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The contribution of receivables management in the optimization of working capital requirements

Case study : The french pharmaceutical company SANOFI

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Abstract:

This paper focuses on one of the components of the working capital requirements, the receivables item, an essential asset in the optimization of working capital requirements. Our research objective is to analyze the efficiency of the receivables management at the french pharmaceutical company Sanofi, as well as its role in optimizing the working capital requirement. Fort that, we used the software SPSS to analyse the correlation of the working capital requirements of Sanofi with its components.

Key words: Receivables, Optimization, Receivables management, Working capital requirements.

JEL Classification Codes: G32, H63.

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Introduction :

Companies, for their sustainability and development, face a number of financing needs, in particular financing needs related to the operating cycle and the investment cycle.

Indeed, the sustainability of companies depends not only on the ability of managers to adapt to a constantly changing economic environment, and their ability to adapt to the requirements of new management techniques.

Similarly, good management of the company requires the mobilization of financial resources adapted to the needs of its activities.

To meet these needs, which absorb capital and weigh on cash, companies have at their disposal resources (equity, medium and long-term debt and resources related to the operating cycle).

It is essential for managers to have management indicators that provide them with information on the company's financial situation and that enable them to take the right decisions at the right time. Financial analysis, which seeks out and interprets data and the significant magnitudes of the company's cycles through its various aspects (activities, performance, policy and financial structure), then constitutes the appropriate management tool for monitoring the company

As part of its current activity, a company performs repetitive operations whose renewal defines its operating cycle.

For the operation of the operating cycle, any company is naturally required to incur expenses that will be recovered only when the sales or services are received.

Depending on the payment habits related to the sector of activity, the company may experience more or less significant discrepancies between its disbursements and its receipts.There is therefore beforehand a mass of money to mobilize necessary for the operation of the company in the same way that it is necessary to mobilize to pay the premises; machines; equipment; etc. This mass of money is called the working capital requirement.Operating needs therefore fall under the concept of working capital requirements. In the event of insufficient working capital, good management of the components of the WCR (stocks, customers, suppliers) can optimize the WCR and thus improve the cash flow of the company.

To illustrate our study, we chose the French pharmaceutical company SANOFI as a case study .Besides that, the pharmaceutical industry is one of the most profitable and economically important industries, Sanofi is one of the world leaders in the

pharmaceutical industry. In Algeria, the French company ranks as the leading laboratory in the category of medication sales.

Research problem:

Because of the great place that SANOFI occupies in the pharmaceutical sector at national and international level. Our study will therefore have SANOFI as a practical case with the following problem: "Does receivables management efficiently guarantee the optimization of working capital requirements? »

Sub-questions:

Beyond this main issue, a set of questions arise:

- How to rationalize accounts receivable and limit WCR?
- What are the consequences of non-mastery of WCR for SANOFI?
- What are the credit management tools and the means necessary for its application?
- Is there a direct impact between good receivables management and the optimization of working capital requirements?
- What is the contribution of credit management to the working capital requirement?

Hypotheses :

In light of the questions asked and relating to the theme of our study, we have opted for the following hypotheses:

- Customer credit management is considered an essential tool in optimizing working capital requirements. In this sense, a company applying this concept will have a better chance of surviving in a highly competitive environment.
- Improving and optimizing the application of credit management through the appropriate choice of tools and management methods, contributes to the reduction of the need for working capital.

Research methodology :

In order to validate our hypotheses, we used a methodological approach adapted to the very nature of our research. For this we opted for a descriptive and analytical method, using the following tools: documentary research which will be very useful to us in the definition of the concepts of our subject and in the analysis of the case study. All scientific work requires at least a minimum of knowledge on the subject to be treated. This technique will allow us to exploit the various documents of our predecessors in order to facilitate our research.

We will use the consultation of the internal documents of the company, in particular the financial statements of this one which will be of great use to us in the confirmation

or the invalidation of our research hypotheses. After that we used the software SPSS to analyse the correlation of the working capital requirements of Sanofi with its components.

