

The Importance of Immaterial Investments in the Tunisian Textile and Clothing Sector and Barriers to Their Emergence

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Abstract: This article analyses the importance of intangible investment and barriers to their emergence in Tunisian textile sector. Our methodological approach is the following one: first we try to turn on the origins of the concept intangible investment and explain that if the term intangible investment is increasingly present in the current economic literature, the concept is that it covers much older origin; is the succession of different theoretical contributions which contributed to the formulation of the concept. The analysis of the explanatory factors of growth in different eras, through the work of some classic pioneers such as Adam Smith and Jean Batiste Say and Walras and neoclassical Marschall, helps us to locate his origin. This is the purpose of our first section of this article. The second section aims to revisit the definition of this term and its evaluation methods. In the third section we will try to analyze the importance of these investments in the Tunisian textile and clothing sector as well as the obstacles to their development .

Keywords: Immaterial investment, Immaterial in new growth theories, Barriers to their emergence, Method for Valuation, Tunisian Textile and Clothing Sector

INTRODUCTION

We chose to return to the origins of the concept "intangible investment" through the studies of classical, neoclassical and contemporary economic and managerial approach. We explain that if the term intangible investment is increasingly present in the current economic literature, the concept is that it covers much older origin. Thereafter we present the immaterial in new growth theories and try to identify and define the concept.

LITERATURE REVIEW

The factors of economic growth among classical economists, neoclassical and contemporary

In the classic design, production depends on the amount of inputs used, especially capital and labor. Knowledge and knowledge is considered external elements and not endogenous in the production function. However, in the new design, economic growth depends more directly on investment in knowledge and knowledge and, more generally intangible investments. The investment idea in these "new" growth parameters based on knowledge is not new. Indeed, Adam Smith [1], one of the founding fathers of classical economics, believes that the acquisition of knowledge and skills improves the economic progress of the nation but also the income of the individual. Similarly, Jean Baptiste [2] considers that there is a direct link between education and training, and effectiveness of workers; he

writes: "since the worker who shapes the wood or clay to the Minister of State who, with a stroke of the pen, rule that relates to agriculture, mining, trade, individual fill his job if he knows better the nature of things, if more educated." Alfred Marshall [3] also has never excluded the role of this factor in the economy. It extends the Smithian analysis and states that knowledge is a time element that increases future returns. He writes, "Around 1904 English businessmen are beginning to realize that they had to follow other nations by promoting industrial efficiency through improved education." Denison [4] and Schultz [5] also showed the important role of knowledge in the development of the economy. For an accounting approach, Denison showed that between 1930 and 1960, 23% growth rate in the US was due to the education of the work force. In addition, Shultz, too, measured the relationship between education and productivity, and concluded that investment in this residual factor positively influences the production growth rate [6].

These developments we can say that in the economic history the rules that organize economic activity have changed. As specified Caspart and Christine Afriat [7], in the new theories, it was incorporated into the production, something other than capital, labor and technical progress, to account for differences in growth rates. This "something else",

mainly due to intangible qualitative elements had been appointed the residual factor. In our explanation of this residual factor, new growth potential, we use as a starting point of the economic analysis, the model presented by Cobb-Douglas[8]. Indeed, through this function the American economist and mathematician CW Cobb Douglas P. tried to measure under the constant returns to scale assumption and perfect competition, the relationship between the overall output of the nation (Q) and the two primary inputs; the stock of capital (K) and labor (L). Both authors propose the following formula:

$$Q = K^{\alpha} L^{1-\alpha}$$

α and $(1-\alpha)$ are respectively, the elasticity of output with respect to capital stock and that in relation to employment.

This formulation, static essence recalls the reasoning developed by the classical economists for whom the increase in domestic production is achieved by increasing inputs, that is to say, the amount of capital and / or that labor used. We note that in this approach, keeping the same proportions of inputs, technical progress allows the increase in production is not taken into account. However, the neoclassical theory that considers growth is manifested through the accumulation of capital which is paid its marginal productivity, cannot explain sustainable growth. This is related to the fact that the performance and the contribution of capital decrease and approach zero as and as capital accumulates, and the incentive to invest is seriously affected. Therefore, the basic Solow model [9] cannot be considered representative of a growth theory in the presence of exogenous factors. Thus, a third factor explaining the unbounded economic growth has been built there.

The residual factor (or trend of technical progress)

With the aim of boosting the traditional production function, Solow [9] proposed the idea of moving the economic balance of what he calls a growth path. The new production function is then:

$$Q = f(K, L, t),$$

where t is 'autonomous technical progress'. This is a third factor of production which translates all that positively alter the national production under the assumption of productivity of labor and constant capital. In this case, the source of growth results from exogenous technical progress. In other words, technical progress which provides information on the ability to control the laws of nature stems from the efforts of engineers, not economists. Or, as stated Guellec and Ralle [10], the integration of another explanatory factor

of production growth made the increasing returns to scale, which does not fit into the framework of perfect competition. Similarly, we must consider the fact that technical progress is incorporated into "primary" factors. Moreover, this incorporation is the starting point for Contemporary researches on sources of technical progress and the identification this residual factor.

Technical progress into capital

By the late fifties, the basic idea that Solow tried to develop is that technical progress requires hardware support for take its toll. The disembodied technical change is any innovation whose use is conditioned by the acquisition of a support to which it is fully incorporated. Any new technique therefore requires new machinery, and therefore a new investment. The latter is considered as partial or total vehicle technical progress. At this level, we must take into account the heterogeneity of capital, because the productivity of the equipment depends on the technique used. This means that "the recent hardware is more productive than the former because it incorporates the existing progress at the time of its construction, the capital stock is now made up of layers of successive generations of the more productive capital that they are more recent production [11]. However, considering that technical progress is conveyed by physical capital is limited reasoning. Improving the skills of the workforce through training investment also allows better utilization of equipment and thus an improvement in growth. Hence the idea of incorporating technical progress at work.

