

# Impact of T.R.M on the SMEs of the industrial sector in the city of Medellin, in the last 3 years.

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2016

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Abstract

#### **Abstract**

Colombia has undergone a process of economic openness that has led the country to overcome the phenomenon of globalization, through the implementation of many policies that seek to maintain a balance in the economy and the competitiveness of the companies in the country, including industrial SMEs in the city of Medellin. The volatility of the rate of change is a factor essential in the development operating of the SMEs; many are them determinants that generate reassessments or devaluations of the currency local facing the dollar American and the challenge depends on of your identification, understanding and analysis, looking for generate an impact beneficial for it industry in the measure that through the knowledge of them causes and them effects, as well as of them tools that is can use to mitigate them impacts These grow productively and achieve global competitiveness posed by the Government through the Ministry of Commerce, industry and tourism. The attraction of investment foreign direct towards them SMEs mentioned, represents the challenge to which entities as Procolombia must focus its trigger, improving thus the capitalization of them same contributing in latest to the development economic of country.

#### **Key words:**

Globalization, competitiveness, rate of change, productivity, financing and foreign direct investment

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#### List of abbreviations

TRM. Indicates rate of change.

SME. Shown in small and medium-sized enterprises.

BR. Indicates Bank of the Republic.

IMF. Indicates Fund monetary international.

IMC. indicates an intermediary of the market exchange rate.

OPEC. Organization of petroleum exporting countries indicated.

FED. Indicates system of the United States Federal Reserve.

OECD. Indicates the Organization for cooperation and economic development.

FDI. Indicates Foreign Direct Investment.

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#### Introduction

The determinants that affect the level of the rate of change in our country reflect the behavior of a series of complex by themselves, but fundamental phenomena for the development of the global dynamics of the business. However, his determination plays an important role against the arguments given to economic operators for the maximization of the benefits to the interaction with the exchange rate or the minimization of the damages that may cause, to ignorance in exchange rate matters; precisely, this referenced the first part of the research, which will enable to contextualize the phenomenon of volatility of the rate of change in Colombia.

Then, this paper identifies the exchange rate factors directly affecting the competitive level of the SMEs that belong to the industrial sector of the city of Medellin, which are characterized by external influences such as those generated on the price of oil, political decisions on interest rates which promulgates the reserve of the United States and the same value of the dollar worldwide. Added to this, are them influences of character internal, which have that see mainly with the execution of it political monetary from the Bank of the Republic, as well as the political in matter of investment that seeks the promotion of Colombia in the world and that affects on the capital circulating in the economy and finally, exists an effect important generated by the behavior of it bag of values of Colombia; the above, significantly limits its actions against the development economic, given that largely depends on the actions that the Government later to encourage the growth of small and medium-sized enterprises, which, in turn, plays in favor of the competitiveness that they can achieve.

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Subsequently, the reader may evidence how the factors identified affect of a u another form the level competitive of them SME, initially within a context national by means of it presentation of them data of it great survey SME 2016, for then identify such impacts to level regional, in the city of Medellin, through the presentation of them data and aspects fundamental of it reading regional of it same survey with regard to them years earlier.

Finally, a number of proposals are developed based on impacts generated by the rate of change on different factors, which, in turn, determine the competitiveness of SMEs, tools that have been undervalued by small and medium-sized entrepreneurs, ignorance which has greatly affected the sustained growth of the sector.

## 1 Project formulation

#### 1.1 Background

The process of liberalization commercial by which has flowed through the country within the framework of the globalization, has marked it guideline between others themes, in what has that see with the rate of change (in forward TRM) and this has brought get a series of effects on them sectors economic that have intended remove the greatest advantage to these exchanges commercial and to them relations established driven in large part by the volatility affecting the TRM. In this sense, and based in what indicates (Garcia I, 2002) in his article called "liberalization, change structural and growth economic in Colombia" is evidence how them reforms institutional of the country have generated a series of changes in the economy Colombian and whose approach is based in the experiences of the country before the opening economic and them changes of type structural associated to the model neoliberal.