Business credit theories:

The first work on the issue is of a macroeconomic nature and meets the then topical concerns of quantitative control of bank loans. The business-to-business credit is described as a mechanism for amortizing liquidity shocks, through offsetting effects between bank and commercial credit, for firms exposed to bank credit rationing. It is then presumed that these are the most fragile and constrained firms - that is, the smallest and opaque ones - who are expected to find greater commercial financing from large companies with wider access to external sources of finance (Bardes, B. M. Nivelais ,2007), Parallel to these general theoretical developments, other scientific contributions devoted to the study of the financial behavior of the company question the reasons why firms engage in financing activities through the credit between business. In contrast to the former, these contributions do not focus on examining the main consequences, but on an in-depth exercise to identify the causes of the existence of the business-to-business credit. In this sense, they lay the foundations of a theory of the supply of business-to-business financing. These reflections are based on the assumption that sellers have particular motives in financing their customers' purchases. Materialized by the amount of the receivables item, the sales financing offer of the company is theoretically justified by marketing considerations (verification of purchases, increase of sales and price discrimination) but also by considerations related to the information benefit of the provider. This comparative advantage is reflected in particular by a reduction in the level of information asymmetries - often disabling for SMEs - and allows the achievement of strategic and financial objectives (contract submission, specific investments and economies of scale) (Le Davis, N. Lamoreaux & J. Rosenthal, 2006).

The reason for verification of purchases justifies the payment period as a guarantee provided by the seller to the buyer to ensure, before payment, the good quality and the right quantity of goods delivered or services provided (Smith, 1987). Since the asymmetry of information can first relate to the products sold, before the financial quality of the counterparty, the supplier, in accepting the time difference, assures his client of his good faith and the confidence he has in his production sold. Following this logic, SMEs are often forced to finance a significant portion of their sales through

business-to-business credit because of a lack of reputation and greater opacity (Long, Malitz and Ravid, 1993). To limit this major disadvantage, smaller firms may, however, use cash discount as a means of reducing the audit period (Lee and Stowe, 1993).

The business-to-business credit is a determinant of the actual price of the products because of the financial advantage or cost it generates according to its configuration (with or without a discount). As such, it is a full component of the supplier's pricing policy (Schwartz, 1974). It thus serves to differentiate competing offers in the same way that payment facilities partly determine the choice of any informed consumer. From this point of view, business-to-business credit is a possible and often necessary tool for the SME, to strengthen the competitive position of the company in its market. In order to promote sales or stabilize demand, an adequate specification of the offer of B2B credit by the seller is then possible since, unlike the financial intermediary, the supplier is not obliged to making a profit on the financial part of his business transaction with the buyer. Thus, Nadiri (1969) shows that the terms of the credit between business can be particularly adjusted to conquer or preserve market shares, offset the costs of switching suppliers or facilitate a rapid flow of inventory and therefore an immediate transfer of storage costs from the supplier to its customers.

In addition, the supply of business-to-business credit also incorporates a pattern of price discrimination. The main assumption underlying the reasoning is decisive in the understanding and appreciation of this reason. This assumption assumes that the main terms of credit granted to customers (duration, amount, rate and discount period, net period) are standardized and essentially meet more or less formal sectoral standards. As a result, they are not very sensitive to the actual financial situation of each client. From this point of view, the terms of the business-to-business credit have the notable effect of reducing the effective price of products for the most risky customers by partially eliminating the risk premium associated with their status as poorer borrowers. Small and medium-sized enterprises are thus the first concerned by this reason. The latter can indeed benefit from financing conditions identical to those of the best-known firms and therefore obtain cheap supplies, at least theoretically. For its part, the supplier is encouraged to offer similar payment terms to all its customers since it thus records a higher overall demand; the seller's profit margin and pre-established sectoral credit conditions are the main determinants of the influence of this price discrimination pattern.

