patents and other businesses having no access to the cost-saving methods.

It should be noted however, that most of the patents registered every year, cover only minor details improving certain processes of manufacture. Relatively few patented devices prove to be useful and commercially feasible and are in actual use.

The value of a patent covering a manufacturing process, and resulting in a saving in costs, will be determined by the capitalization of the producer's surplus, or the income in excess of what other similar industries, having no access to the efficient means of production. obtain.

Copyrights, on the other hand, cover complete works. No two works can be exactly alike, and therefore, the control over the means of production such as the printing press, printing tools, etc. are not instrumental in bringing a control over the product.

#### CHAPTER III

#### VALUATION AND ACCOUNTING TREATMENT

The valuation of goodwill and other intangible assets presents many complexities. The general principle of valuation at cost rather than market may be said to apply here. What constitutes cost is difficult to determine. A corporation buying out a firm, may pay an amount of money in excess of the value of the net assets for goodwill. Goodwill acquired by purchase is recognized in the books of account at the price paid for it, and the price paid is deemed to be the cost of goodwill. On the other hand, the vendor firm establishing its goodwill over a long period of time is not allowed to show a good-will account in its books, unless specific expenditures were made for that purpose. It is deemed good accounting practice not to recognize goodwill in the books unless paid for by purchase. Many circumstances might arise calling for the valuation of goodwill; some of the most common of these situations are discussed below.

# A. Procedure

The usual method of valuing goodwill requires an estimate of the period during which the excess-profits

"The determination of the amount of excess profits is generally based on the records of the past experience of the firm or corporation selling its goodwill."(1)

Valuing it requires a consideration of the determination of a normal rate of profit, and a determination of the value of the net assets used in the business.

All these items are of a speculative nature, the estimation of which is necessarily approximate. It should be attempted however, if goodwill is to be valued. Profits which are to be taken into consideration should be only those profits arising from activities for which the business was originally established. Capital profits and profits resulting from operations and transactions not usually undertaken in the ordinary course of business should be eliminated when averaging profits, and the number of years to be averaged vary with the nature of the business, usually ranging between two and five years.

Once 'excess-profits' are determined, a rate at which capitalization of these profits is to be made should be determined and accepted. The capitalization of excess-profits at the rate agreed upon, gives the value of all

Hatfield, <u>Accounting</u>: <u>Its Principles and Problems</u>, p. 117.

intangible property as accepted by the valuers. In view of the difficulty of imputation of such a payment to specific items of property it is customary to allocate it totally to goodwill regardless of the component elements that may enter into, and give rise to excess earnings. When intangible property is separately acquired by a going concern through purchase, the amount paid is usually designated according to the right purchases, and recognized as assets to the extent of the consideration paid.

In the case of patents, recognition in accounts is based on cost. The cost of patents to a firm being "....whatever amount it may pay for them in cash or its equivalent, or the obligation to pay cash, which may be in the form of a true liability or of capital stock issued."(2) The experimental work required to perfect the device patented constitutes the major item entering in the cost of a patent.

Other additional costs necessary to secure the full enjoyment of the right are considered as legitimate charges against the patent.

<sup>(2)</sup> Couchman, Charles, The Balance Sheet: Its Preparation, Content, and Interpretation (New York: The Century Co., 1924), p. 126

A problem arises in connection with the determination of the amount of experimental expenses chargeable against the patent. Experiments might be carried on for a long period of time, amounting to a large sum with a resultant discovery of a device or process which is a minor one. In other cases, discoveries of very important devices, processes, or even articles may be accidentally made. Both of these discoveries are patented. How much to value each, presents a real difficult problem. The valuation of a patent, therefore, is necessarily arbitrary and approximate.

Copyrights are valued in the same manner as patents, at cost. To the original grantee the cost of the copyright may be the expenses incurred in registering the copyright. To an assignee of the original grantee, it is recorded at its full purchase price. However, continuous revaluation and appraisal of the value of the copyright is necessary.

Again the cost basis is employed in the case of trade-marks. The cost of registration, and other legitimate expenses connected with the trade-mark, constitute its cost. Sometimes a portion of the advertising expenses is capitalized under the caption 'trade-mark'.

Franchises are also valued at cost. The term 'cost' covers all legal expenses necessary to secure the grant, payments to the municipality or state granting it, and other legitimate expenses.

The basis upon which intangibles so acquired are recognized in accounts as assets (in contrast with non-purchased intangibles) is manyfold.

First, it is held by accountants that payment for goodwill gives rise to a definite value in the same way as in the purchase of other properties. Second, in regard to commensurability, payment for intangible property is a basis sufficiently accurate for an accounting entry although the price paid may not be an exact measure of its absolute value. Thirdly, as long as the investment indicates the significance of the intangible factors acquired, their contribution to the earnings of the business becomes more or less of a definite character, and are deducted from gross income as they expire. They become a part of business costs.

The consideration paid for the acquisition of intangible property based upon a series of excess earnings is similar to a payment for the purchase of an annuity, the method of computation in both cases being the same. In a sense it is also similar to a

deferred expense, for the payment is made on the basis of a benefit that may accrue to the business in the future; in both cases the payment is an element of cost. No recourse for the enterprise against the original seller remains.

A major difference exists between intangible factors on one side and annuities and deferred assets on the other side in that both the latter represent definite values realizable in the ordinary course of business. Deferred assets are relatively more certain of realization through the price of goods sold in so far as they are basic and necessary for the operation of the business. Annuities are definite legal claims on definite legal persons. Intangibles, being factors extraneous to the business depend on indefinite factors such as human reactions which are not based on genuine economic necessities. It is therefore recommended by accountants that assets resulting from such payments should be regarded as a special class of property distinct from other investment values.

# Revaluation of Purchased Intangibles

In this chapter due consideration is given for the justification of the treatment of intangibles as assets to the purchaser. An attempt will be made now to study the position of intangibles, once recognized as assets, and the way they are handled in accounts.

According to the orthodox theory, intangibles acquired by purchase may not be appreciated in value. Their appreciation would be equivalent to the recognition in books of accounts as assets, of such values that are developed by the business itself, hence the consequent similarity in treatment.

As for depreciation of intangibles wide difference in opinion obtains. Some accountants hold that they should be depreciated in the shortest possible period of time. Others hold that an depreciation should not be charged to them at all because they are not subject to wear or tear or consumption through the ordinary course of business. This however is discussed later in this chapter

The confusion seems to rest in the basis taken for their valuation. Current profits do not serve as a good basis for revaluation.

# Nature of Consideration

Distinction should be made between two possible views of the nature of the consideration given in exchange for intangible values. In a way the payment made may be recognized as a premium or advance payment for an annuity of a series of excess earnings. If this view point is taken, then intangibles would be more of the nature of deferred assets and therefore from an accounting point of view depreciation cannot be avoided. On the other hand, no appreciation in value may be recognized since there is no reliable measure for the enhancement of their value, money paid being the only measure of value available.

Another point regarding the inherent nature of intangibles must be mentioned here, namely, that even if it is possible to appreciate their value on the basis of excess earnings there will continue to exist the difficult problem of imputation of the excess income to individual items of property. Whether the enhanced earnings are due to the intangibles acquired or to the new combination of these factors with old management is difficult to answer.

Another way to view the case would be to think of the consideration given in exchange of intangibles as a purchase price of the properties per se. If this view of the case is taken, then intangibles would have to be treated in accounts in the same way as other assets are treated. Depreciation and appreciation in value will have to be recognized whenever sufficiently reliable proof is available.

These two concepts are two aspects of the same problem, and the problem of revaluation is better viewed from this rather than from the current income point of view. Purely accidental influences may temporarily upset the earning capacity of a concern which do not justify either the appreciation or depreciation of the intangible property. Examples of these circumstances are the upward and downward swings of the trade cycle and the temporary rise or drop in the price of certain factors affecting the concern's income. Hence the rise or fall in the earnings of a concern for one or few accounting periods cannot be taken as conclusive evidence for the revaluation of intangible property.

In view of this, it may be possible that the keeping of intangible values indefinitely in accounts as assets would be justified on the basis that purchased intangibles are vanishing and new intangible values are being developed, replacing the old ones. In this case dividends might have been declared out of capital because of the overstatement of earnings due to the failure to account for depreciation of intangibles. Their value and life cannot be tested on the basis of profits alone since undue confusion will result. Nor can they be genuinely appreciated except through the income record of the purchaser. A rational principle might be found

in apportioning the total asset value during the periods for which the excess earnings were capitalized when calculating the purchase price.

In the case of goodwill the number of years' purchase will determine the number of years over which it is to be written off. This procedure is similar to the treatment of premiums on bonds, i.e., the premium being written off over the life of the bond on which the premium was paid. The same procedure is followed in the case of any other asset acquired for the purpose of further production. As soon as they are acquired, they are depreciated at a predetermined rate and whenever proof to the inaccuracy of the treatment is available, corresponding adjustments will be made. No serious error would result if the same principle is used in the case of intangible property.

# Circumstances Calling for the Valuation of Goodwill

However, unless acquired by purchase, goodwill is not usually recognized in books of account, except in a few cases, where, although it is not acquired by actual purchase, is of the nature of a purchase. Some of the most important circumstances calling for the valuation of goodwill are:

- 1. Admission of a new partner to a partnership,
- 2. Death or retirement of a partner,

- 3. Dissolution of a partnership when such dissolution includes the sale of the business to an individual, firm or corporation,
- 4. A change in the ratio of sharing in profits and losses.

#### Admission of a New Partner

In the same way as a prospective buyer of a business is prepared to make a payment for the goodwill of the business he wants to acquire, a prospective partner is prepared to pay for a share in the business. The principle is the same in both cases; whereas the payment to be made by a prospective purchaser of a business is for the whole of the business, the payment made by a prospective buyer is for a share of the advantages of the business.

The accounting treatment of the payment made by the new partner is different according to the terms of the agreement for the admission of the new partner. In general, there are two methods by which the admission of the partner may be accomplished. According to one, the new partner pays the old partners personally a premium for the goodwill of the business. This payment is divided between the old partners according to their old profit-sharing ratio.

The receipt may be treated as a private transaction, and therefore no entries need to be made in the
firms' books. It might be treated as a firm's transaction, the cash being immediately withdrawn. The entries
needed are two. One is the debit to the cash account of
the premium received, and a credit to the capital accounts
of the old partners in their old profit-sharing ratio.
The other entry is to reverse the first entry and thus
cancel it.

. It might be treated as a firm's transaction, the cash being retained in the business. The entry needed is to debit a cash account and to credit the old partners' capital accounts proportionate to their old-profit sharing ratios.

According to this first method, no goodwill account appears in the books of the firm, and the payment made by the new partner is treated as a premium for his admission into the partnership.

Circumstances may arise, however, where a person is admitted as partner into a firm on condition that the old partnership be revalued and goodwill be recognized in the books of the firm.

# Death or Retirement of a Partner

Following the rule discussed in the preceding paragraph, a retiring partner (and to that effect the

beneficiaries of a deceased partner) would expect to receive a compensation for the surrender of his rights in the partnership. The determination of the retired or deceased partner's share of the goodwill of the business depends mainly on the partnership agreement. In the absence of an express agreement, the partnership assets and liabilities are to be valued and must be taken at a "fair value", thus involving the recording of entries for appreciation and depreciation of assets and liabilities, and the introduction of omitted items such as goodwill. The net effect of such entries is a profit or loss which is divisible according to the profit and loss sharing ratios.