Technical progress included in the work

This is in Denison [4] that must reconsideration of labor as a determinant of economic growth. The author presents a set of factors that explain the improvement in productivity and thereby result in reducing the unexplained residual. From the specific growth rate conventionally, the author distinguishes the part due to increased inputs of that attributable to advances in productivity. To analyze the impact of the improvement of technical progress on the second factor of production, Denison [4] examines first the influence of the reduction in working hours on hourly productivity. He believes that a decrease in the amount of work of approximately 30% was offset by improved productivity. His study then looks to analyze the impact of a better worker skill on productivity. The author finds that the increase in inputs of the primary factors (capital and labor) explained 44% of the growth rate of the US economy. In contrast, 42% are allocated to education and research. Thus the central role of intangible expenses is highlighted. However, the question that lingers is whether technical progress is a result or a cause of growth.

Technical progress "induced" result and cause of growth

In a long-term perspective, technological progress appears as a result of growth, but also as a cause of it. The idea of "learning process" (learning by doing) introduced by Arrow in 1962 [12], and the phenomenon of "productivity Slowdown" observed after the 1973 oil crisis in developed economies are interesting in this regard. In his study of the US aircraft industry, Arrow [12] notes that as the number of aircraft built increases, the amount of work required to build a device decreases. This is explained by the fact that the experience accumulated by the employee increases over time. Indeed, in its activity the employee develops and incorporates other capabilities to become more and more efficient. Familiarity that develops between workers and their production tools arises progress. In other words, the control of states of nature by the employee gives it a domination that is manifested through improved technical progress whose impact can go beyond the boundaries of his business. In addition to the marginal productivity of capital for the company, progress improves the overall level of community knowledge. Incidentally, Arrow [12] points out that in terms of income and social performance of technical progress than the private return to the company.

The phenomenon of shortness of slower growth recorded in all industrialized countries after the first oil shock of 1973 proves the fact that technical progress is a cause of growth [13]. This has affected not only the growth rate of per capita or per hour, but the growth rate of technical progress [14]. However, many other authors relate the phenomenon of slowing the negative effects of the oil shock on the stock of capital following the increase in energy prices [15] and the effects of regulation [16]. We report that three other interpretations of this phenomenon have been suggested by economists. The first is related to the growing service sector of the economy since the first oil shock. The second relates to measurement errors and the third to spending on research and development. These arguments will be developed in the following paragraph on intangible in the new growth theories.

THE IMMATERIAL IN NEW GROWTH THEORIES

The immaterial in the productivity paradox

Rapid technological change, the increasing share of spending on research and development, the proliferation of technological innovations and the growing diffusion of information technology and communication (ICT) especially after 1973 were followed by a slowdown in productivity gains. The average annual growth rate of total factor productivity rose by about 3% during the postwar boom to less than

1% during the first half of the 90s [17]. Several explanations for this have been advanced by economists. According to Baily and Gordon [18] the difficulties and errors in accounting measures are at the origin of this phenomenon. Indeed, highlighting what they call 'the explosion of computer power', these authors have shown that certain accounting practices are outdated. Moreover, in their practice of assuming that technical progress is zero in the financial sector is no longer justifiable because growth in these sectors is largely due to the high penetration of the most efficient information tools and their persistence. Therefore, this new situation creates accounting errors once without consequences, can be harmful. In addition, the measure of difficulty is also due to the inability to assess accurately and reliably the impact on the growth of research and development, the rate of obsolescence is rapid. Incidentally, Epingard [19] wrote that "the obsolescence rate of capital (or stock), particularly due to the new technology penetration rate, would be largely underestimated by national accounts, leading to overestimation of the value of community capital stock and an under estimation of productivity growth.

The growth slowdown phenomenon has been explained by the fact that the implementation of innovations in a new technological environment requires a process of adaptation generating direct and indirect costs. According to Greenwood and Javanovic [20], these costs come from the delay of the connections between the built-technical progress, learning and technology diffusion. In the eyes of these two authors, although firms from all sectors decide to instantly adopt new techniques and results of research and development, they do not control all the workings upon acquisition. Organizational changes accompanying changes in technology and the training of human capital takes time. This idea is confirmed by Bahk and Gort [21], which, based on an empirical study of 2,000 US companies scattered across 41 industries, and followed for 14 years, they deduce that because of the adaptation phenomenon, the gradual process may take several years.

To breathlessness phenomenon, another explanation has been advanced by Blanchard [14]. The author believes that the problem of fertility research and development, as measured by the extent of externalities and "spillovers" of innovations, persists despite a period marked by a technological expansion and investment recovery in research and development. Technological advances are very specific to defined business sectors and their growth effects are negligible. Therefore, the author argues that there was certainly more research, but there was no New Industrial Revolution to pull the productivity growth upwards. However, this argument was rejected by the proponents of the "New Economy" who believe that the upturn in Western economies is the

result of intangible investments conducted in the early 1980s, particularly in research and development and information technology and communication. Clearly, for the supporters of this theory such as Greenwood and Jovanovich [20] and Krusell [22], there has been a new industrial revolution, but the development and articulation of the workings of technological changes require time. Productivity gains can stagnate and even fall in between.

At the theoretical level, many attempts of explanation and prediction of long-term growth, coinciding with the emergence of the intangible phenomenon have been implemented since the early 80s; these attempts have resulted in the development new growth theories known as non theories of endogenous growth.