In a context marked by the incompleteness of loan agreements signed by companies with financial intermediaries, the supply of business-to-business credit is also justified by a higher incentive capacity of the supplier to recover the amount of funds lent (Mian and Smith, 1992; Jain 2001, Cunat 2007). This advantage is mainly due to the nature of the commercial relationship of dependence which underlies the commercial credit between the seller and the buyer and which would be broken for lack of non-compliance with the main financial commitments of the latter. In the event of repeated payment delays or outstanding payments, the likelihood of loss to the buyer of the benefits of its long-term business relationship is a major determinant of this superior ability to collect supplier's receivables vis-à-vis vis-à-vis the financial intermediary. These advantages are materialized by the assurance of a certain liquidity of the customer but also by the possibility of renegotiations without financial penalties or commercial and financial arrangements at lower costs. The commercial credit offer thus enables the supplier to guard against a non-complacent attitude of the buyer with regard to its main contractual obligations. The significance of this argument, however, varies significantly depending on the degree of competition in the market on which the contractors operate and the supplier's position in vertical competition. It is also sensitive to the commercial balance of power that binds both parties (Dietsch, 1998). At the expense of the smaller ones, these relationships are often expressed through the respective size of the companies.

In anticipation of future sales, the above-mentioned sales promotion rationale emphasized the importance of the supplier's investment in the form of the business-to-business credit supply function. These gains are mainly related to the inertia of the most loyal customers and the exploitation of the long-term commercial relationship initiated by the seller. As a result, the company must make the investment profitable by maintaining its commercial relations with its best customers for a sufficient period of time to achieve strategic objectives such as exceeding a given level of sales or profits. This is particularly made possible by a particular use of the terms of the business-to-business credit (Smith, 1987). Thus, it is common for the supplier to extend the payment terms of a client experiencing temporary difficulties (Summers and Wilson, 2002) or the discount period of a client wishing to make a competitive purchase (Ng, Smith and Smith, 1999). These particular actions are then intangible and specific investments of the seller in a long-term commercial relationship.

In the context of the economies of scale reason, two main arguments justify the supplier's offer of business-to-business credit. They are essentially related to the achievement of financial objectives on the part of the latter. First, it appears that the size of the firm is a positive influence factor on the proposed amount of sales financing (Ng, Smith and Smith, 1999). Due to the importance of fixed costs in the management of the company's receivables, a large customer base implies a lower average management cost per customer and thus favors the development of the credit supply through the savings of the customer. scale achieved. The reasoning is similar for the management costs engendered by the practice of commercial discounting. Implicitly, this first argument assumes the existence of a positive relationship, often verified, between the size of the company and the number of its customers. The second argument interprets the supplier's offer of inter-company credit as the result of a financial arbitrage made by the supplier. For example, Schwartz (1974) demonstrates that cash-surplus firms can derive superior commercial and financial benefits by providing additional credit to their clients rather than simply placing such surpluses in the short term. For their part, Brick and Fung (1984) support their reasoning on tax considerations by assuming that firms facing high tax rates are likely to lock in a larger portion of their cash with clients whose taxation are lower.

In summary, six main reasons for offering business-to-business credit can be advanced. Recognizing simultaneously commercial, strategic and financial considerations, they refer in particular to a particular advantage that the supplier is able to exploit through the extension of customer credits and partly justify the weight of trade receivables within the balance sheet of firms of all sizes. In the rest of the article, we will try to answer the following problem « Does the management of the client item efficiently guarantee the optimization of working capital requirements? ? " using data collected on Sanofi.

Presentation of the contribution of the management of the receivables management in the optimization of the working capital requirement at SANOFI:

The credibility and solvency of a primarily commercial enterprise is measured by its ability to have the necessary and sufficient funds to finance its operating cycle. And to achieve this goal, you need a good organization for the management of sales credits that turn out to be a complex exercise.

While customer credit appears to be an undeniable tool for increasing revenue and optimizing results, it is a risky investment for the company and the decisive factor in raising the WCR. .