The partnership is revalued and goodwill is debited in the books at its full value and credited to the individual partners' accounts.

# Dissolution of a Partnership

When a firm is to be sold to another firm or company, the latter will usually pay, in addition to the actual value of the net assets, a sum for goodwill. Such an amount received by the partnership, in so far as it was not recorded in the books of the firm, is a profit which will be transferred to the partners capital accounts in the proportion of their sharing of profits.

appear in the books of the firm at the time of dissolution. It will be treated as a profit which is
first debited to the cash account and credited to
a profit and loss account, which will be transferred
to the capital accounts of the partners.

# Change of Profit-Sharing Ratios

When partners in a firm agree to change the ratio in which they share in profits, it becomes necessary that all profits or losses made prior to this agreement which are not divided between the partners, should be divided according to the old profit-sharing ratio, before the new agreement is enforced. Such unrecorded items as goodwill should, therefore, be revalued and credited to the old partners' capital accounts.

In this case an account 'Goodwill' will be opened and will be recognized in the books as an asset.

Recognition in Accounts

As has been discussed early in this chapter, goodwill is normally recognized in accounts on purchase by cash or equivalent, or on revaluation of a business because of a change in its internal structure. Instances can be cited where a goodwill account is opened where no cash expenditure or its equivalent is made. It is

urged by accountants, however, that such a recognition should not be made unless exceptional conditions or circumstances impel it. Non-purchased intangibles developed by the business itself are rarely recognized in accounts and when recognized they are subject to many serious limitations.

# Advertising as Cost of Goodwill

tisement. By creating a demand for a product newly introduced to the market, or increasing the demand for an article already in the market, advertising helps increase the profits of the business and create a goodwill for it. It is obvious however, that a certain amount of advertising is necessary to maintain a normal demand for the product, which is of the nature of an expense charged directly to the profit and loss account. Advertising in excess of this normal, which is expected to contribute to the profits of future periods, may be looked upon as an expenditure on account of goodwill. This is difficult to determine especially in the case of advertising is not yet known.

Although such expenditure is a means of creating goodwill for the business, it is carried as a prepaid advertising expense and is written off

rapidly over a period of two to five years depending on the amount of the expenditure made. At the time the entry is made, prepaid advertising, if properly estimated, would represent the cost of that part of business goodwill created by advertising, and when written off no indication of the existence of such goodwill will be found in the balance sheet. The evidence of it must be sought in the statement of revenue, and will be indicated only be the existence of more than normal profits.

# Initial Deficits as Part of Goodwill

Arguments similar to those presented for the capitalization of advertisement expenses and including the capitalized value under goodwill, are advanced in connection with deficits or heavy losses incurred in the initial stages of the operation of a business as capital expenditure made in the acquirement of goodwill. A similar procedure has considerable recognition in the case of public utilities, and appear on the balance sheet as part of the 'going-value' account. The bases for capitalization of early deficits in the case of ordinary businesses are different from those in the case of public utilities and seem to find more justification

in the case of the latter because of the arbitrary manner of the fixing of rates, based to a large extent on the capital investment of the utility.

It must be noted that whenever an item is capitalized which would otherwise be charged to revenue, the profits of the period will be correspondingly increased. The apparent increase in the profits is represented by an increase in intangible values on the balance sheet. This treatment might lead to detrimental consequences especially in the case when such deficits are large and profits are distributed to shareholders out of profits that are more apparent than real, thus decreasing the net worth of the business by amounts equal to the capitalized expenses.

Under ordinary circumstances, the carrying of a deficit as an asset account does not meet with the approval of accountants and is neither commendable nor justifiable.

# Preliminary Expenses

The account comprises the cost of preparing and printing the memorandum and articles of association, the charges and fees of lawyers, accountants and others properly engaged in the formation of the company, the cost of printing and advertising of the prospectus, the

fees and duties payable on registration, the cost of printing share certificates, the commission payable to underwriters and other legitimate expenses incurred prior to the registration of the company.

Although this class of expenditure is unavoidable, it cannot be properly treated as capital expenditure, and cannot also be treated as an expense chargeable against revenue account of the first year of operation. Preliminary expenses contribute to the existence of the company in the same as installation expenses contribute to the value of the machinery thus installed, and therefore they are temporarily capitalized and written off over a period of two to five years depending upon the amount of the expenditure. However, it is usual to have a provision in the articles of association specifying the period over which the preliminary expenses are to be written off, or reduced to a saleable value, out of profits.

The recognition of formation expenses as an asset in the books of accounts, whether under the caption 'Goodwill' or 'Formation Expenses' has the same significance, especially as the same depreciation rate applied to goodwill is applied to preliminary expenses. However, the separate classification of such expenses is commendable as it indicates the

source of the asset account clearly. Goodwill indicates superior earning power; formation expenses indicate a deferred expense account. Hence the distinction is necessary and is in no way unimportant. Recognition of Goodwill on Incorporation

A partnership may be incorporated with the former partners holding most, or even all the shares of the new company. Other than the legal change of ownership and organization, the business may not have been changed; the same business being carried on with the same equipment employed by the partnership. Nevertheless, stocks or shares issued by such companies may be at a par which is in excess of the value of the properties as previously recognized by the partnership, with such excess treated as a goodwill which has been sold to the new company. In reality, the same owners previously running the business as partners, control it after incorporation as board of directors, with all the transaction being only nominal.

It might be argued however, that the mere incorporation of a business brings with it advantages not possibly enjoyed by other forms of business organization as a legal person having continued existence independent of the owners of the business, and the

ease with which ownership can be transfered, are all advantages that should be recognized.

In bookkeeping practice a goodwill account is opened which will take care of the excess of the total stocks issued over the existing property after adjustment of individual asset values.

## Recognition of Goodwill on Consolidation

In the case where several corporations are consolidated through the medium of a new corporation either by amalgamation or absorption, it becomes necessary for each of the combining companies to revalue its properties and recognize missing items of property. The value of the business under revaluation is usually taken to be equal to the total market value of the issued stock of that business. If the market price of the issued stock is above the par value of same, a goodwill account will be recognized to the full extent of the difference between market and par values of the issued stock.

## Profits Prior to Incorporation as Goowill

A company might agree to buy a business as a going concern as on a date which is prior to its fulfillment of the requisite legal formalities for incorporation. Such profits are deemed to be capital profits not available for distribution as dividends to

shareholders. It is held that a company cannot make profits or carry on business before it starts its legal existence.

The vendor of such a business to a company will normally estimate the profits to be derived from the business operations between the dates of the nominal and actual sale of the business and adds it to the purchase consideration as part of the goodwill of his business, pre-incorporation profits will be credited to a goodwill rather than to a revenue account so as to decrease the goodwill account by the amount originally added by the vendor of the business. Loss prior to incorporation is treated conversely.

## Depreciation of Goodwill

The question whether goodwill, once recognized in accounts should continue to be so recognized or whether it should be subject to periodical appraisal or to regular depreciation on the same footing with other fixed assets such as machinery, is another question on which opinions differ.

Among accountants favoring the writing off of goodwill is Leake, while Kester and Couchman (3)

<sup>(3)</sup> Leake, Commercial Goodwill, p. 70; Kester, Accounting Theory and Practice, p. 367; Couchman, op. cit., p. 138.

hold that it is unnecessary or even improper. Even amoung those accountants favoring the writing off of goodwill, there is no agreement as to the circumstances under which this is to be done. The common view of the case is to depreciate goodwill against unusually high profits made during any one year, while some accountants hold that it should be made only when the business is making profits below what was expected.

In accounting practice, however, it has been long recognized that shrinkage in value of fixed assets need not be taken into account when determining profits. (4)

From one point of view, goodwill is the most fixed of all fixed assets. It is rigidly attached to the business and cannot be conveniently disposed off without disposing of the business as a whole. Moreover, the very indefiniteness of the value of goodwill renders its over-estimation less harmful than that of other assets. It is quite known by all accountants that the value of goodwill as appearing on the balance sheet is no indication of its present value and that constant periodical revaluation is necessary. As for credit

<sup>(4)</sup> Wilmer v. Macnamara, and Stapley v. Read Bros. Ltd. Quoted by Pickles and Dunkerley, Accountancy, p. 932.

purposes it has little value in a financial statement,
"... as bankers almost invariably eliminate it from
consideration". (5)

However, there is no similarity whatsoever between the diminution in value of goodwill and other fixed assets. Goodwill is not consumed, nor is it subject to wear and tear or obsolescence or diminution in value through efflux of time. The value of goodwill is primarily dependant on the profits made in any one year, and as profits fluctuate, the value of goodwill necessarily fluctuates. The mere existence of high profits is by itself an excellent indication that goodwill as recognized in books of accounts is valuable and need not be decreased in value. When profits are low, the possibility of making provisions to absorb the charge against goodwill will probably be impractical. Goodwill is not a static item of property; it grows when the business grows, and decreases in value when the profits of the business decline. When profits shrink the account 'goodwill' as appearing on the balance sheet becomes of the nature of a debit balance of the profit and loss account not written off, because there is no suitable account to which it can be charged.

<sup>(5)</sup> Couchman, loc. cit.

As Couchman expresses it, ".... to put it briefly, if you can write it down, you need not; if you cannot, you should." (6)

The charge to revenue for the purpose of reducing the value of goowill has the effect of creating a secret reserve which tends to strengthen the financial position of the business. From this point of view, the practice of depreciating goodwill through revenue is commendable.

From another point of view, the theory of the permanence of goodwill is inconsistent with the theory of its valuation as the purchase of a temporary annuity. As the price of goodwill represents the purchase price of a series of excess profits, it would be only logical, that it should be written off with reference to the duration of the annuity; it should be written off during the period of its calculated duration.

As it has been mentioned above, goodwill is a very uncertain fixed asset. The only justification for its depreciation is conservatism. Where the value of goodwill is obviously erronous, that it

<sup>(6)</sup> loc. cit.

is not worth its book value, the decline in value is met by a reduction in capital rather than by a charge to revenue.

#### Depreciation of Copyrights and Patents

Copyrights and patents have a definite legal duration, which, for purposes of depreciation is the period over which the cost of a patent or copyright is written off. However, they often become worthless long before the expiration of their legal existence, and therefore it has been recommended by some accountants that charges to revenue in virtue of depreciation should be supplemented by a charge for obsolescence. Bennet suggests that " ... it would seem conservative to set up a reserve to cover the contingency of possible obsolescence due to better patents issued to others in addition to the annual credit made directly against the asset ". (7) Improvements on a patent may be secured by other than the original patentee, and therefore, before the legal period of duration of a patent expires, the value of the patent is likely to depreciate at a rate which is higher than the ordinary rate of depreciation which is

<sup>(7)</sup> Bennet, George E. Advanced Accounting (New York: McGraw Hill Book Company, 1922), p.44.

usually applied. In view of this it would be only reasonable to write off the cost of patents sooner than their legal term.

On the other hand, arguments might be advanced to the effect that the rate of depreciation applied to a patent should be lower than the usual rate. It might be argued that since a company holding a patent is in a better position to make improvements on it, and to design and develop inventions that are auxiliary inventions, the possibility is that such a firm will develop a system of exclusive rights which tends to strengthen one another to such an extent that outside competition during the life of the original patent will not be possible and that the actual useful life of such a patent might be prolonged beyond its legal term of existence.