The immaterial in the theories of endogenous growth

Jean Tirole [23] found that new growth theories are based on the contributions of the industrial economy in particular regarding the relaxation of the assumption of diminishing marginal or constant returns to scale in favor of returns to scale croissants. With the phenomena of positive externalities in the process of accumulation, these theories can explain and predict long-term behavior of economic growth. In these theories, sources of growth include other intangible elements such as learning by doing, human capital, research, technological innovation and the increasing division of labor related to technical progress (organizational investment). For the pioneers of the theory of endogenous growth such as P. Romer [24] and R. Lucas [25], the heterogeneity of the investment is one element. It allows creating opportunities and improving productivity resulting from investment in the areas of material and immaterial.

However, this second sphere remained unexplored. The lack of terminology and accurate and standardized definition constitutes an obstacle to the emergence of the field. For this reason, in what follows, we focus on the definition, typology and on the evaluation of intangible investment methods in an economy increasingly based on knowledge, the world of production changes in depth. The driving forces or development engines continue to move towards the sphere of the immaterial, the intangible or intellectual, which takes as core information, knowledge and skills. According to Foray and Lundvall [26], Dibiaggio [27], these elements have become topics of primary importance in economics as to form themselves into a separate field. De Band and Gourdet [28] added "we now know that the wealth creation of our production process is essentially located at the level of informational activities - creation and dissemination of

knowledge, relational activities - so Investissements materials and intangible appear more complementary than substitutable ". These intangible investments are also related to contemporary investments as opposed to conventional investments. Lorino [29] writes: "Contemporary investment for modernization investment essential technological and organizational jumps does not have much to do with the simple substitution of a new machine more efficient than old machine. The expected gains are only partially live performance increases. It is also a better quality control, increased flexibility, reduction of inventory and assets, shortening development and manufacturing cycles, better coordination of functions, learning new techniques and new forms of organization needed to master the 'state of the art industrial ". The importance and the rise of intangible investments were also highlighted by Lev [30]. This author also mentioned the birth of a new economy in which there is a rise of intangible factors that have a role increasingly dominant in the creation of wealth. He wrote: "Today the economy is based increasingly on the exchange of ideas, information, the expertise and services. The profitability of a system is usually oriented organizational capacity by controlling physical resources. The value of tangible assets is related to other intangibles such as technological innovation that is incorporated in products, brand awareness and creativity. " Thus, the author explains the rise of intangible investments by the unique combination of two interrelated economic factors: the intensification of competition, the competition and the organization of exchanges on one side and deregulation in economic sectors on the other side.

However, although the theme of intangible occupies a more and more important in the economy, he stayed for economists and managers a new area, not yet fully exploited. The lack of clear literature and the insufficient statistical data on the subject, the fragility of methods of measurement and classification, the difficulty in determining the contours of this concept, and finally, the disagreement of business men and politicians Safety detours in this category are obstacles to its emergence. It is all of these questions we try to answer in the following paragraphs

Etymology and definition

The concept of intangible investment is difficult to define. Blurred boundary, no benchmarks, nonlinearity, non reversibility, substitutability and complementarity and many other features are the barriers to formalization of this notion. In their description of these investments, Soulie and Roux [31] point out that it is "abstract categories, inaccessible to the senses, whose understanding is still cumbersome, since it is possible that by the through

conceptualization. " Therefore, the etymology of this concept can help us to define it?

As opposed to hardware, this is opposed to the spiritual and moral. This is something palpable, tangible or physical which refers mainly to the substance of which is made concrete physical universe. This definition is not accurate to the extent that it consists of words whose boundaries are not clear. For Medus [32], the immaterial is defined by opposition to things that may be affected. In a way, this is what is foreign to matter. In 1981, the Bonnaud group tried to give a clear definition of this term, but quickly encountered several difficulties. According to Epingard [33], the researchers of this group wrote: "Our group has therefore found itself unable to give a unique and definitive definition, due to the heterogeneity of the covered area, and in the absence normative or technical references from which one could determine the criteria for this investment category, which nevertheless contributes to productivity and economic performance ". Pierrat and Martory [34] also consider that "the scientific literature and official documents do not produce clear definitions of the concept of intangible assets. Most authors prefer to make a simple list of the main components of the whole, while the official texts define the term very loosely and often with ulterior motives'

This vagueness of definition results from the absence of benchmarks, imprecise and unstable borders and the lack of a reliable database to measure the detours of these investments. Tézenas Montcel [35] writes, in this context, that "the concept of intangible investment has not yet stable borders. It contains probably all that results from spending by the company to equip software, do research and development, advertising, marketing and training. It also adds everything about the organization, storage and flow of information over all the rights resulting from scarcity of phenomena.

The OECD [36] defines intangible investment in the following terms: "intangible investment includes all long-term costs, other than the purchase of fixed assets that firms agree in order to improve their results. In addition to technology investment, it also concerns the investment in training in the organization of production in labor relations in the management structures, development of commercial and technological relations with other firms, suppliers and consumers, the investigation of markets, acquisition and operation of the software". Epingard [33] describes this definition of "negative" because it is imprecise and is only repeated juxtaposition of pieces that become embedded into each other.

Critique of immaterial Taxonomies

The typology of intangible investments proposed by the OECD [36] is not unique. In a ranking based on the identification and then the evaluation, Pierrat [37] proposes another typology. The author begins his enumeration by the most identifiable components to reach those who are not intangible but having relationships with intangible investments or the consequences of these assets. The author distinguishes six types:

Rights and quasi-rights: they are intangible elements that have legal protection and are easy to determine. In this section we find the patents, licenses, trademarks and other intellectual property rights. Regulatory fees (quotas, licenses) or contractual (licensing, franchising, franchise) are also included in this category.