However, any increase in the WCR significantly dries up corporate cash flow.

Unpaid receivables place the company at risk of non-recovery and have an impact on net income. This is why we can say that the credit is a double-edged sword that the company must seek to control and manage if it wants to optimize its BFR. (BRUISSART, 1999)

Analysis of the correlation of the need for working capital with its components:

In order to be able to optimize the BFR it is necessary to know the degrees of correlation of the latter with each of its components in order to decide on which variable it would be necessary to devote the most time and energy.

Indeed, the correlation is a quantification of the relationship between continuous variables. Upstream of any correlation measurement using appropriate coefficients, it is necessary to define the form of a possible relationship between two characters. The form of the relation of the BFR with its components is linear that is why the calculation of the correlation coefficient Pearson is appropriate. It is based on the calculation the covariance between two continuous variables.

The correlation will be used to test our research hypothesis, establish the existence of a link between the WCR and its components, and measure the strength or intensity of this link. The equation of the Pearson correlation coefficient is as such :

$$Correl(X,Y) = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}}$$

Where x and y are the averages of the variables whose correlation is to be calculated.

Table 01 : Calculation of the working capital requirement of SANOFI.

Year	Receivables	Inventories	Account payables	WCR
2012	8,006,205 135.11	10 052 379 454.09	2,335,201,595.62	15,723,382,993.58
2013	10,637,739 395.59	12,309,249 163.75	4,219,105,057.23	18,727,883,502.11
2014	12,253,636,921.84	12,070,656 204,80	4,806,093,571.45	19,518,199,555.19
2015	12,769,211 445.03	10,278,735,423.73	980 091 685.39	22,067,855 183.37
2016	14,879,062,717.07	11,333,480 411.23	1,840,433 881.29	24,372 109,247.01
2017	16,728,317,612.04	11,038,559 948.72	2,651,051,491.31	25 115 826 069.45

Source : Developed by ourselves on the basis of the financial statements of the company.

Table 01 represents the result of calculating the working capital requirement for our research. After extracting the amount of the receivables, inventories, and suppliers from SANOFI's six years' balance sheets (from the year 2012 to 2017) , obtained from this backbone, we were able to access the data we needed to calculate the correlation quoted. above.

Table 02 : Correlation of working capital requirements with receivables, inventories, and suppliers.

Variables	r =	The value of p	p <0.05 = *
WCR Receivables	0.97733726	0.01	*
WCR Stocks	+ 0.6302221	0.04	*
WCR Suppliers	-0.36587301	0.0499	*

Source : Developed by ourselves based on the financial statements of the company.

The table above represents the results of our calculations of the correlation of working capital requirements with trade receivables, inventories, and supplier for the last six years using IBM SPSS statistics software.

The first result Correlation Test or Pearson Correlation (r) measure the degree of linear connection between the BFR and its components by knowing 0 equals no link, while 1 is a perfect link between WCR, receivables, inventories, and suppliers.

The sign + signifies that the relation between a variable X and Y is proportional; when X increases (or decreases), Y increases (or decreases).

The sign - signifies that the relation between the variable X and Y is inversely proportional; when X increases (or decreases), Y decreases (or increases).

By convention, we say that the relation between X and Y is:

- perfect if r = 1
- very strong if r> 0.8.
- strong if r is between 0.5 and 0.8.
- of medium intensity if r is between 0.2 and 0.5.

- low if r is between 0 and 0.2.
- No if r = 0

The analysis of the data in this research shows that the r WCR and the receivables is 0.97733726, which indicates a relationship that is not only proportional, but also very strong between the WCR and the receivables amounts.

The r WCR and inventories is 0.6302221, which indicates a relationship that is not only proportional, but also very strong between WCR and inventory amounts, but which is nevertheless less significant than that with trade receivables.

The r BFR and suppliers is -0.36587301, which indicates a relation which is inversely proportional, but also of an average intensity between the amounts of BFR and those of the suppliers but which remains nevertheless much less important than that with receivables.