The question that suggests itself under such conditions, is whether it is possible or not to measure the strength of a patent and to estimate the useful term of existence, especially in its early period when new inventions are not yet patented, or if patented, the practicality of their use is not yet tested. Another question is whether or not the rate of depreciation to be applied should be reviewed every time a new patented right to an invention is made, and what are the criteria

to be considered when revision of the rate of depreciation is attempted. These questions do not seem to have definite answers, nor definite answers are possible. Evidences and subjective judgments reign in the valuation of patents, as well as in the valuation of all other indefinite asset values. Although accounting practice adheres consistently to a conservative policy in regards to intangible values, it should be remembered that only a few asset items appearing on a balance sheet are of a definite character. Consequently, it would be only reasonable to depreciate the cost of a patent or a copyright on the basis of equal installments based on their legal duration and that special additional provisions for obsolescence should be made when evidences are available to that effect.

# The Nature of the Derpeciation for Patents and Copyrights

An interesting yet a difficult problem arises in connection with the depreciation of copyrights and patents regarding the nature of the debit entry when the asset account is credited. An analysis of the costs incurred in the acquisition of such rights is necessary. The cost of a patent or a copyright consists of the following main classes of expenditure: (8)

<sup>(8)</sup> loc. cit.

- i. Cost of producing the invention or the manuscript;ii. Legal fees involved;
- iii. The expenses incurred in protecting it from infringement.

The cost of producing the invention in the case of a patent, and the cost of the manuscript and its editing in the case of a copyright, seem to be legitimate charges to the cost of production, for they are necessary expenses in getting the design, manufacturing processes, or the product itself, into existence.

In regards to the legal expenses incurred in connection with the registration of the patent and the expenses incurred in its protection from infringement, the charge depends on many considerations most prominent of which is the nature of the patent itself. If the patent covers a whole article, these expenditures will not contribute to productive efficiency, but are primarily connected with the distributive phase of operation. In this case the charge is more reasonably made to the selling expenses of the business.

On the other hand if the patent covers a process of production which makes possible a more efficient method of production, these expenses will be more of a manufacturing nature and therefore are more

legitimately charged to the cost of production directly.

A problem would arise when the patent is related to both the selling and productive activities. In such a case arbitrary rules would have to be used to secure a reasonable apportionment of the charge. An example of a patent related to the selling and productive activities, would be a patent covering an essential manufacturing process, which enables the patentee to control the supply of a commodity.

Another interesting problem might arise when the patent has been carried in the books at more than actual cost. The charge for depreciation is usually made to the cost of manufacturing, although it seems more reasonable to charge it to the account to which the original appreciation in the value had been credited. Thus if the amount in excess of cost had been credited to a capital reserve account, this same account should be debited when depreciation of the patent is made, but only to the amount previously recognized in excess of cost. The rest of the depreciation charge should be pro-rated between the manufacturing and selling costs in the above manner.

# Relation of Depreciated Patent and Copyrights to Goodwill

It is argued that patents and copyrights contribute to the goodwill of the business during their life time and therefore "... it is urged that goodwill of at least equal value will have grown up during the life of the patent and that the cost of the patent may therefore be considered as the cost of the goodwill gradually acquired during the life of the patent". (9)

Arguments as to how a patent or a copyright contributes to the goodwill of the business has been discussed elsewhere in this thesis. It should be noted, however, that the relationship between a patent or copyright and goodwill is an incidental one and that the transfer through depreciation of the cost of the patent or copyright to goodwill only on the basis of the probability that goodwill might be built up through publicity gained through the use of the former is not reasonable since accounting is designed to show definite values and estimates of definite values in so far as they are reasonably ascertainable. Probabilities and possibilities should not be included in accounts.

<sup>(9)</sup> Hatfield, op. cit., p. 129

A person manufacturing a product under a patent can acquire a goodwill only through the excellence of his work independent of the patent itself.

Once goodwill develops, it becomes subject to valuation paractices and methods discussed elsewhere in this paper. In most probabilities, goodwill developed through the use of a patented right or a copyright, does not lend itself to genuine valuation until the term of such an acquired right elapses and distinction between voluntary and forced patronage becomes possible.

## B. Some Notes On Procedure

As discussed in a previous chapter, there is no clear cut distinction between tangible and intangible property of a business enterprise. An asset belongs to the intangible group of values only because it is subject to a class of considerations requiring separate attention.

The question as to the proper treatment of intangible values is among the most difficult problems of valuation. Whether they are to be regarded as mere earning powers not to be recognized in books of account, or to be recognized as the capitalized value of such an earning power as assets, requires a study of the underlying principles and concepts of accounting values.

According to the common business view of the

case, assets are ".... the property and possessions of a business". (10) They represent all the economic resources of a business enterprise which are regularly utilized in the revenue producing activities. They differ from the economist's 'capital' in that they cover all pecuniary values which a business enterprise may possess, thus including personal accounts and consumers' goods, while the latter comprises only that part of the wealth of a community which is utilized in further production.

The term 'earning power' is used in this connection to signify a rate of income of an enterprise estimated on the previous experience of the enterprise in consideration. It is the potential income of the business and not the income itself. For if the latter was not withdrawn from the business it will invariably be represented by some form of asset. The reference to income as potential or realized does not imply the possibility of a sharp distinction between the two, as such a distinction is difficult to be made. The determination of what constitutes a present or future income is evidently a problem of valuation, and the system adopted in valuing the business assets as on a certain date will affect the book income to be

<sup>(10)</sup> Carter, Advanted Accounts, p. 2.

derived in the future periods.

An example will make the concept more clear. Assuming that a manufacturer has as his main item of cost the raw materials used in producing a certain commodity. He buys at the . beginning of the year 5000 units of raw material at £3. per unit. During the year he uses 3000 units and his sales record shows a total of £12,000. Assuming further that the price of this type of raw materials increased to £4. per unit, then the book profits for the ending fiscal year and the following accounting period will vary according to the system of valuation used. If stocks are to be valued at cost, the book profit (assuming no other costs exist) will amount to £3,000. If stocks are to be valued at market price, the book profits (excluding other costs) for the ending fiscal period will be £5,000.

In the second case, beside the income derived from sales, the business has an accretion of value due to the fluctuation in the price of raw materials.

If the higher market price were to be adopted in the valuation of raw materials on hand, this would increase the book cost of production for the following accounting period by an amount which is equal to the product of the increase in price and the number of units

of raw materials used in production in the same period. Consequently the book profits for that period will be decreased by the amount of increase in the value of raw materials used.

#### Cost or Value

The question of accuracy in accounts involves a matter of fundamental theoretical importance. Whether accounting should be primarily concerned with pecuniary sacrifies, or whether its function should be to show values in whatever way they may be acquired, has never been satisfactorily settled. The conservative orthodox theory adheres to cost both as a basis for record and as an index of value all through the life of the asset.(11)

To Guthmann, a balance sheet ".... might be defined as the dual picture of an enterprise, depicting, on the one hand, the properties that it utilizes, and on the other hand, the sources of these properties". (12) A balance sheet has also been

<sup>(11)</sup> The orthodox theory has been severely criticized by Henry Sweeny in his book <u>Stabilized Accounting</u> published in New York in 1936 by Harper and Brothers, as being irrelevant, mathematically unsound and incomplete.

<sup>(12)</sup> Guthmann, Harry G., The Analysis of Financial
Statements (New York: Prentice Hall, Inc., 1935),
p. 26.

defined as "A display to those, such as creditors or proprietors, who have advanced values to a business, showing what has been done by that business with the values so advanced." (13) Both distinctions imply, cost as a basis for record, since the 'source' or 'values advanced' are assumed to be fixed.

It can be easily proved however, that cost is not always a practical method to use though it may be satisfactory in many cases. Properties may be acquired by mere donation, no cost being incurred. They may be acquired through discovery without incurring substantial cost commensurate with the value of the resulting property. In such cases it is apparent that adherence to cost would result in an understatement of the value of property so acquired. On the other hand, costs might be incurred with resultant properties whose value on the market is lower than the cost of their acquisition. Adherence to the cost principle in this case will definitely result in an overstatement of properties.

<sup>(13)</sup> Couchman, op. cit., p. 44.

It should be emphasized that cost and value are two different things. Cost, represents only pecuniary sacrifices made at any one moment; value is a constantly changing variable, and hence, cost is no guarantee of value, as business might gain or lose by fluctuations in the value of its properties in the same way it loses or profits in its ordinary course of business operations. This however is discussed in detail in a latter chapter.

#### Accounting Values

The fitness of a value for recognition in accounts depends on whether it is measurable in terms of money and whether it has a fairly stable and definite existence from the point of view of a going concern. Accounting can deal only with values that are capable of reasonable commensurability. A value, to be worthwhile recognition as an asset in books of account, should be of sufficient permanence and stability.

As accounting deals primarily with the periodic valuation and revaluation of properties, the use or adoption of a single standard of value although much desired, seems to be out of question since property is of diverse characteristics. Even the same kind of property differs in its significance according to the the difference of the nature and activity of the

business using it. In view of these considerations accountants seem to be in agreement that in valuing an asset regard must be had to the nature of the asset under valuation and the nature of the use to which it is put in a particular enterprise.

In the case of liquid assets(14) little valuation problems would arise. Being in universal demand, these assets have usually a steady market, and should fluctuations take place, the changes in value are normally stable and definite in character relative to the length of time necessary for their realization. Value changes are normally realizable at short notice and therefore it is deemed by accountants as sound procedure to recognize such fluctuations as representing definite value occurences. From the stand point of cost accounting, variations in value that are of fairly stable and definite character in

<sup>(14) &</sup>quot;In this group should be included such assets as are held for realization in the ordinary course of business...They... include
a. stock-in-trade and work-in-progress; b. trade and other debtors, prepayments and bills receivable; c. Investments held as part of the liquid resources of the company; d. tax revenue certificates; e. bank balances and cash." The Institute of Chartered Accountants in England and Wales,
Recommendations On Accounting Principles, (London: Gee & Company, Std., 1953), Article 81(14).

the case of assets which need constant replacement, is recognized in the cost of production.

In the case of fixed assets(15) however. fluctuations in value find no place in accounting records. "Where practicable, fixed assets in existence at the date of the balance sheet should be shown at cost."(16) For one, the difficulty of quick disposal of fixed assets and the close attachment to the business makes recognition of fluctuations in their value extremely difficult to measure. Moreover, as fixed assets are relatively durable, fluctuations in their value tend to be less significant relative to their entire life. If changes in value become relatively stable and pronounced then recognition in accounts becomes possible. It should be noted however that in actual cases it is often difficult to forsee whether or not any particular variation in value is permanent in view of the long life of the asset. If the value of a particular site

<sup>(15) &</sup>quot;In this group should be shown under separate headings fixed assets such as (a) goodwill, patents and trade-marks; (h) freehold land and buildings; (c) leaseholds; (d) plants, machinery, and equipment; (e) investments acquired and intended to be retained for trade purposes."

ibid., Art. 73(12).

<sup>(16) &</sup>lt;u>loc</u>. <u>cit</u>.

has increased because of conditions outside the industry, such an increase is recognized in accounts, so that management may realize the situation and either move to another location where land is cheaper or use the property more efficiently.