Intangible assets materialisables : these assets that can be sold and protected individually. In this category we find software and databases.

Exploitable intangible assets: they are easily identifiable assets such as customer lists, files suppliers and catalogs.

4- The structures are identifiable elements: They integrate the information system of the company, the hierarchy, the style of power, etc.

The residual intangible value: the company's residue. It can be understood by the concept of goodwill. This indicator represents the ratio between the market value of the company and its book value, ie the actual value described in the balance sheet.

The developers of intangible assets: the author does not assign asset quality, but gathers them in the impact arising from the use of an intangible asset. For example, we can mention the part of the enterprise market, strategic positioning, etc.

However, this classification may be discussed from various angles. First, the classes offered by the author are not clearly distinct from each other. In the reality of companies we can find elements that can belong simultaneously to two or more classes. For example, the rights and duties which form almost the first class, and incorporates elements under legal protection may include the second class elements as they are subject to legal protection. Then, if the classification presented by the author in order of decreasing possibility of identification, it is difficult to accept the position of revealing intangible assets located in the sixth. These elements are, in our opinion, easier to identify and measure in companies with a reliable database on the development of its customers, competition and market share. Similarly, the structures

that form the fourth class also have a questionable position; indeed, in some companies we can find a fuzzy structure, style can sometimes centralized decentralized but sometimes revealing a position of significant intangible assets. In this case, the classification proposed by the author loses its meaning. For these reasons, we believe that this type can be reduced to two categories. A first integrating element that can be identified and protected legally (first and second class) and second gathering items that cannot be easily identified or legally protected. In their classification of different types of intangible investments, other authors as Duizabo and William [38] are based on two criteria. The first is related to the degree of transferability of assets and the second degree of the integrated human capital and influencing the company's control capacity. The more the specificity of the asset is human, the more risky and therefore its mobility control is difficult. However, this classification is also questionable. Consider a specific asset implies low market value and an evaluation disability is limited reasoning. An asset can be measured not by its sale value on the market, but rather by its hidden potential. The proof is that the market, some companies have a greater value than their book value. In other words, they have a potential intangible whose value is higher than its market value in the company.

Note that several obstacles arise in determining the types of intangible investments. Indeed, given the growing strategic and financial importance of expenditure on intangible activities, measurement has become a key issue of financial communication policy of the companies. In the abstract, virtual and intangible moment, the evaluation process is delicate and more obstacles are encountered. Incidentally, Bounfour [39] states that the identification and evaluation face several obstacles due firstly to the difficulty of delimitation and definition of the concept and the other to the unavailability of data or information. He writes: "the definition of the intangible contours is not yet stabilized, whereas the issues related to it are essential. To this difficulty is the issue of non availability of data whether public or private. "

Such a difficulty is confirmed by Vicklery [40] adds, "To date information on the immaterial is not measured adequately or well reported by companies. It is not transparent, reliable and comparable from one firm to another. " In a survey on the performance of large international companies, Taylor [41] points out that only 8% of them publish information on intellectual capital, although this is an area where institutional investors are more interested to information. This difficulty is also specified by O'Connor [42], which shows that the data and information published for business are fragmentary and unreliable in many cases. Based on the analysis of annual reports from 1996 of

several companies, O'Connor shows that at least half of the reports provide information such as the number of employees, while 15% gave no information. Only 6% of reports provide useful indicators against two out of three do not give any. Information on other items (productivity bonuses, labor relations, safety, frames, training ...) is sparse or nonexistent. This finding is also confirmed by Holland [43] writes, "a survey conducted in Britain to fund managers suggests that the problems of ignorance and uncertainty in the selection of actions and decisions Asset allocation is exacerbated by the increasing share of intangible and intellectual capital in the stock price. Background managers are increasingly encouraged to contact directly the business leaders to identify sources of value creation".

In summary, we can say that the data for this area, whether public or private, are not exhaustive. They are not identified or measured effectively. According Bounfour [39], these data can be classified into three categories:

- Data from ad-hoc surveys, given the supplied or estimated by public sources such as the OECD and national statistical offices
- Data available for some components of the intangible as they are
- Data provided by public or private sources or outsourced R / D, information services, marketing and communication services, organizational change and other services.

To resolve this problem of non-availability of data and have a reliable analysis, the use of these sources of information simultaneously, the choice of the analytical method, time and collection techniques are of great utility. The study by Mangenatin and Lhuillery [44] on the field of IT investments endorses this approach. Both authors take the example of information technology and computer for which the unit of analysis (economy as a whole, company, sector or branch), the performances (productivity, industrial efficiency, effectiveness operating costs, market share ...), the input measures (capital stocks in information technology, computer use, number of CPUs ...), the type of analysis (econometrics, cross-sectional correlation ...) and periods come to different conclusions. So, to refine the analysis and minimize the problem of recognition, collection and measurement of data, these authors made three main recommendations which should answer any approach. These are:

- Improving data quality for intangible investments
- The construction of indicators based on knowledge and scientific, technological and organizational, and study of the links between knowledge, skills and efficiency in the areas of advanced technologies,

- The construction of indicators on the organizational skills of firms in low and medium technology sectors.

Valuation method for immaterial investments

To cope with globalization and the explosion of technological innovations, Boisselier [45] believes that companies must constantly assess intangible investments and put them on the same footing as physical investment. But the obstacle assessment remains a major handicap hampering the emergence of these investments [7]. In fact, why do not reduce the nature of these investments difficult to define, fuzzy border and risky detours, but relate to the value attributed to these investments is changing and depends on the position of the actor in the organization. In this context, Martory B [46] distinguishes three categories of actors motivated by their own interests: creditors, employees and investors. In the evaluation process, the creditors seek the price of the security. However, to the extent that employees are both creators and beneficiaries of the accumulation of intangible, they seek evaluation by exposing the same time their potential and make a profit. Finally, for investors, the valuation of intangible investment depends mainly on the profit to be made [46].