The value of p represents the value of the slope test or Sig (bilateral). This second result is obtained by means of a hypothesis test.

The test of significance of the slope or the r allows to decide if this link is significant, in other words if the correlation observed between the WCR and its components does exist.

In the logic of a hypothesis test, there is always 2 statistical assumptions.

The first - the null hypothesis or H 0- is, as its name indicates, a hypothesis that postulates that the relation between X and Y is due to chance, in other words that there is no relation between X and Y (null = absence of relationship). If the value of p is greater than 0.05, we must accept the null hypothesis and conclude that the observed correlation between X and Y is due to chance.

The second - the alternative hypothesis or H 1- is usually the hypothesis of our research. Unlike the null hypothesis, this hypothesis suggests that the relationship between X and Y can not be attributed to chance; so there is a connection between X and Y. If the value of p is less than 0.05, we must reject the null hypothesis and conclude that a correlation between X and Y does exist.

The value of p for the three relationships is less than 0.05, it is concluded that a correlation between the WCR and its components does exist.

After calculating the BFR correlation with receivables, inventories and suppliers using the SPSS software, we are able to say that the WCR is highly dependent on the amount of trade receivables, indeed the correlation relationship between them is the stronger relative to the other two components of the WCR. This is why good credit management

within SANOFI will have the greatest impact on reducing the company's WCR, without neglecting the management of stocks and supplier delays.

Thus, a more in-depth analysis of the receivables management process will be necessary in order to identify the contribution of the latter in optimizing the WCR.

Customer receivables management procedure at SANOFI:

Customer risk policy :

Asked about SANOFI's customer risk policy Mr. Faouzi Adoul, a credit manager at the company, told us that :

" The requirement of the shareholders for cost reduction and profitability must push SANOFI to apply the best practices of customer risk management and for that we must make all the arrangements to not suffer an unpaid from a customer. This represents a significant shortfall for us that could lead to a bankruptcy filing.

The global customer risk policy is defined by the Finance Department, which determines for all customers of the company the payment period granted, with a limit or ceiling if you want to ... commitment that corresponds to the maximum exposure that we accept.

These elements may vary according to the customers according to commercial criteria such as the volume of business, and financial for example : the private or public status, the financial situation, and the payment guarantees provided by the client. "

The management and analysis of receivables consists of describing the system put in place at SANOFI level for the monitoring of receivables in order to identify any weaknesses that could inflate the level of outstanding receivables.

Analysis of a SANOFI customer account :

A regular analysis of the financial situation of the customers is part of the assignments allocated to the credit manager. Indeed, the latter must be able to distinguish at any time a good financial health of a bad of each of the customers of the company. One of the payment guarantees provided by the customer is the communication of his financial statements, it is then up to the

credit manager to analyze the data and follow up the evolution of the indicators of activity, results, and calculate the financial equilibrium indicators of the client concerned.

To illustrate this analysis, we had access to data from one of SANOFI's clients, Pharma Medic, which specializes in the wholesale marketing of pharmaceuticals, medico-

surgical materials and instruments;and who has made a request for an increase in the ceiling of his commitments as well as a renegotiation of these deadlines.

On the basis of its financial statements and with the supervision of Mr. Adoul, credit manager within SANOFI, we were able to make an assessment of Pharma Medic's financial situation and to establish a prognosis for its solvency and its ability to to meet its commitments to SANOFI.

Table 03 : Data analysis of a SANOFI client.