Deferred assets, such as prepayments and organization expenses, are generally held to be costs that are adjudged to extend beyond the current accounting period. They are not charged directly to the revenue account of the first year but are spread over a number of accounting periods in amounts which management deems suitable. They differ from all other types of assets in that they are not realizable even in the case of liquidation of all the concern.(17)

Some very indefinite values are directly charged to revenue account although they may contribute to the future earning power of the concern inasmuch as deferred asset may contribute. These are not recognized as assets because of the absence of a test of their durability or measureability. A good example would be the cost of an extensive advertising campaign carried by a business concern the effect of which is

<sup>(17)</sup> There may be some exceptions such as in the case of insurance premiums partly refundable when the insurance policy is cancelled.

expected to last for more than one year.

With these considerations in mind, i.e., that accounting for assets is limited to measurable and stable values, it is therefore not improbable that a certain portion of the book income of a concern is in reality a realization of past fluctuations of value which are not accounted for as assets or realized earnings until they actually accrue to the business in the form of definitely measurable values such as cash or receivables.

The same criteria applied in the distinction between assets in general and earnings may be used for the distinction between assets and superior earning power. It must be noted that superior earning power and assets are not distinct values, and that some values come to the business as earnings only because of the failure to account for them as assets due to the lack of certain criteria which are taken to constitute the characteristics of 'accounting assets'. The difference of opinion regarding the valuation and recognition in accounts is one of degree viewed from the standpoint of the criteria of accounting values.

Intangibles are the most fixed of all fixed assets. They are not the object of purchase and sale

and therefore cannot be measured on the basis of market price or competitive offers. Separate disposal of intangibles cannot be affected without serious jeopardizing of the status of the enterprise as a going concern.

In the previous section of this chapeter it was indicated that pronounced and relatively stable changes in the value of fixed assets are recognized in accounts. In the case of intangible property such changes cannot be measured as long as the business owning them continues to operate as a going concern. They cannot even have any definite value as long as the basis for their valuation, i.e., earnings, is normally a constantly fluctuating factor.

# Business Costs and Intangible Assets

In valuing the intangible property of a business many factors should be taken into consideration,
most of which are not capable of being measured. The
determination of what constitutes a 'normal rate of
return', the nature and magnitude of the risk involved,
the number of years during which excess earnings are
supposed to exist, the rate of capitalization of 'excess
profits' and a host of other considerations are but a
few examples of the difficulty that is likely to be met
when valuation of intangibles not acquired by purchase
is contemplated.

A definite basis of measurement will be available when intangibles are acquired through purchase, hence their recognition in accounts as assets. It must be noted that intangibles so acquired and recognized do not become less fluctuating to the purchaser than to the seller. It is only because cost is conventionally regarded as giving a certain amount of definiteness in value, that they are so recognized. Differential Value of Intangibles

The question as to recognition of intangible property in accounts is worth further consideration. If intangible property is recognized in accounts as showing the difference in value between the commercial and the actual investment values of the business (assuming that the book value represents the investment value as used in this connection), would such a view of the case justify their recognition in accounts as assets?

The suggestion seems to be based on the view that all valuable considerations should be recognized in accounts. However, as has been discussed before, a balance sheet does not intend to show all valuable considerations. It purports to show only definite and measurable values which are

acquired through expenditures or have definite realizability in the ordinary course of business.

It should be noted however that no attempt is made in this discussion to distinguish between intangible values and fluctuations in the value of the remaining property of the business. The relationship between asset value and earning power is a problem of valuation. Furthermore, assuming the orthodox cost theory of accounting values, it is inevitable that the value of excess earnings should be bound up with the value of fixed assets in general. Thus the value of intangible factors brought into a balance sheet will include changes in the value of fixed property as a whole.

It should be further noted that the capitalized value of the earning power of an enterprise does not indicate its market value. It only furnishes, and in a restricted sense, the supply price of the business as a going concern. The demand price, or the price the intending purchaser may be willing to pay, depends primarily on the potential earning power of the business. The selling price would probably be a modification of both prices and will be somewhere between these two valuations.

Another reason for rejecting the recognition of capitalized values in accounts is the element of confusion that necessarily results and makes very difficult the intelligent interpretation of accounts. As long as the statement of revenue clearly shows the net earnings of the business under consideration, computations of capitalized values and their imputation to particular items of property can be made whenever need arises, as there is no need to show beforehand the possible selling value of the business when it is intended to continue as a going concern.

#### CHAPTER IV

#### ECONOMIC IMPLICATIONS

#### A. MAINTAINING CAPITAL INTACT

In this chapter discussion is made of a relationship that might obtain between the accepted method of recording intangibles and the 'maintenance of capital intact'.

The argument is developed on the following lines. First, an enquiry is made on what constitutes capital and the methods of keeping it intact. The enquiry however, requires a preliminary study of costs, methods employed in the measurement of profits, and the differences between the views of the accountant and economist in this connection. Criteria are established for the determination of influences affecting changes in capital and are applied to intangibles to test the extent of the effect of their accounting treatment on capital changes.

Starting from a broad and descriptive point of view one is justified in saying that all business transactions are subject to a preliminary classification as between those which carry significance to a short period set intentionally for review and those which are less immediate and which carry significance to a longer period of time. These are conventionally termed in

accounting as 'revenue' and 'capital' respectively.

This temporal qualification to economic transactions has been recognized by many an economist, and the following passage found in <a href="The Economics of Welfare">The Economics of Welfare</a> does much to illuminate the point.

"However we define (capital), it may be likened to a lake into which a great variety of things, which are the fruit of savings, are continually being projected. These things, having once entered the lake, survive there for various periods. according to their several natures and the fortunes that befall them. Among them are things of long life, like machinery, and things of very short life, like material designed to be worked up into finished goods for consumption or coal destined to be burned. Length of time in this connection means, of course length of life as capital in the industrial machine functioning as a going concern, not the length of life which a thing would enjoy if nobody interfered with it. Coal, for example, if left alone, will last without change of form for an indefinite number of years; but, none the less, the 'life' enjoyed by coal in the lake of capital, i.e., the period covered between its entrance and its exit, is almost always very short. All things that enter the lake eventually pass out of it again. Some of them pass, so to speak, in their own persons, embodied as material in some finished product, as when cotton emerges as a cloth garment. But exits are not always, or indeed generally, made in the form of a passage outward of the actual elements that originally came in. When coal is burnt in the process of smelting iron, which is to be used eventually in making cutlery, it is the cutlery, embodying the 'virtue' of the coal, and not the coal itself, which passes in person out of the lake. In like manner it is of course the 'virtue' of machines that are worn out in making finished goods, and not the machines themselves, which passes out in person. In one form or another, however, whatever enters also leaves.

There is then of necessity always a stream flowing out of the lake so long as it has any contents at all, and in practice there is always a stream flowing into it. Its contents at any moment consists of everything that has flowed into it in the past minus anything that has flowed out. It is theoretically possible to make an inventory of them from day to day. When we speak, in connection with our definition of the national dividend, of the need for 'maintaining capital intact', something is implied about the relation between successive inventories or successive evaluations of the contents of the lake we have been describing."(1)

Professor Pigou therefore, has as his main criterion for the distinction between capital and revenue, the time that a particular asset stays in the lake. His view of the case corresponds to that of the accountant and in fact employs the same criterion for distinction between the two concepts. However, when explaining his own example he points out four points which accountants are not in full agreement with at least in practice, these are: (2)

- 1. That maintenance of capital intact does not require that the contents of the lake should have a constant money valuation;
- that the physical state of the things lying in the lake does not necessarily need to remain unaltered;

<sup>(1)</sup> Pigou, A. C., The Economics of Welfare (4th ed.; London: Macmillan & Co., 1950), pp. 43-44.

<sup>(2)</sup> ibid., pp. 44-48.

3. that expected losses and losses resulting from the ordinary course of business decrease capital; and
4. that the cost of maintaining fixed assets intact is relatively low.

Professor Pigou's explanation of capital suggests two questions which are fundamental to this enquiry. The first is concerned with the meaning of capital from an economic as well as from an accounting point of view; the second, is concerned with the nature of profits and the methods employed in their measurement, again from the point of view of the economist and that of the accountant.

#### Capital

What constitutes capital or revenue is really difficult to determine. There are however two major conceptions of these terms, that of the accountant and that of the economist. As far as the former is concerned, capital consists of a money fund of definite magnitude, from which allocations are made. "This practice is, of course, largely due, and partly justified by the fact that the capital of the individual enterprise is to a great extent furnished in the form of money loans, and that in consequence the entrepreneur has in the first instance to provide for a repayment

of the money loans."(3)

The investment, it is assumed by accountants, is made only as a means of making profits and as
long as a certain level of profits is aimed at the
initial investment should remain constant. When the
accountant speaks of profits, he means realized money
profits disregarding changes in the value of money itself.

It would not need lengthy discussion to show that the original capital outlay, including all expenditures incident to the initiation of the business, represent the investment of the entrepreneur, which he aims at keeping constant.

Payment made for the acquisition of any of the many types of intangible property is regarded as payment for the acquisition of valuable property.

"The firm possessing goodwill, owns a precarious yet valuable claim upon its patrons, namely, the chance of their continued patronage."(4)

As is mentioned above, capital is not an end in itself. It is valuable and desirable only in

<sup>(3)</sup> Hayek, Friedrich, Profits, Interest and Investment (London: Routledge & Kegan Paul Ltd., 1950), p. 130.

<sup>(4)</sup> Fisher, Irving, The Nature of Capital and Income (London: The Macmillan Company, 1923), p. 29.

so far as it gives rise to a series of profits. In actual business life "....realized money profits have come to be regarded, rightly or wrongly, as approximate measures of earning capacity; future trends are almost subconsciously inferred from past trends, sometimes even without a proper regard to changing circumstances. Prospective investors reveal a propensity to mirror this view with the consequence that current values of proprietorship rights in institutional capitals tend to be judged by conventional multipliers of realized yield."(5)

To an economist the value of capital "....is the aggregate discounted value of its estimated future net income,"(6), and consists of all the combined wealth of business enterprises, households, non-profit making institutions and government.

The economist however, refers to real values as contrasted with the monetary views of the accountant. When the economist speaks of net income, he means net real income, while the accountant refers to realized money incomes.

<sup>(5)</sup> Bray, Sewell, The measurement of Profit (London: Oxford University Press, 1953), p. 8.

<sup>(6)</sup> Marshall, Alfred, Principles of Economics (8th ed., London: Macmillan & Co., 1920), p. 593.

To make the point more intelligible, a discussion of profits as understood by accountants and economists seems appropriate.

#### Profits

As far as economic theory is concerned, profits may be viewed from at least three angles. One way to look at profits is to assume that investments are usually subject to two classes of hazards, a (conceptually) calculable hazard referred to in economic literature as 'Risk', and an incalculable hazard conveniently termed 'Uncertainty', and that the reward for bearing risk and uncertainty is the profit—it is the factor payment for taking hazards.

Another way to look at profits is to assume that in a station ary economy and under conditions of perfect competition profits do not exist. Profits therefore appear as a result of disequilibrium and imperfection of the market; that whenever the marginal product does not equal its marginal cost profits will exist.

A third view of the concept sees profits as a result of dynamic development and innovation in production methods. By the term innovation is meant the increment in output over and above the accompanying in-

crease in costs, due to a preconceived and intentional change in the methods of production. According to this view of the case, profits become a measure, and an objective one, of the value of ideas in a community.