Note that the evaluation is a difficult task because it is not just a means of measuring equipment or intangible existing potential, but also of accounting and financial reporting issue. It is also a way to break free of debt and liquidity constraints [47].

In the literature we often speak of two valuation of intangible investment methods. Methods to apply traditional evaluations both hardware investments as intangible investments. - The specific assessment methods that are only interested in intangible investments.

Conventional methods of assessment adapted to intangible

Typically, the evaluation methods used are based on historical costs. In these methods, the evaluation of a value generator intangible element can be accomplished on the basis of past information (historical cost method), or on the basis of the information gathered in this (by the replacement cost method). In addition to these techniques, other methods exist and are based on information from the expectations of future revenues associated with the object to evaluate.

The valuation costs

In this method we distinguish firstly the assessment by the historical cost method and also the evaluation by the method of cost recovery:

1. The assessment by the historical cost method: it consists in evaluating intangible assets by the sum of costs that were actually incurred in the past to be. The limitation of this method is that the amount of expenses incurred to build the asset is not an index representative of the actual value of the intangible asset. For Pierrat and Martory [34], this method is not reliable because the nature of the intangible assets different from physical assets. However, Pierrat justifies its use "in the case of assets (in particular marks) recently created for which there are no other references that accumulated costs"

2. The assessment by the method of cost recovery: it consists in valuing intangible assets by the costs that should be a commitment today to reproduce identically. This method also has limitations in that certain intangible investments are specific and difficult to reproduce identically. Take the example of a brand; its value will not be tied to the cost of reconstruction but rather the quality of the product, the advertising action, confidence given by the clients, etc. Also, the value of a training program depends on human capital and organizational ability to cover intellectual capital in to profit.

The market valuation

This is to evaluate intangible assets compared with the prices of recent transactions for similar assets. This method can be interesting if the market works efficiently, statistical data on prices are reliable and the property in question is really similar to the assets exchanged. Unfortunately, neither of these features is verified on the market. Incidentally, Desreumaux and Wishbone [48] point out that "the market can give value objectively, by aggregating subjectivities, thereby allowing to overcome ethical and political considerations that have no place to be facing the natural play of adjustments in supply and demand and thus individual preferences."

The revenue per valuation method

Its principle is to identify and quantify the flow of income attributable specifically to a given intangible asset and to capitalize these flows to derive the value of the asset. There are two methods of evaluation by income: the first is based on future earnings. It consists of calculating the value of the intangible asset by applying a multiple to income indicator present or past, usually an accounting profit. The second is based on past income and is to estimate the net cash flows attributable to the intangible asset and to calculate the present value using a discount rate. Optionally, the difficulty that arises is how to calculate the return on investment of intellectual capital? Although this return is real, its clear identification remains challenging.

Kleinknecht and Reijnen [49] state that if traditionally determining the profitability of an enterprise value raises a number of issues such as the choice of the income stream to capitalize, the time horizon and discount rate (the risk, etc.), these problems become more complex when dealing with intangibles.

1. The choice of the income stream to capitalize: generally the income generated by the intangible asset is determined by the nature of intangible investment to evaluate. Indeed, certain investments such as patents, for example, can generate income directly, while others such as training or organizational investment generate indirect way of income. Pierrat offers three types of methods for the selection of the income to be capitalized.

- Methods discount future cash flows: These methods consider that the company is the discounted sum of substance flows from shareholders and financial creditors [50]. However, in the evaluation of the company, it seems that these methods are increasingly challenged, because in practice it is difficult to separate from income generated by intangible investment from other sources of income in the company

- Methods of multiple income indicator: This method is based on an accounting performance indicator, often accounting profit to determine the share reasonably allocable to the asset. However, the determination of this indicator is complicated by the need to take account of the risk of the company's business rates, industry characteristics, competitive positioning and forecasts on growth. Some work is inspired by the appearance of residual goodwill (GW) to provide, through a capitalization of residual profit attributable to intangible (after subtracting the share of the profit of tangible and financial assets), a value of intangible capital or knowledge [51].

- Methods of assessment by actual or potential royalties (royalties methods): these methods are limited to intangible investments that lead to periodic payments (royalties) whose duration depends primarily on the legal protection. The capitalization of the royalties paid by a third party constitutes the value of the intangible asset. It should be noted that maintenance costs are subtracted from this income. The duration of these payments depends primarily on the length of legal protection.

2. The choice of the time horizon: in this choice, the study of the past that can identify the mechanisms that generate value is the starting point for estimating future results. However, to the extent that past events are not loyal to the present, this method is fairly criticized. Apart from the specific characteristics

of the immaterial, the risk may come from the shift in the balance between the company and its environment.

3. The choice of discount rate: Brilman and Marie C [52] define the discount rate as "encrypted form to indicate the preferred investor pays a sum received today rather than in the future. This rate will depend on the inflation that can crop a future recipe, the cost of money it uses, risk attached to future revenue, and the general atmosphere, that is to say rates usually used for the time being. «This rate is supposed to reflect the depreciation of the future and the risk of the investment project. However, in its application, this rate is generally static and constant. For this reason, Glais [53] estimates that applying a constant discount rate to a stream of expected future income implies that one does not give the same degree of risk from these revenues. He added that if these are also risky, they should be discounted using different rates to the extent that they are obtained at different point of time.