Pharma Medic	2016	2017	Variation	%	comments
Turnover	4 378 726,00	4 641 459,00	262 733,00	6,00%	we note a good increase in turnover with an increase of 6% in 2017
Result	21 792,00	69 568,00	47 839,00	220,16%	the result of PHARMA MEDIC records
%	0%	1%			
Account reciebles	1 182 797,00	1 319 864,00	137 067,00	11,59%	average payment term of 104 days
% Turnover	27%	28%	1%	5,27%	supplier debts are significant, but we
Account payables	2 173 166,00	1 881 944,00	- 291 222,00	-13,40%	
% Revenue	50%	41%	9%	-18,00%	the level of inventories fell by 16%
Inventories	1 055 141,00	879 168,00	- 175 973,00	-16,68%	10% increase in cash at the customer's, this enrichment of the active cash reflects an increase in liquidity and
%/Revenue	24%	19%			
Cash	71 602,00	79 265,00	7 663,00	10,70%	we note an increase in equity of 50%
non-current asset	76 732,00	73 850,00	- 2 882,00	-4%	the client's equity to total balance sheet ratio records an increase proportional to the increase in client's
equity	168 969,00	252 537,00	83 568,00	49,5%	
% equity / total balance sheet	7%	11%	4%	4%	
loan	48 298,00	17 333,00	- 30 965,00	-64,11%	repayment of 64% of loans between
other asset	40 612,00	41 260,00	648,00	1,60%	steady
overdraft (passive cash)	-	-	-		no bank overdraft has been contracted by the client during the last two years

Source : Developed by ourselves on the basis of the client's financial statements.

Despite a rather large supplier debt, we note an increase in shareholders' equity, turnover, earnings, as well as cash, these indicators express a satisfactory result as to the solvency of Pharma Medic.

Table 04 : Analysis of the Financial Balance of a SANOFI Client.

Pharma Medic	2016	2017	Variation	%	Commentaires
working capital	92 237	178 687	86 450	93,73%	we note a significant increase in working capital in 2017 of the customer customer equal to almost
working capital	68 932	116 754	47 822	69,38%	we observe a 70% increase in WCR between 2016 and 2017
cash	23 305	61 933	38 628	165,75%	increase in cash in 2017 of 38,626
financial autonomy	0,07	0,12	0.04	71,42%	we observe a low financial autonomy at the customer due to the significant supplier debt

Source : Developed by ourselves on the basis of the client's financial statements.

An in-depth analysis of the client's financial equilibrium indicators found positive and increasing working capital, which means that durable goods are financed by long-term resources. The customer is in financial equilibrium.

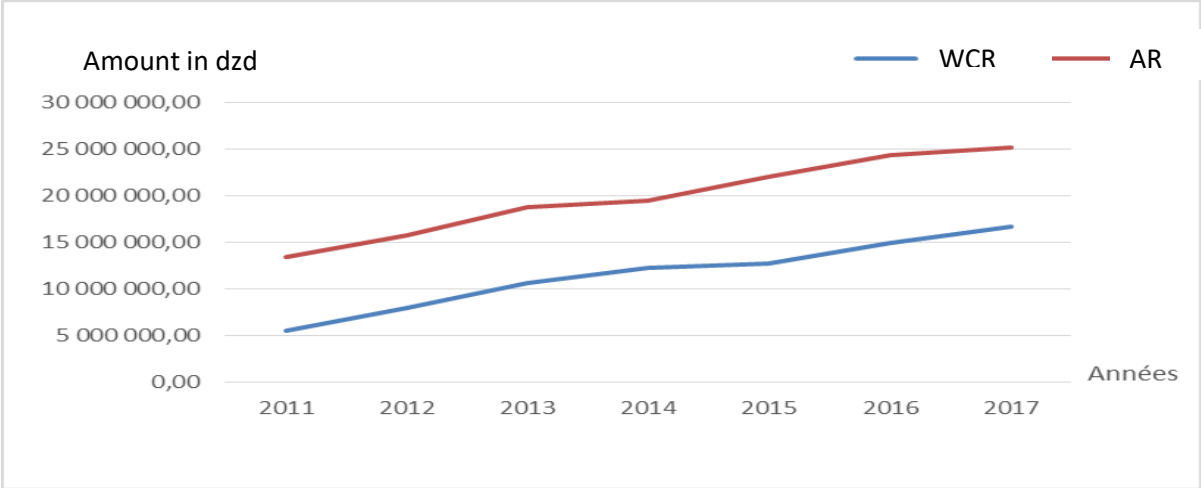
Positive working capital is not in itself a sufficient sign of the client's financial well-being: it is necessary to ensure that it covers the need for working capital of the company. The comparison between Pharma Medic's short-term assets and short-term liabilities in 2016 and 2017 highlighted this fundamental fact. And despite the increase in the need for working capital in 2017 due to the 13% drop in supplier amounts, the working capital is able to cover the funds required for the client's operating activity.