All three views of the concept relate profits to a pure surplus, and whether the theory conceives of profits as a reward for risk bearing, imperfection in the market or as the increase in net output because of ideas contributing to improved methods of production, they detach the concept of profit from capital. Accounting procedure on the other hand, has a broader view of the term. It includes, in addition to compensation for risk and reward for innovations, interest on investment made by an entrepreneur.

Before proceeding any further, I would like to point out a major conceptual conflict between the views of the economist and those of the accountant concerning the meaning and the basis for measurement of profits. I am referring to the ex-ante approach of the economist in contrast with the ex-poste approach of the accountant. Accountants measure income by finding the difference between net assets at the beginning of a period intentionally set, and at the end of that period. Net assets being the difference between total assets and reserves and liabilities, and the period-to-

period change is the periodical income.

To accountants net income is a historical record of past activities. To an economist, it is fundamentally a speculation about the future. He thinks in terms of real income. He assumes that present expenditure is shaped by expectations of future fluctuations of earnings rather than by historical book profits.

However, the major points of difference between the two approaches may be summarized under two main headings: first, the constitution of costs, and second, the basis for valuation of assets. These highly controversial issues are discussed below.

#### Costs

Under this heading one may list at least three major sources of conflict between the views accountants and those of economists. First, what to include and what to exclude when deducting expenses from gross revenue to arrive at the net income; second, what method or methods of depreciation to apply to each class of assets; and third, how to treat unexpected losses, or losses resulting from factors outside the control of business management.

Starting with the first of these three sources of conflict one cannot but mention the difference in

opinion regarding the inclusion or exclusion of interest on capital, and the value of the entrepreneur's time and effort spent in organizing the business. The accounting convention of estimating profits necessarily includes such items as rent, interest and wages as well as economic profits.

A detailed analysis of this problem is not especially relevant in this connection, and therefore is left at this level without further elaboration.

The second source of difference in opinion is the question of depreciation. As was mentioned above, the accountant's view of capital is that it is a fund of money and therefore his insistence that depreciation should be related to the original cost, and attempt to recover the cost of equipment before its usefulness is exhausted by making periodical charges to income. The effect for sure, is to insure that revenues will equal to the original cost and are not distributed as profits. Whether these charges will be actually sufficient for replacement at the end of the useful life of the depreciated asset is not satisfactorily considered as part of the problem.

On the other hand, the economist conceives of two kinds of depreciation, one escapable and is

termed 'user cost' and the other unescapable and is termed 'replacement cost'. User cost may be defined "....as the reduction in the value of the equipment due to using it as compared with notusing it, after allowing for the cost of the maintenance and improvements which it would be worth while to undertake and for purchases from other entrepreneurs. It must be arrived at, therefore, by calculating the discounted value of the additional prospective yield which would be obtained at some later date if it were not used now."(7) The shrinkage in value which results from using an asset as against keeping it idle, produces a depreciation cost which is quite different from straight-line depreciation for any one year, and the value of this wastage can be related in no way to original costs, neither does it have any relation to the ultimate disposal value of the equipment in question.

In some cases however, the question of user cost does not arise at all. I am referring to cases where the asset in question is so highly fixed that it can find no opportunity cost whatsoever. An electric plant which is already sunk is a good example. It has no opportunity cost and depreciation is measured by

<sup>(7)</sup> Keynes, John Maynard, The General Theory of Employment, Interest & Money, (Macmillan & Co., 1949), p. 70.

the replacement value of a plant that will produce the same earnings, and the amount is not determined by the historical cost of the plant.

This type of depreciation is not recognized as a social cost as it is assumed that cost has been incurred at the time the plant was sunk. As Arthur Lewis puts it, "The use of permanent indivisible assets gives rise to no social cost, unless these assets are useful in some other industry."(8) Such depreciation is an act of saving rather than a cost, and is determined by expectations of present and future earnings and the price level that may be ruling at the time of the actual replacement. Again, this type of depreciation takes no primary consideration of historical costs except in so far as they help formulate expectations in regards to the future.

The third of the sources of conflict in regard to the constitution of costs is the treatment of losses and gains not expected to result through the ordinary course of business. A point of departure may be found in Professor Pigou's analysis discussed early in this chapter. To him, all losses that cannot be anticipated

<sup>(8)</sup> Overhead Costs (London: George Allen & Union, 1951), p. 15.

("Act of God or the King's Enemies") are losses,

"...on capital account, not on income account."(9)

This view of the case corresponds to that of the accountant. They may be treated as profits or losses

by the individual shareholder as long as they are

reflected through the market value changes of the

proprietorship certificates. But from the point of

view of the business, capital gains are recorded only

as and when they accrue in the form of cash or receivables on actual sale of the property in question,

while losses on capital account are recognized at the time

when shrinkage of value becomes apparent.

#### Basis Of Asset Valuation

In measuring income, accountants are typically used to state costs in terms of the price level at the time of the purchase. Arguments have been advanced to support this view based on the objectivity of the procedure and the function of the accountant as recorder of history, not withstanding the relevance of history to future economic or business decisions. This historical approach is in fact very largely determined by the exigencies of profit measurement.

<sup>(9)</sup> Pigou, op. cit., pp. 45-46

The earnings of the business are calculated in accounts on the basis of investment assets, and a profit is supposed to accrue when all pecuniary costs involved fall short of the gross income. There is no fundamental reason however, for the application of gross income on pecuniary costs only. A business may gain or lose on investment values as well as on other forms of value which are not acquired through pecuniary sacrificies.

In a period of inflation, the cost of replacement of inventories, equipment and plant goes up, while in a period of falling prices, the cost of replacement goes down. Yet accounting procedures generally fail to take adequate measures to adjust to new conditions of costs and values.

The "money fund" conception of capital discussed early in this chapter is strictly adhered to by accountants and the <u>ex-poste</u> approach is obvious in this connection.

The economist on the other hand assumes that each asset should be replaced at a future time if earnings are to be maintained, and recognizes the fact that asset replacement will be made under circumstances that need not coincide with present con-

ditions. He takes into consideration the expected price level at the time when replacement becomes due, and other conditions including changes in technique, expected interest rates, and the like.

To him, an asset is a source of real income that should be maintained at a certain level, and that in the process of maintaining the level of real income, all future expectations should be taken into account.

On the light of the above discussion regarding the meaning of capital, profits and costs, a study is made of the extent of the economic effects consequent to the accounting treatment of intangible property.

# Cost or Value

Applying the economic onception of "Capital" to intangibles would obviously show that they possess all the characteristics of a capital account. They give rise to a surplus and they form a source of income, but they are not recognized in accounts at their full economic value which is "....the aggregate discouted value of (their) estimated future net income."(10) Their value

<sup>(10)</sup> Marshall, loc. cit.

is deemed to be equal to the cost incurred in the process of their creation, or if purchased, the money paid in consideration for their acquisition.

The treatment of intangibles at cost may be subject to two serious objections.

First, if cost is a measure of value then intangible property would be a common attribute to all business. The second objection is that there is an implicit assumption that intangibles are always worth their cost. Perhaps the mere fact that intangible property is of a differential or monopolistic character is sufficient to prove that cost and value (at least in this connection) are not identical. However, a further analysis of the question might be desirable.

It goes without saying that any advantage that can be created by cost directly will cease before long to be an advantage. Expenditure is a universal instrument; one enterpreneur may be just as ready to incur a cost if expectations of future profits justify such an expanditure. In an attempt to create custom numerous expenditures may be incurred by entrepreneurs in the form of advertising or easier credit terms, but the results obtained through the same endeavour are not likely to be proportional to the cost incurred. In fact

it is not difficult to conceive of cases where a lower expenditure results in a greater advantage.

Further, although it might be true that concerns with larger appropriations for research expenditure are more likely to secure a relatively larger, and possibly more valuable, number of inventions, it is not uncommon to find large sums of money spent without a single valuable outcome. The possible value of an invention does not so much depend on applied expenditure but rather on the skill and personal ability (and toa large extent on mere coincidence of a combination of certain factors) of the personnel administering appropriations of the sort. It might be argued that the amount of the research facilities available will reinforce and render more effective the skills employed, yet it will be readily accepted that the outcome cannot be adequately measured on the basis of the research expenditure.

In the case of franchises however, the lack of relationship between the cost of their acquisition and their value is obvious. The question of value depends on the extent and influence of the monopoly that the franchise secures to the business and the expected monopoly profits to be derived in the future.

For sure the amount of expenditure an entrepreneur will be willing to make on account of intangible
property (and to that effect on all other types of property) depends primarily on the expected conditions of
business, assuming that the rate of interest does not
change, or if expected to vary, his expectations in this
regard. This does not assume that adverse future conditions will discourage further investments. If conditions turn out to be unfavorable then the net return on
the investment will drop without affecting the future
possibilities of further investments, except, possibly,
psychologically.

Intangible property therefore indicates the state of expectations of future yields at the time of their acquisition. The amount of expenditure actually applied represents only the sacrifice the entrepreneur has made. Obviously, the entrepreneur might have been prepared to pay more to acquire this property; or, his budgeted expenditure in this regard might have been less than what was actually spent and that the additional and involuntary investment was nothing more than an attempt to minimize a sure loss by substituting it for a probable gain. The probable gain consists of the possibility that an additional expenditure may result in a

more than proportionate saving. No matter how valuable the property acquired turns out to be, accountants represent it as an investment the value of which is equal to the total direct expenditure.

However, the accounting treatment of intangibles at cost rather than at their full economic value finds justification in the usefulness of the procedure to the entrepreneur in that it affords a more practical means of measuring the efficiency of the business. It is very impractical to measure business efficiency by applying net income to indefinite values such as intangibles at full market price. These values are determinable only in connection with the net income of the enterprise the integrity of which is preserved in accounting in order to enable the entrepreneur to make intelligent judgements about business prospects. The inclusion of indeterminable values would confuse the basis for judgement.

Intangible values, as has been discussed elsewhere in this paper, can be valued only through a process of imputation of excess earnings which may be considered as such only after deduction of all pecuniary costs and other specific valuable considerations.

A normal return on all investment values, adjustments

of the concern's properties and compensations for the services of the proprietor are allowed for in computing the excess earnings.

From an economic point of view the procedure is sound since excess earnings indicate the amount a business can afford to attach to its intangible factors. In this sense intangibles rank behind all other assets from the point of view of their residual character. They are based on a relatively indeterminable factor, and hence the last that may be capitalized as assets.

If however excess earnings of all businesses are to be capitalized the net effect would be to defy one of the most essential purposes of accounting as a measure of the efficiency of each business, as all profits will be reduced to normal. Only those businesses with less than normal profits would not be effected. Accounting will become then a measure of business inefficiency rather than efficiency. Even if assumption is made that such a drawback does not exist, imputation of excess profits to individual items of intangible property is difficult. How much of the excess earnings are due to the existence of a patent and how much to management efficiency or goodwill cannot

be reasonably determined.

Anyway, no definite and consistent plan of recognition has been suggested as yet by accountants favoring the recognition of intangibles at their full value. It seems that there is an implcit assumption that a consistent plan is difficult to follow and that the capitalization of excess earning values is at best a conjectural process. For if intangible values are to reflect the current position of the business then they should be currently adjusted on the basis of the rate of earnings realized in the preceding accounting period. If this scheme is to be followed consistently, the appreciation or depreciation of intangible assets based on an increased or decreased rate of earnings respectively would have the effect of showing either inflated or deflated earnings, because the increase or decrease in earnings will be magnified through the adjustment of intangible values.