Specific valuation methods for intangible investment

Following an increasing dematerialization of the productive system, human capital is increasingly seen as a key growth asset. Its importance in the business cannot be judged in the light of its assessment. Indeed, based on strategic tools such as social auditing and accounting of human resources, specific assessment methods try to meet this objective.

The social report; social dashboard

Usually the social report includes some information on the share capital of the company. It is considered an internal reporting system whose purpose is to manage and control the human potential. This assessment contains several categories of indicators such as employment indicators, remuneration and expenses, hygiene and safety conditions, other working conditions, training, labor relations etc. However, according to Martory [54], the establishment of a social report is the first implementation phase of the Social Dashboard (TBS). The second step is to add to this primary information for other indications such as forward-looking predictions about the evolution of the wage bill, inflation rate, etc. The third step is the realization of informative crosses between different social and economic information of the company to make 'the social information system more integrated and forward-looking. A social scoreboard allows steering of staff and structural changes, mastering skills, compensation management and labor costs, the extent and development of collective intelligence, monitoring of social dysfunction and appreciation climate, and finally measuring the socio-economic performance [54].

After presenting the growing rise of the immaterial in the economy and obstacles to its

definition and evaluation, in this part we will try to assess the importance of intangibles in the textile apparel Tunisia

Experimental Section/Material and Method

Based on questionnaires (50) and interviews (30) addressed to human resources managers and several employees, we tried to extract the maximum information to then be treated through the method of multiple component analysis. A model in which these elements should be recognized as assets in its own right is presented; this model is based on the two definitions of assets made by the Institutional Committee Accounting Standards (IASC) and the French accounting system.

RESULTS AND DISCUSSION

The importance of intangible investments in textile clothing enterprises and barriers to their emergence

66% of respondents consider that intangible investments occupy a place as important as physical investment. Against 28% believe that these investments are less important than physical investment and finally 6% are unable to identify and assess the place. Through these answers, we can identify two categories of companies. A first category (66%) that focuses on intangible investments and grants them a place as important as physical investment and second (34%) which grants them unimportant. According to officials of these companies, three contingency factors influence investment in intangible. 90% of respondents connect to the intensification of competition; the 32% refers to the deregulation of economic sectors and finally join the 68% of globalization.

Note that these proportions are related to the total sample. To get a better idea of what motivated each of the two categories identified earlier to invest in this intangible area, we made a cross-sorting question 1 and question 2. Indeed, the first graph shows that in the first category, which includes 66% of the total sample, 58% think that the reason for this investment is related to the intensification of competition, 44% related to globalization and the 20% to the deregulation of economic sectors. However, in the second graph of the 28% of companies where the place of intangible investments is not as important as physical investment, 26% of respondents consider that increased competition is the reason. In contrast, 10% and 18% respectively think the deregulation of competition and globalization. Finally, for the rest of the companies (6% of our sample), even if the interviewees have no idea about the place of these investments, they think the increased competition and globalization are the reasons that incentives to invest in this area. What then prevents the second category to invest in intangible?

The Gerzi study in 1997 (two years after the signing of the association agreements with the EU and eight years before the fateful deadline of 1 January 2005) and updated in 2004, answers this question and discusses the static state textile apparel sector as a whole. The study states that "the Tunisian model has not changed since 1997 and Tunisia remained a predominantly country confection." This is due to our sense of the sources mentioned in the first chapter and that can be summarized by poor articulation between the educational system and the production system, fluctuations either in programs or means of financing the education system and finally, the limited engagement of different actors in the production of knowledge. In addition to these constraints, obstacles definition and evaluations are handicaps to the emergence of these intangible investments. To identify the reality of the textile and clothing sector companies, we try as a first step to ask them about their ability to definition of intangible investment or, failing that, on all of its components. In a second step we try to present the types and content of each investment. Finally, in a third step, we present the registration practices in assessment and evaluation methods.

Ability to define the intangible and components

One of the major handicaps hampering investment in intangible is the obstacle definition. To put this problem in the reality of the textile and clothing companies, the open question; "Can you briefly define the intangible investments?" was asked. In deciding on the "reliability" of the definition presented by the interviewee, our choice of text recording unit was decisive. We cut the text finite element based on keywords and considered reliable 'definition where the interviewee mentioned at least three elements of intangible investments (training, R & D organization, marketing, and IT) and also the specifying a theme of improving human capital and organization. In this way, we found that 66% of our sample is unable to define these investments. Only 34 % where able to describe but in general.

We note that two thirds of this second group had more definition at least wave connected with a theme of improving human capital and organization and only the remaining third was able to provide us with a precise definition. However, whether the heads of companies that consider the role of intangible investments is important (66% of our sample) are able to define the field, we made a cross tabulation between the first and the third question. The Findings he also show that only one-third (22%) was able to define them. However, answering the place of intangible investments is substantial in relation to material investments and knows the definition does not imply that these companies really invest in these. It is therefore

necessary to specify the measures and know the type, content, registration practices in the balance sheet and the methods for evaluating these investments in the reality of these businesses.

Type and content of intangible investments

Analysis of the questionnaires shows that 96% of our sample invest in training, 60% in computer science, 46% in organization, 42% in R & D and 32% in marketing. For terms of R & D, the analysis of our interviews with managers of these companies proves that it is not investment but rather expenditure under experimental research. These expenses do not follow a continuous rate. They are one-time or periodic. Generally, they intervene to solve a technical problem emerged following the introduction of a new machine or a new technology. This is confirmed from the analysis of the questionnaire sent to employees. Indeed, seven of the twenty surveyed confirm that in their businesses, these relate only to technical aspects arising out of the introduction of new machines. The experimental work whose objective is to improve the organization and processes or the development of a new product are virtually absent. Interviews with officials tell us that the lack of guidance and support mechanisms, lack of skills and prohibitive costs are barriers to their emergence.