The increase in working capital requirements is directly related to the volume of business activity. The client is in a growth phase with a 69% increase in working capital requirements.

In view of the absence of cash flow difficulties at Pharma Medic. We can conclude that the client is clearly able to manage their operating needs. An increase in the ceiling of its commitments to SANOFI and an extension of deadlines is therefore an option to consider.

Analysis of the impact of trade receivables on working capital requirements :

Graph 01 : Comparison of changes in WCR and accounts receivable



Source : Developed by ourselves on the basis of the financial statements of the company.

The graph shows the evolution of the BFR and the receivables of SANOFI, one clearly notices the impact of the increase of the receivables on the increase of the BFR.

But in order to analyze the impact of client receivables on the WCR in greater depth, we will first rely on a first table summarizing all the elements characterizing the expression of the balance of power between the activity of the company. and its customers for the years 2012 to 2017 to determine weight of these on the activity.

Analysis of the receivables / turnover ratio :

Table 05 : Amounts of trade receivables compared to SANOFI's turnover (in KDA).

Years	Receivables	Turnover	Receivables /	Growth Receivables	Turover growth
2012	8,006,205.14	23,562,232.88	33.98%	-	-
2013	10,637,739.40	26,939,598.38	39.49%	32.87%	14.33%
2014	12,253,636.92	30,998 267.43	39.53%	15.19%	15.07%
2015	12,769,211.45	34,383,157.13	37.14%	4.21%	10.92%
2016	14,879,062.72	37,688,561.25	39.48%	16.52%	9.61%
2017	16,728,317.61	39,698,948.87	42.14%	12.43%	5.33%

Source : Developed by ourselves based on the financial statements of the company.

Once again, we note that the value of the receivables remains significant. Trade receivables represent on average 32% of the company's turnover over the six years. There is also a continuous increase in trade receivables between 2012 and 2017 as well as a continuous increase in the receivables ratio. / turnover over this period.

As the level of trade receivables has generally increased over the six years on which our study is based, we see an increase in the weight of trade receivables on the company's turnover. However, it should be noted that these increases are higher compared to the increases observed in previous years despite the existence of credit management service in the company that can be explained by the lack of rigor in the management of trade receivables.

Table 05 shows that the company's trade receivables are very important in absolute terms, they represent on average 32% of turnover, while the growth rate is 32% in 2012, 15% in 2013, 4% in 2015, 16% in 2016 and finally 12% in 2017 ; thus representing a growth higher than that of the turnover, these receivables testify to the progressive deterioration of the position of the company in the report customers / CA.

Analysis of the average time of customer settlements :

This indicator expresses the number of days that separates the delivery of a good, or the execution of a service, from the collection of the corresponding claim.

The average payment time of customers has an impact on cash flow. Thus, the calculation of this ratio makes it possible to know the working capital requirement

(WCR) of the company, to know if the customers pay on time, and to alert if they pay late. It has an even greater impact for a company that has to pay its suppliers with shorter payment terms than it is paid by its customers.

The average time of collection of the receivables is determined by the following calculation:

(Tax receivables / annual turnover incl. VAT) * 360 days

On the basis of the financial statements provided by the company we were able to calculate it and obtain the following results :

Table 06 : Average Customer Settlement Time (DMRC) in Days.

Years	ACSTAverage Customer Settlement Time
2012	102,79
2013	119,46
2014	119,59
2015	112,35
2016	119,43
2017	127,48

Source : Developed by ourselves on the basis of the financial statements of the company.