# Costs and "Maintaining Capital Intact"

If capital is to be regarded as a fund of money, then recognition of intangibles at cost will show the allocation made in this connection out of the fund. What part of the expenditure made is to be regarded as 'cost' of the intangible property is an important question. For if an item is capitalized which would

otherwise be charged to revenue, the profits(11) of the period will be correspondingly increased. On the other hand, if an item is charged directly to revenue which would otherwise be capitalized, the profits of the period will be correspondingly decreased.

If one bears in mind that income figures as arrived at by accountants are intended for use by the entrepreneur to help this consumption-expenditure pattern decisions, the treatment of any account as an asset or revenue will definitely affect such a decision.

In the first case the logical consequence of the treatment, especially if the losses capitalized are large, is that profits will be distributed out of capital (viewed as a fund) and hence its intactness is impaired. Naturally this will result in a lower earning power of the business and possibly in lower earnings.

<sup>(11)</sup> To Norris, profit figures as arrived at by accountants are "....useful in deciding how to spend existing and future resources to secure maximum advantage or satisfaction." Norris, Harry, Accounting Theory, (London: Pitman & Sons, 1946), p.52

As Lord Keynes puts it "...net income is what we suppose the ordinary man to reckon his available income to be when he is deciding how much to spend on current consumption." Keynes, op.cit., p. 57.

In the second case however, losses are exaggerated and will probably affect expectations and the determination of the consumption (as well as the investment) expenditure pattern. The lower profits available for distribution result in a lower purchasing power of the consumer.

Recognition of intangibles at cost therefore affects the individual business in two ways. One, the capital of the business viewed as a fund will be kept intact.

The second effect relates to the amount of book profits available for distribution and to the state of business expectations. The larger the amount of expenditure capitalized as intangible values, the more will be the profits available for distribution and the more optimistic business expectations will be.

However, if the analysis of professor Pigou in regard to the meaning of 'maintaining capital intact' is to be taken as a point of departure, little if any, value will be attached to the information supplied by the historical records of the accountant concerning intangibles. Whether capital increases or decreases or remains constant as a consequence of this treatment, would depend on the relationship that subsists at the

time of the record between the cost and the value of the property in question.

If cost and value happen to be the same, then the accounting record would be economically correct and therefore intactness of capital is maintained. A possible case where cost and value may be the same would be when intangible property is acquired through the purchase of a business as a going-concern. This relationship is not necessary, anyway.

If the value of intangible property happens to be more than its cost, then there would be an act of saving which is equal to the difference between the value and the cost of the property. Captial, therefore, is increased rather than maintained at the original level, and the financial position of the firm improved. For if recognition is made in accounts of the increased value of intangibles, then the profits of the business would increase. This is bound to happen if the increase in value is regarded as an expected increase, accruing as a result of carrying the business as a going-concern for a period of time.

Should the cost of intangibles exceed their value, then there would be an act of dis-saving which is equal to the difference between the cost and the value of the said property. Their book value therefore,

would include a loss account not written-off and profits would have been distributed out of capital.

Again, this is bound to happen since it is an expected
loss, not caused by an "Act of God or the King's Enemies."

However, when cost is taken as a basis for record and depreciation is applied to intangible property, a new set of conditions will develop tending to preserve the intactness of capital or even to increase it over time. Below is a study of depreciation as applied to intangibles.

#### Depreciation and Intangibles

Depreciation, as is applied by accountants to intangible property is based on conservatism and expediency only. The objective is to allocate their total cost to revenue during a short period of time and the effect is to insure that revenue, equal to original cost, are not distributed as dividends, but are rather ploughed back into the business. The financial position of the firm would be improved and the intactness of capital would tend to be preserved.

However if the economic concepts of depreciation are applied in this case, no justification whatsoever may be claimed for depreciating intangibles. They are not subject to wear and tear nor decrease in

value through use. On the contrary, one is inclined to think that intangibles increase in value if the business possessing them contines to operate as a going concern.

In some specific cases however, there may exist a decrease in value through the passing of time, such as in the case of patents or copyrights with a fixed legal duration. Depreciation in this connection may be economically justifiable if assumption is made that they give rise to no other intangible property such as goodwill. If in the case of a franchise, the concession terminates after a fixed period of time, and business has to be liquidated as of the date of termination—which is not a frequent practice—then the straight line method of depreciation would again, be economically justifiable.

Both questions of user cost or replacement cost do not find a good field of application in the case of intangible property.

In chapter V below, a more detailed enquiry into the economic implications of depreciating intangibles is made.

#### B. PRICING

Except in the case of public utilities, the accounting treatment of intangibles does not affect prices or price determination. Under conditions of pure competition, price is set automatically through the forces of supply and demand. No one entrepreneur can have any material effect on the state of supply or demand to alter prices; while under a monopoly, the price of goods sold tends to be that which will equate the marginal cost with the marginal revenue of the monopolist. This will be calculated on the basis of cost without including the value of the right giving rise to the monopolistic position. Inclusion of the capitalized value of superior earnings would tend to confuse rather than clarify them. However, replacement of property values through depreciation does not exist in the case of intangible factors, and therefore they do not form part of the costs of the business. (12) In the special case of public utilities where price is

<sup>(12) &</sup>quot;The amount of goodwill written off in the financial accounts at the end of a trading period appears to present difficulties to many minds so far as cost accounts are concerned. The writing off of goodwill is a profit and loss transaction, and the amount must not be included in the cost accounts."

Ryall, R.J.H., Dictionary of Costing (London: Pitman and sons, 1952), p. 183.

calculated on the basis of all investment values, the treatment of intangible property in accounts has special significance.

#### Price of Public Utility Services

It would be recalled that in the second chapter of this thesis an attempt is made to justify the recognition of intangibles in the accounts of public utilities. An attempt is also made to discuss the most outstanding interpretations of their significance and methods of valuation.

For the purpose of the following discussion appraisal of intangible values in the case of public utilities will serve one purpose, that is to establish relationships between the book value of intangibles and the price of the particular type of service rendered by the utility.

A preliminary assumption in this connection seems pertinent. I am referring to the right of the owner of the utility, whether a private individual, a municipality or a state to a reasonable return on the investment which should include a reasonable interest on investment after allowing for operating expenses and an annuity which in <u>n</u> years at compound interest, will amount to his investment. The term 'investment' in this connection refers to all the original outlay including development costs.

Had such a person determined to keep his  $\mathbf{f}$  unds invested in safe securities at ordinary interest rates instead of building the plant, he would have been, at the end of  $\underline{n}$  years, in possession of his entire capital plus interest on the full amount thereof for the entire time. Therefore, it would be only just to make this assumption.

Of course the assumption excludes from discussion such public property as established and maintained by taxation, such as public roads and parks, which is normally available for use free of charge by the public.

Another assumption necessary for the discussion relates to government intervention in the fixing of rates. Government intervention, it is assumed, should be present and should manifest itself in two ways. First, it should safeguard the interest of the rate-payer against possible unreasonably high prices; and second, in its endeavor to safeguard the interest of the consumer it should not decrease prices to such an extent as to kill the incentive of the owner to improve the quality of the service.

These assumption settled, the argument can be developed in the following manner. In the process of fixing rates, the owner will give consideration to all elements of cost, to the investment, to the hazards

of the business, to profit, to the value of services rendered, to the permanency of the service and to the volume of business transacted. This set of conditions upon which public utility prices are determined is conveniently termed the 'rate-base'. It differs from 'cost' in that it includes elements of expectations and uncertainty, negative or positive. The rationale behind this concept is that earnings. present and prospective, should be adequate to yield a proper return on the rate-base and an additional return to compensate the owner for having established and for managing the utility. There is for sure an implicit assumption that the investment has been reasonably made and that excessive development costs do not represent part of the investment. That is. inefficient management is not rewarded.

There are two factors that enter into the rate-base and are relevant to this discussion. First, the value of the investment in plant at the time when rate fixing is contemplated, and second, the value attached to intangibles at that same time. These, together with the rate of interest to be used and the amortization rate to be applied to plant will show the effect of the recognition of intangibles on pricing of public utility services.

The case in Re Appalachian Power Co. v.

West Virginia Public Service Commission(13) will
illustrate the point. The value of the plant was
estimated at 8,500,000 dollars and 'going value' at
1,500,000 dollars. If interest on the total investment is fixed at 6 percent., and that 5 percent. in
lieu of depreciation of plant a year is sufficient
to keep the plant at its present value (assuming
unlimited life of plant) then the total earnings should
be as follows:

5% of 8,500,000 dollars for depreciation... 425,000.-6% of10,000,000 dollars for interest..... 600,000.-

Out of this total which is charged to ratepayers, 90,000 dollars represent that part of the
income due to going value, which in fact represents
8.8 percent. approximately of the total rates collected.

In the case of public utilities, therefore, the accounting treatment of intangible property has an effect on the price to be charged for the goods produced or services rendered, the extent of the effect being determined by the value attached by the public utility to intangible property in its possession.

<sup>(13)</sup> cf. supra, p. 29

#### CHAPTER V

# DEPRECIATION OF INTANGIBLES

Between the two major and conflicting views regarding the treatment of intangibles after their recognition in books of accounts, the theory that they should be depreciated is upheld by most accountants. The method of depreciation to be used is still a further point on which views are in conflict.

No matter what depreciation method is used, a set of conditions would probably arise because of the effect of the amount of depreciation charged to revenue on the magnitude of profits available for distribution, the supply of credit and the investment incentive of the entrepreneur. Im most probability the extent of the influence of depreciation applied to intangibles on the entrepreneur's decisions is insignificant; still less significant would be its effects on the economy as a whole.

Its influence is felt only in so far as it changes the level of money income which is certainly one of the most obvious manifestations of the trade cycle, and may be the most generally accepted index of its course. The effect of the particular depreciation method which is employed is discussed later in this chapter.

In general however, depreciation of intangibles provides the business with a liquid fund which encourages business savings. "If part of income is saved and invested, ceteris paribus the proportion between the demand for consumers' goods and the demand for producers' goods is modified in favour of the latter; and it must be permanently modified because, by the act of saving, the stock of capital, as well as the volume of transactions in capital goods, has been permanently increased." (1)

This may be illustrated in the following manner. If  $S \neq S(r, y)$  and I = I(r, y)

where S stands for savings, I, investments, r, rate of interest, and y, money income, then an increase in y will increase S and I if r remains constant. This concept may be reduced to a supply of saving and demand for saving schedules as in Figure I below.

L, is the intersection point of SS and II, the equilibrium position prior to the increase in money income y. A new state of equilibrium is established at L1, which is the point of intersection of SIS1 and III1, incident to the increase in money income from y to y1.

<sup>(1)</sup> Haberler, Gottfried, Prosperity and Depression (Geneva: League of Nations, 1941), pp. 48-49.