In investment education, although 96% of our sample considered to invest in this area, the facts show that it is spending in general education and specific times. These come with the acquisition of a new technology or a new organizational mode.

At the organizational level, these companies are dominated by a "mechanical model" characterized by specialization, centralization of power, a low level of skills and autonomy and limited responsibility for the execution of tasks. Even the leadership in these companies is mechanical; it brings together a large staff and has a hierarchical structure of control, authority and highly structured communication. In some of these companies, the management of human resources is absent and its functions are grouped in the hands of the chief of staff. It is responsible for assigning work, coordinate efforts, control the quantity and quality of work, evaluate performance and make the connection between his unit and the rest of the organization. Moreover, the majority of respondents answered that it is the general direction that is at the origin of decisions. Only a few business leaders report that senior management share the action with the management of human resources and technical direction, which is not consistent with our theoretical teachings. Thus, at this level of analysis, it is difficult to speak of organizational investment but rather common organizational actions.

In terms of marketing investments, we stated in the first chapter that it is the long-term expenses that increase the business benefits of the company. These usually affect the four policies, namely product policy, distribution policy, advertising policy and sales policy. Gold, field observation shows that few companies focus their marketing investments to these policies. To the extent that the majority of them are subcontractors whose principals are abroad, the effort of marketing or search for new markets is limited. The notion of export itself can be misleading because the companies involved in this production do not export products but sell an "industrial service" which is measured in cost per minute. Under these conditions, the search for new markets is not to explore other opportunities but to convince more principals. Finally, the IT level, managers of these companies argue that there is neither investments that relate to the improvement of computer programs to meet specific and specific need or investments that aim to improve software contains a number of ready-knowledge. These are generally recurring expenses aimed at the acquisition of new computer equipment.

Balance sheet and valuation of intangible investments

Sign intangible investment in the company's balance sheet enables the "insiders" to grasp the existing potential by which strategies and future policy will be defined and "outsiders" to get an idea of the current value of the firm. Indeed, the analysis of the questionnaires shows that only 6% of 42% of companies having made an investment in R & D, included in their balance sheets. Of the 96% of companies with an investment in training, only 36% have registered their balance sheets. At the organizational investment, only 8% of the 46% of companies that have invested in this area have included in their balance sheets. On marketing investment, only 6% of the 32% who have invested in this action, included in their balance sheets. Finally, only 10% of 60% of companies that have made an investment in computer science, in drawing up their balance sheets.

These intangible investments are not recognized in the balance sheet of these companies for several reasons. 2% of managers think that by "precautionary principle", financial accounting does not recognize them as assets. 38% of managers by against say that because of their recognition in the parent companies, these investments are not included in their balance sheets. Finally, 60% of managers feel they are burdens and therefore should not be included in the balance sheet. However, this representation of things should move toward a business model that integrates a financial approach. A model in which these elements should be recognized as assets in its own right; Based

on the two definitions of assets made by the Institutional Committee Accounting Standards (IASC) and the French accounting system, presented in the first chapter, the accounting entry must be changed. Indeed, during the year N at the time of intangible investment (X), the company must record this in the assets as intangible investment. At the same time, it must initiate amortization ($Y = X / 2$) which is spread over the short term (2 years). Thus, the total amount spent during this year would be equal to the sum of the investment (X) and half of amortization ($X / 2$), ie ($3X / 2$). During the year $N + 1$, the company has yet to invest in intangible. The second investment of this funding sources come from the amortization of the year N ($X / 2$) and other funds (Z), the amount must be greater than ($X / 2$). In this way, its value would be greater than that incurred during the year and equal to N ($X / 2 + Z$).

During that same year $N + 1$, the company also engages a second installment of the amount invested (Z). Total expenditures will therefore be equal to ($Z + X / 2 + Z / 2$). Again, the depreciated amount ($X / 2 + Z / 2$) which includes the amortization of the year N and the amortization of the year $N + 1$ would be injected to finance part of the investment of the year $N + 2$. Thus, the total amount of these investments would be permanently growing. Therefore, it would be possible for the company to monitor these investments, to have a look on the existing potential intangible and finally measure the impact of this field on its growth. Especially if this procedure is generalized, asymmetric information between employees and contractors reduced. The first would be better informed in case of mobility on the potential in the target companies and the latter would be safer to recruit skilled human capital from other companies. Thus, a resource or existing market potential is created. It will allow both a valuation of intangible investment and a more reliable assessment of these elements.

During our interviews, we tried to test this method. The majority of respondents are not willing to accept the idea of recognition. They think these are expenses which generated detours are neither tangible nor guaranteed. Dedicate a double sum for investment and depreciation according to them requires significant working capital, which weighs on the financial health of the company. Finally, the officials added that due to the

strong external mobility in this sector, the risk of loss of production is huge detours. Compared to the obstacle assessment, Boisselier (1993) [45] believes that to overcome it, companies must constantly estimate intangible investments and put them as and on the same footing as physical investment, which requires ongoing evaluation of these. Pirrat and Martory (1996) [34] distinguish three evaluation methods, namely; the method by which the cost is divided itself by the historical cost method and method the cost of reconstituting the method by the market and the method by revenue. The latter includes the method by past earnings and future earnings method.

Analysis of the questionnaires shows that only 34% of managers practice assessment by costs. Generally, this is an assessment by the historical cost takes into account only the amount of the costs incurred in the past. However, this method is not reliable evaluation manner in that it does not provide information on the actual value of these items, but informs us about the costs incurred in the past to restore the asset. In contrast, 4% of managers practice a market valuation. This method is useful when the market is transparent and operates efficiently, which is not the case in this sector. Finally, 2% of responsible practice assessment by past income.