Table 06 shows that the company's ACST averages around 116 days, which is critical. In other words, a service performed is recovered on average 3 months and 26 days later.

This proves once again that the company is in an unfavorable position in the balance of power with customers. An increase in customer credit may indicate that some customers are in difficulty which will cause cash flow problems, and the longer the term, the greater the working capital requirement. It is therefore advantageous to optimize this duration.

Cash analysis:

The table below shows the calculation of net cash over the six years of the study:

Table 3.8: Evolution of SANOFI cash (in KDA)

Years	Cash assets	Cash liabilities	Net Cash
2011	13 739,63	4 706 547,25	-4 692 807,61
2012	3 125,39	6 325 501,57	-6 322 376,18

2013	3 933,51	9 162 961,43	-9 159 027,92
2014	3 025,32	11 360 012,68	-11 356 987,37
2015	1 529,84	12 624 384,78	-12 622 854,93
2016	1 023,04	12 156 322,58	-12 155 299,54
2017	1 783,56	14 321 371,36	-14 319 587,80

Source: Developed by ourselves based on the financial statements of the company.

With an average of -10 089 848.76 KDA, the cash of the company was largely in deficit during the period 2012 to 2017.

The company's cash flow was never surplus throughout the study period, reflecting the enormous cash flow difficulties in which it is located. This very dangerous situation is likely to lead the company, if measures are not taken, towards a cessation of payment even though the conditions of the operation would be at a rather interesting level.

From the same table it can be seen that the cash flow grew while the active cash flow continued to decrease despite an increase in the continuous turnover during the period in question.

Table 07: Amount of claims against SANOFI's cash position (in KDA).

Years	Cash	Recevables	Recievables/Revenue
2012	-6 322 376,18	8 006 205,14	1,27
2013	-9 159 027,92	10 637 739,40	1,16
2014	-11 356 987,37	12 253 636,92	1,08
2015	-12 622 854,93	12 769 211,45	1,01
2016	-12 155 299,54	14 879 062,72	1,22
2017	-14 319 587,80	16 728 317,61	1,17

Source: Developed by ourselves based on the financial statements of the company.

Much of the explanation of the current cash flow situation of the company, and thus the continuing increase in working capital requirements over the last six years, is in the level of trade receivables in general and in the customer credit policy in particular.

From Table 3.9, it can be seen that the level of trade receivables is always higher than the level of cash, which means that the improvement in the collection of receivables will not only allow the increase of the active cash , the decrease in the cash flow, the reduction of the financial costs, and finally the improvement of the payment capacity of the suppliers.

In conclusion, the company's financial equilibrium is very fragile and the company's operating needs are mainly provided by external financing (bank loans), because of a

large deficit in debt collection which explains a need. working capital positive and growing throughout the study period.

Conclusion

The practical case dealing with the analysis of the contribution of the management of the receivables management in the optimization of the working capital requirement of SANOFI enabled us to demonstrate the link and the considerable impact of the receivables on the need for working capital of the company.

It also presented the procedure set up at SANOFI for the monitoring of receivables, which aims to define the limits of the risk of non-recovery of sums due by its customers. It follows from this procedure that SANOFI does not neglect the problem of debt collection, but according to the analysis that has been made, the value of the claims remains very important throughout the study period and the average delay The debt collection period is more than three months throughout the study period. This means that the company is in an unfavorable situation because a long time of collection of sales weighs too much on the cash of the company and considerably increases the need for working capital.

The results of the case study allowed us, on the one hand, to detect the flaws in the SANOFI receivables management procedure, on the other hand, to confirm that in the first place, the management of the customer credit is considered a essential tool in optimizing working capital requirements. In this sense a company applying this concept will have a better chance of surviving in a highly competitive environment. Secondly, any loophole in the application of credit management or the choice of tools and methods of managing receivables directly contributes to the increase in working capital requirements.

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