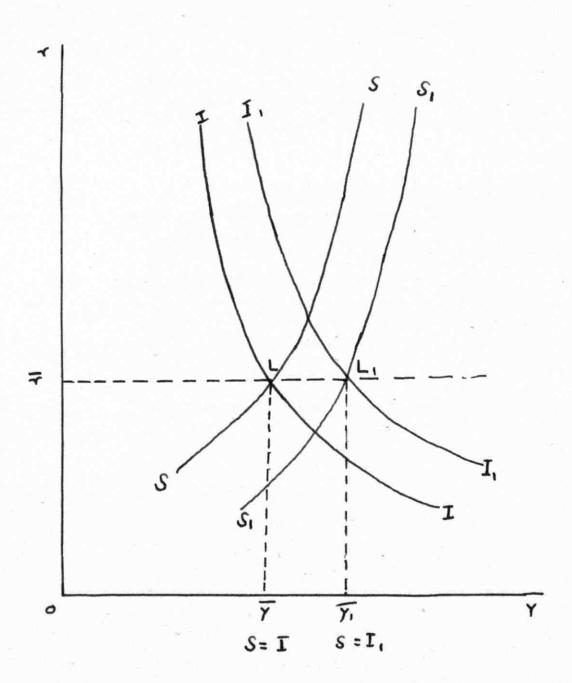


FIGURE I

If depreciation of intangibles represents a mode of providing more working capital out of profits (whether or not it is intended as such), the aggregate of funds supply curve will tend to shift to the right for two main reasons. First, the reinvested profits are added to the aggregate supply of funds available thus displacing the whole curve that much to the left.

If Smo represents the aggregate supply of funds curve at a given rate of interest, then an increase in the stock of money from Lo to Ll will shift the aggregate supply curve to the new position Sml. (Figure II)

Second, in consequence of the increase in its equity, lenders will be willing to lend more at any given rate of interest. In Figure II, this concept may be illustrated by an additional shift of the supply of funds curve to Sm2.

The improved liquid position will also help in other ways. First, it might decrease the possibility that at a future date, urgent need for liquid capital might arise leading to payment of high interest rates. Second, default on contract payments will be less likely and therefore a prejudiced credit standing avoided.

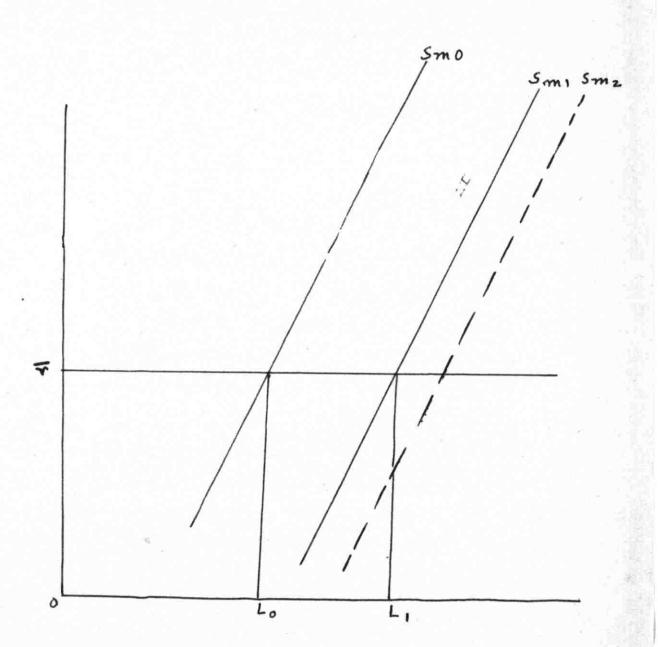


FIGURE II

Third, during a period of falling prices, the banking system will be less reluctant to extend credit and continue the expansion.

Below is a discussion of the economic effects of the particular method used. Two assumptions are made however, which need some justification. First, during a period of rising prices, book profits are increased; and during a period of falling prices, book profits are decreased. It is certainly very possible that an individual entrepreneur may make profits during any phase of the trade cycle, but in the aggregate, rising prices as well as rising profits in any particular industry indicate a period of recovery in that particular industry. The contrary is assumed to hold during a period of falling profits.

This assumption is essential for the following discussion since it is very impractical (may be impossible) to discuss the effect of depreciation of intangibles on the particular business in every one of its possible states of prosperity and depression, and on the trade cycle, again in every one of its many phases. In fact one may conceive of infinite combinations of possible circumstances that may prevail at any one moment.

Second, the method of depreciation discussed is assumed to be in universal use. Once each business is assumed to employ a different method, it will become impossible to predict their behavior or determine their effect unless and until quantitative data becomes available, and, through a process of cancellation of opposing effects, the net effect is determined. As the discussion is carried out in the abstract, the assumption will be helpful.

# Depreciation of Intangibles Against Low Business Profits

A method of depreciation favored by some accountants suggests the writing-off of intangibles only against low business profits. The argument is based on the idea that intangibles indicate superior earning power; once business profits approach the normal rate in the industry itself, intangibles should be written-off.

As regarding the individual business, this procedure implies the further pushing down of book profits. Since it is probably true that business profits are lowest during a depression and highest in a boom, then the procedure will affect the economy in any one of many ways. First, during a period of falling prices, losses are exaggerated by the addition of depreciation on intangibles to revenue, the entrepreneur

will be expected to lower his prices less than he would otherwise have lowered them. This he will tend to do probably because of the improved liquid position; his need to sell to acquire liquid capital will be diluted. Vice versa, in a period of rising profits, the entrepreneur will tend to mark his prices up less than he would have marked them.

Again, in a period of falling prices, the exaggeration of losses will affect favorably the liquid position of the business, which in due course will increase the ability to invest. The increased liquidity of firms in a depression is held by most economists to be an essential factor in the subsequent recovery. Vice versa, in a period of rising prices and profits the exaggerated profit figure due to the absence of a depreciation charge to revenue on intangibles, will reduce the investment incentive of the entrepreneur and will weaken his liquid position, contributing therefore to the subsequent stability of prices and production.

Depreciation of intangibles against low business profits, is of the nature of an injection of liquid capital, which by improving the state of investment and saving will lead to an increase in the expenditure on consumption goods which in turn, through the increased profits in the consumption trades, constitutes the impetus and the means for increased capital expenditure.

It will set into action a set of conditions which will help in the subsequent recovery.

Exaggerated profits in periods of inflation and exaggerated losses in periods of slump will tend to make government planning more effective through the adjustment they make possible in its taxing power. Higher profits in a boom are subject to higher tax collections which can be diverted by the government to the proper channels. In periods of low profits, the lower taxes collected leave the entrepreneur with a relatively larger amount of profit which he will find available for possible reinvestment.

As an illustration, an economy is assumed to be initially in a position of full employment which is subjected to a disturbance leading to a decline in the aggregate money demand. The first effect will manifest itself in a decline in sales, a piling up of inventories, a fall in prices following an attempt to reduce inventories followed by a decline in business profits.

The decreased book profits of the business further pushed down by writting off intangible values would automatically decrease taxes collected by the government, which decrease may be considered as a net contribution by the government to the income stream which offsets a part, no matter how small, of the decline in the aggregate demand which in turn helps decrease unemployment.

This method of depreciation contributes therefore to price stability, which-especially in periods of low income elasticity of demand such as is likely to obtain in the depression phase of the trade cycle-may be an element in economic stability.

In no way does this explanation exclude other effects on the economy. In fact there may be other conditions arising out of this same accounting treatment; a good example will be found in the effect of distribution of profits out of capital in periods of rising profits, both decreasing the entrepreneur's incentive to invest and increasing the purchasing power of the consumer. If such a position arises which leads to an increase in the effective demand for consumers' goods, then the extent of the effect of the treatment will depend on the propensity to consume and on the

inducement to invest under the new set of circumstances.

In a period of falling profits exaggerated losses decrease the amount of divisible profits contributing possibly to a decrease in effective demand.

The net effect on the community as a whole again depends on the inducement to invest, the extent of the improvement in the liquid position of the firm, and the state of demand for both producers' and consumers' goods. Depreciation of Intangibles Against High Business Profits

Another method of depreciation favored by some accountants suggests that intangibles are best written-off against high business profits. If this procedure is adopted then during a period of rising profits, the amount of distributable profits is decreased contributing to an adjustment as between consumers' goods and producers' goods in favor of the latter. In a period of falling profits, as no charge is made against revenue in regards to intangibles, the adjustment as between consumers' and producers' goods will be in favor of the former.

If during a period of falling profits depreciation is not allowed for, the entrepreneur will tend to behave in any one of the following ways. He will probably further decrease his prices because of his need for liquidity which has been accentuated through
the distribution of otherwise undistributable profits.
His credit standing and his incentive and power to invest will probably become unfavorable. This will tend
to further the depression and lengthen its period.

Again the distribution of profits otherwise not available for distribution induces the business to borrow.

During a period of falling prices many debts are "...certainly a most potent factor (although not the only factor)
tending to aggrevate the depression. The burden of debts
becomes heavier with the fall in prices; and this leads
to distress selling, which depresses prices further. "(2)

. In a period of rising prices and profits, the writting-off of intangibles decreases the entrepreneur's profit. He will tend therefore to raise his prices more than he would otherwise raise them if intangibles were not depreciated.

Underestimated profits during a period of rising prices and underestimated losses during a slump period are two factors contributing to the enhancement of the boom and the aggrevation of the slump.

# Intangibles Depreciated Over a Short Period of Time

If intangibles are depreciated over a short period of time, the net effect on the economy will depend on the phase of the trade cycle obtaining at the

<sup>(2)</sup> Harberler, op. cit., p. 114.

time of depreciation. In a period of rising profits, the effect of this method will be the same in most respects as in the case when intangibles are written-off against high profits. In a period of falling profits, the effect of this treatment will be the same as the effect of applying low profits to write-off intangibles.

One difference may possibly obtain. The method under examination spreads depreciation over a definite period of time decided upon beforehand, and the amount charged to any one accounting period would be equal to the amount charged against any other accounting period.

In the two other methods discussed above, the amount of depreciation depends on the magnitude of profits. In the first method the lower the profits are, the higher the charge for depreciation would be; in the second method, the higher the profits are, the higher would be the charge. These two methods tend to have more (positive or negative) effect on the economy, especially in the extreme phases of the trade cycle.

#### CHAPTER VI

# TREATMENT IN SOCIAL ACCOUNTS

Before concluding the discussion of the subject of intangibles it may be interesting to inquire into their treatment in social accounts and the extent to which they are recognized as assets in the nation's balance sheet. It is necessary first to discuss briefly the composition of national wealth and the technique used in its computation.

In one respect, business accounting and social accounting are basically the same. Both endeavor to show systematically and in a continuous manner "economically relevant transactions expressed in a common unit."(1) The difference is in the means by which they are accomplished. Efficiency in business is measured by the amount of 'accounting net profit' as compared to the capital investment and the business's turnover. The efficiency of the whole economic system is measured by the amount of real net

<sup>(1)</sup> Goldsmith, Raymond W., "Measuring National Wealth Irra System of Social Accounting", Conference on Research in Income and Wealth, National Bureau of Economic Research (New York: H. Wolff, 1950) XXII, 24.

national income, a concept related to economic welfare. Comparison as between stock of capital at one date and the stock of capital at another date, in both cases show the increment (whether positive or negative) to capital; the accountant employing the accounting concept and the economist the economic concept of the term. An accounting profit may represent a real loss and vice versa. Although the actual arithmetic results may be at great variance, yet, allowing for conceptual differences, one is justified in saying that the ultimate purpose is the same.