To determine the percentage of companies that have, at the same time investing in intangible replied, making an entry in the balance sheet and an initial evaluation, a cross tabulation between these three questions is performed. 42% of companies that responded have made an investment in R & D, 6% were in the balance sheet and only 2% have practiced evaluation. 96% of companies that responded have invested in training, 36% have an entry in their balance sheets and 20% were evaluated. At the organizational level, 8% of the 46% who said they made an investment in this area, have included in their balance sheet and practiced evaluation. Level marketing among the 32% who responded has invested in these items, only 18% were entered in the accounts and practiced evaluation. Finally, the IT level, among the 60% of companies that responded has invested in this area, only 30% have registered their investment in the balance sheet and 6% were evaluated.

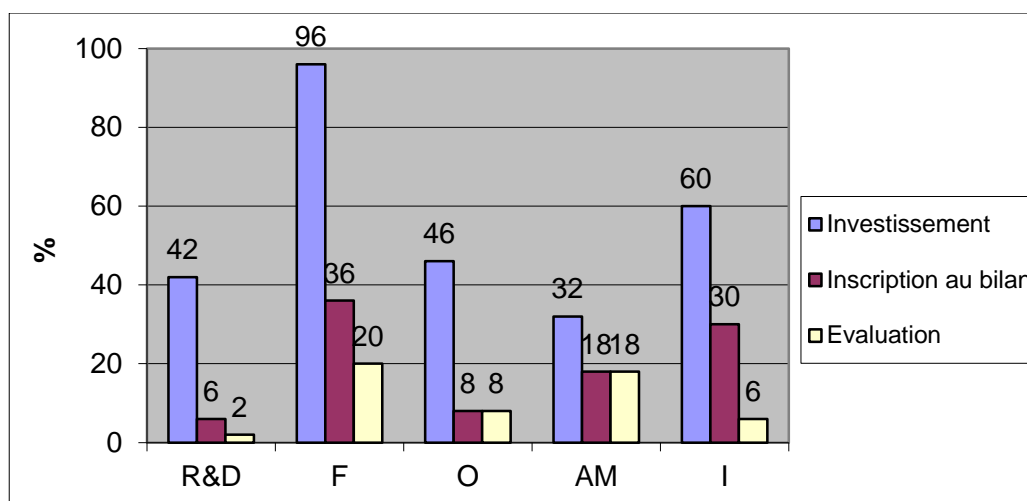


Fig- 1: Companies that invest in intangible fall in the balance sheet and practice evaluation
Source: Author.

CONCLUSION AND ACKNOWLEDGEMENTS

From the above analysis, we can conclude that several officials of companies under-estimate the impact of the dismantling of the Multi Fibre Arrangement in the textile and clothing sector environment that is becoming increasingly uncertain. In these companies, the role of intangible investment is still small compared with hardware investments.

What are the origins of this under-investment in intangible?

To answer these interrogations, we believe that the origins are multiple: the first are connected to an inefficient performance of the education system especially at the secondary and higher level. This inefficiency is twofold. It is due to high rates of dropout and repetition on the one hand and fiscal policy not included in logic of sustainable investment on the rise, on the other. The second source is due to limited participation on the part of entrepreneurs to finance these investments. For example, if we observe domestic expenditure on research and development in relation to gross domestic product (GERD / GDP) in Tunisia, we notice that it does not have dépassé 1%. This rate is low compared to other developed countries. In 2001, this indicator is of the order of 2.23% for France, 2.82% for the United State, 3.09% for Japan, 3.4% for Finland and 4.27% for Sweden. However, given that this indicator shows the commitment of different actors in the production of knowledge, we believe that the cause of his weakness is due to the limited dynamism of investment in research and development in companies. While the expenditure of these companies in research and development increased from 0.05% to 0.13% of GDP between 2001 and 2004, it remains limited compared with that of other developed countries. In 2001, if the expenditure did not exceed 0.05% in

Tunisia, it was 2.84% in Sweden, 2.47% in Finland and 1.76% in Germany. The third source is related to our sense of logic that promotes an employer in some cases a strategy a strategy that favors unskilled labor, which is a pressure on salaries. Note that many business leaders have expressed the wish to recruit employees with higher education or vocational training. Nevertheless, they remain reluctant to implement a real policy based primarily on the level of education. Their reluctance can be explained in several ways:

- Even if the workers are educated, the content of the latter is questioned. Although a majority of employees have completed their primary education, this training is insufficient, said a company official. This is due to the mismatch between school learning system and the labor market and the fact that once employees have left school, their knowledge is quickly forgotten.
- In some cases, this is the business strategy that wants to rely on a workforce which it controls learning and qualifications. For some leaders, apart from its mission to bridge the gaps practices, training that require a learning period can serve as a means of training of employees to a new internal market. According to an official "during this period, employees learn to conform to the new rules of the company, which puts them in a debt situation to her". Thus, this period of training and learning may appear as a way to benefit from a low-wage working time and therefore delay the time to assign employees the statutory minimum wage. It should be noted also that through this policy, managers are part of a logic of experience rather than diplomas, which positions them in an advantageous position in the selection of workers, the determination of the experience and wage setting.

• Another reason for this policy is that the skills associated with diplomas impose a collective bargaining around wage for each type of degree. However, the criteria of professional experience, ability or inability of the employee to learn quickly, settling in the best case individually negotiated. In this way, the entrepreneur and his control officers have the authority to evaluate the experience of the workers and affect wages

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