One great difference exists, however, between business and social accounts. In the words of
Goldsmith, "Accounting by business enterprise is conducted exclusively on one level, which is set by the
laws and commercial customs of the time and place.
Social accounting, however, can and must be conducted
on two levels: the combination and completion of
existing accounts in accordance with the prevailing
methods of business accounting; and the construction
or recasting of accounts to conform with a set of standard rules derived from economic theory."(2) The first

<sup>(2)</sup> op. cit., p. 25

level he designates 'national business accounting' and the second, 'national economic accounting'.

In the following discussion the attempt will be to show to what extent does social accounting, in the process of eliminating irrelevant data and adjustment of other data to conform with accepted economic concepts and theories, affect the value of intangibles as recognized in business accounts.

# The process of Elimination And Adjustment

On the first level of social accounting, namely national business accounting, the system attempts
first to compile all balance sheet data and revenue
accounts existing at the time of the attempt. Financial
statements thus compiled are standardized in some degree
to become capable of aggregation. As many economic units
do not keep accounts, estimates of stocks of capital and
revenue are made, primarily based on the available accounts
of other units.

On the second level, data already compiled is adjusted to current values. This means that marginal cost will be substituted for price whenever they deviate. Second, the capitalization factors that are applied to expected net returns in order to arrive at asset values to be included in the balance sheet of the nation are

modified to conform with economic theory. It is evident that accounting for single business units tends to exaggerate risks undertaken and therefore underestimates values. In national accounting on the second level therefore, values given to assets in general tend to be more than their accounting book values.

The net effect of national business accounting may be summarized as follows:

First, all claims (including debtors and creditors but excluding properietorship claims) will be cancelled in the process of aggregation. Allowance is made for minor irregularities such as entries having no corresponding records in other sets of books. Cheques drawn but not presented, bad debts allowed for in the books of creditors but not as yet cancelled in the books of debtors are two out of many possible irregularities.

Second, claims against the community, such as intangible values (in the sense they are defined in this thesis), continue to appear at book value. A modification of this statement is necessary in the case of holding companies. Although one of the intangibles values, goodwill, may not be an asset on the balance sheet of any of the constituent members

of the group, it will appear as an asset on the consolidated balance sheet. This point is discussed in more detail in this chapter.

Third, all other assets (probably excluding a part of government property) will appear as a part of the wealth of the community on the nation's balance sheet. Assets and liabilities are taken at current market prices (assuming that each business is a going concern) in preference to book values, which show historical costs only. In business accounting terminology, the 'liquidation balance sheet' is taken as the basis for valuation. Value adjustments constitute the function of the second level of national accounting, i.e., national economic accounting.

# Intangibles as Part of National Wealth

Only the second and third effects are of concern to this attempt. The conclusion, which is illustrated below, is that in computing national wealth, intangibles are recognized at their full market value. This is not in contradiction with the previous arguments regarding one of the essential economic characteristics of intangibles, that is the absence of a market for them. The term 'market value' is used to mean the value that may be imputed to intangibles if the whole business is to

be sold as a going concern.

The national business accounting value of intangibles will be the total of the individual business balance sheet values plus an adjustment in regards to holding companies. The adjustment is in fact provided by business accounts either to satisfy statutory requirements or for the purpose of providing additional information for members of the group. It should be noted that such an adjustment is not incorporated in the books of account; they appear only on a combined statement of assets and liabilities of a group of companies, conventionally termed 'Consolidated Balance Sheet'.

The goodwill item which results from such an adjustment is a measure of the difference between the book value and the market value of the group as a whole excluding minority interests, i.e., that part of the total networth owned by persons who are not members of the group. Therefore only a part of the total difference between the commercial and the book values of the company is recognized in this way. The following is an illustration of the magnitude of goodwill recognized in national business accounting consequent on the bookkeeping procedure followed.

Subsidiary Limited is totally owned by Parent Limited. Parent Limited acquired all the shares of Subsidiary Limited as on the first of January at a cost of £100,000. The balance sheet of Subsidiary Limited shows the following capital structure:

Share Capital: Authorized And Issued:
60,000 shares of £1. each fully paid .....£60,000.
Balance of Profit And Loss Account as
on First January ...........£ 2,000.

In the consolidated balance sheet a goodwill account will appear to take care of the excess of market value of Subsidiary Limited over its book value at the time of acquisition, normally omitted from its accounts. The value of goodwill as it appears on the consolidated balance sheet is determined in the following manner.

Cost of Shares Acquired:

60,000 shares of £1 13s 4d each... £ 100,000. Less Their Value At Par ...... £ 60,000.

Excess of Purchase Price over Par. 40,000. Deduct Balance of Profit, Jan. 1st. 2,000.

Cost of Goodwill ..... £ 38,000.

Assuming that no goodwill account appeared in either balance sheets before consolidation, the total

value assigned to it will be the full £ 38,000. It would be interesting to point out that a mere change in the distribution of the capital of Subsidiary Limited will bring about a change in the value attached to goodwill, the range of change, being from nil to £ 38,000. An example will illustrate the point. Taking the same example discussed above, if the holding of Parent Limited decreases to 80 per cent of the total issued capital of Subsidiary Limited, the value attached to goodwill will be decreased by £ 7,600. This is arrived at in the following manner:

Cost of Shares Acquired:

48,000 shares at £1 13s 4d each ... £ 80,000.

Less their Value at Par ..... £ 48,000.

Excess of Purchase Price Over Par 32,000.

Less share of Balance of Profit: 1,600.

Cost of Goodwill ..... £ 30,400.

Since no accounting is normally kept in other than the business sector, only estimates of the value of intangibles owned by other sectors is possible. Whenever estimates cannot be conveniently made intangibles are omitted from the national balance sheet.

The illustrates the compilation process Addition

which is the function of the national business accounting. The second level of national accounting deals with adjustments to current values. The value that is assigned to each asset as part of a going-concern business depends on the possible expected contribution of the particular asset to the expected net returns to be derived from the business. The value that is given to intangibles therefore depends on the system of imputation adopted.

In accounting practice it has been deemed as expedient and commendable the overestimation of risk, i.e., to account for possible losses but to exclude uncertain, though possible, gains. The net effect of the national economic accounting therefore, is to assign more value to such items whose values are deemed in business accounting to be indefinite. In so far as intangibles in general indicate superior earning power, and in the case of patents, copyrights and franchises giving rise to an economic surplus, they will appear on the national balance sheet at the capitalized value of the superior profits or economic surplus to which they give rise. The capitalization rate for sure depends on the current economic conditions and the rate of interest ruling in the market.

A final remark of a highly conjectural nature concerns the going-value as applied to extremely large public utilities whose rates for services charged are controlled by government. The ordinary book-keeping practice is to attempt to do justice to both utility and consumer, by allowing a 'fair return on fair value'. An extremely large corporation of this sort may influence judgements as to what the 'fair value' should be. This, in addition to the absence of a known market value due to the large capital outlay of the utility, may result in an overestimation of going-value which in turn leads to an obstruction of figures in the social accounts on the economic accounting level.

Most probably this item may be an insignificant item which may not affect materially the total figure for a nation's wealth.

It may be interesting to point out that out of a total assets owned by manufacturing concerns in the year 1933 of 33,352 million dollars, intangibles and deferred expenses together amounted to 1051 million, or approximately 3.2 percent of total.(3)

<sup>(3)</sup> S. E. C., Survey of American Listed Corporations, Balance Sheet Data, 1939-1943, Part II, pp. 2-3. Quoted by Gainsburg and Krassa, "Compiled Balance Sheet of Manufacturing Enterprises", op. cit., p. 319.

#### SUMMARY AND CONCLUSIONS

At the outset of this thesis an attempt was made to study the meaning of the term 'Intangibles' and the bases upon which assets may be classified as such. To avoid discussion of conceptual differences, an operational definition formulated by the American Institute of Accountants was adopted and used throughout the thesis. The term as used includes goodwill, trade-marks, trade-names, patents, copyrights, going value, and franchises.

A study of these specific items of intangible property showed that they are closely related to each other and carry the same economic significance as to the source of their value. The similarity in their valuation and accounting treatment is, therefore, expected. In fact the essence of the treatment is the same; only minor differences of detailed procedure exist.

Intangibles derive their value from the excess earnings to which they give rise. As these are neither definite nor persistent, the value of intangible property is indefinite. The conservatism of accountants coupled with the indefinite value of intangible property, reflects on the value attached to them in accounts. Many accountants favor their recognition in accounts at the full

capitalized value of the excess profits to which they give rise; yet the general practice is to recognize them as assets only to the extent of the actual expenditure directly made in the process of their acquisition or development. The rapid writing-off of these values from books of accounts is deemed by accountants as necessary.

The recognition of intangibles at cost rather than at full value is subject to serious objections.

The only justification is found in the expediency of the procedure.

cost as a basis for record, it was argued in Chapter IV, has some relation to changes in capital values. If capital is viewed as a fund from which allocations are made, then the accounting treatment of intangibles ensures that the original capital outlay remains unimpaired. However, the economist's conception of capital is different. He views capital as a source of income which needs replacement at some future date under circumstances which need not coincide with circumstances prevailing at the time of their acquisition. If this view of the case is taken, then the change in the value of capital resulting from the adoption of cost as a basis for record, will depend on the relationship that subsists between the cost and value of intangibles

at the time of the record. If these happen to be equal, a case which may not be very common in a world of change, then the procedure will help maintain capital intact. If their value happens to be greater than their cost, then there would be an act of saving which is equal to the difference between their cost and their value. An act of dis-saving will result if the cost, as represented by the book entry, is an over-statement of their value.

Intangibles are not subject to wear or tear, and normally need not be replaced after the lapse of a period of time. They normally tend to appreciate in value rather than depreciate, if the particular business owning them continues to operate as a going concern. Therefore, the high depreciation rate applied to intangibles is not economically justifiable, and the effect will be to widen the gap between their economic and book values and therefore increase the equity of the business adopting the procedure.

Further implications of the depreciation procedure will be found in the effect it causes in the level of money income. In general, depreciation improves the liquidity position of the firm and hence increases the aggregate supply of funds. This is the case, because the increase in the equity of the firm strengthens its borrowing power, as lenders will be more willing to extend credit at the going rate of interest.

An improved liquid position and decreased book profits, resulting from the writing off of intangibles against low business profits, contributes to price stability which may be an element in economic stability. This is especially the case in periods of low income elasticity of demand such as is likely to obtain in the depression phase of the trade cycle.

If however, depreciation of intangibles is universally charged against high business profits, then the decrease in the amount of distributable profits contributes to an adjustment as between the demand for consumers' goods and the demand for producers' goods in favor of the latter. As no charge is made against revenue in regards to intangibles during periods of low profits, distributable book profits in such periods will be exaggerated thus discouraging investment. This procedure tends to enhance a boom and aggrevate a slump.

The accounting treatment of intangibles at cost has an important bearing on the pricing policy of public utilities. The 'rate-base', which is the basis upon which prices are determined, includes, among other things, all elements of intangible values possessed by the utility, which may form a large portion of the total

rate-base. In one case discussed in the thesis, approximately 8.8 percent. of the rate computed was due to the intangible elements of value possessed by the utility.

In social accounting, intangibles are treated differently. Whereas in business accounting special care is made to exclude any uncertain value, and therefore to underestimate the value of intangible property, the value attached to them in social accounting is equal to the capitalized value of the superior profits to which they give rise. Therefore, they are recognized as part of the wealth of the economy to the full extent of their market value.

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