On the other hand, the article points out that the globalization of the Colombian economy was framed by three important aspects as they were in the first place, lived in the 1970's coffee boom followed by the crisis in terms of debt in the years 1980 and ultimately, at the level of institutions in economic reform and opening which is developed in the course of the 1990's; from where it is highlights the importance of companies internationalized State in what could be considered the paradigm of the market return regulated auto and is evidence of building the model of private economy, reducing trade barriers that could lock the Exchange internally and subtract competitiveness with regard to the international environment.

Finally, the relationship that keeps this article with research that intends to produce, is thanks to the economic opening that entered the country in the Decade of the 90's, today we can speak with more relevance on MDR-TB and likewise, analyze its impact on the economy especially in the industry for small and medium-sized enterprises (in forward SMEs) of the city of Medellin.

The Colombian financial system, was not alien to these changing situations that emerged in the 1990's where document (Arango, 2006) called "Evolution and the Colombian financial system crisis", is can demonstrate is due to the issuance of the law 45 of 1990 where the system starts its modernization through the 1993 law 35, which you gave to them entities financial a greater range of operation within what is stands that is could create entities dedicated to Leasing operations. Subsequently, it law 9 of 1991 eliminates the limit that existed for it investment foreign to promote it and finally in the year of 1992, through the law 31 of that same year (also called law of the Bank of the Republic), is that is strengthens the structure of them institutions where in the exercise of them mandates constitutional pronounced by it reform of 1991, the Bank of the Republic (hereinafter BR) starts to play the role of central bank in the economic scenario and is recognized as the highest authority on exchange rate, monetary and credit, thus leaving charge of controlling the cost of living of Colombians (inflation), regulate the foreign exchange market and establish fiscal policies needed to achieve the economic objectives for the country in order to achieve a sustainable and reliable economic growth.

Based on the above, this article has a close relation with the purpose of study, since it is of that delegation of authority exchange between each other, we can make reference to the rate of Exchange (TRM) as a fundamental aspect of all globalized economy that affects each of the economic agents, to a greater or lesser degree and

therefore cannot be despised or below valued but on the contrary should be studied, regulated and understood to minimize the impacts negative that can cause.

The country faced a process of adjustment in its exchange rate policy, which was severely criticized at the time, since previously authorized for the exchange control regime was the exchange rate band allowing to control moderately on the wild swings that the exchange rate could be. What is had was a floor (level minimum) and a roof (level maximum) on which is should move the type of change, allowing to the authority central, intervene when both limits were overmatched. Phenomena as it crisis financial international and them mismatches macroeconomic (internal and external) of the country, together with them high levels in them rates of interest, the recession and the unemployment led to it Board directive of the Bank of the Republic the 25 of September of 1999 to delete the model of band exchange for allow it operation of the regime of rate of change free; transition that was encouraged among other things, by the announcement of the pillars of the agreement with the International Monetary Fund (IMF) macroeconomic adjustment programme that our country faced in the following years (Villar, 2000).

In this order of ideas, there is an essay of Murcia & Rojas (2014) called "Determinants of the rate of change in Colombia: an approach of microstructure of markets" which gives elements that allow understand the dynamic of the TRM in Colombia through it shows of results starting from a survey that was directed to them agents of the market exchange, where is evident the difference with that such agents perceive which are the determinants of the rate of change in the short, medium and long term. In the short term, is considered that the determinants of the TRM respond for the purposes of the microstructure of the market while in the medium and long term, the response corresponds to effects fundamental of the same; Hence is highlights the importance in greater degree of factors international as them movements of them rates of interest external, the economic news that have that see with the index of employment in United States, changes in the political monetary in Brazil and in general, those ads economic that come of regions as North America, Europe and Asia mainly of Chinese, on those factors of character national as the

level in the rate of interest internal and the level of the inflation fundamentally, which determines the dynamic of the TRM in the country. Finally, also are highlights the intervention of the BR, as a determinant that influences in the dynamic of this variable within the market exchange rate Colombian.

In this same sense, the authors Lega, Murcia, Vasquez, & Venegas (2007) in an article called "Volatility of the rate of nominal exchange in Colombia and its relationship to some variables", indicate that the fluctuation of the exchange rate in Colombia affects both to the real sector as financial, demonstrating the negative impact that generate high levels of volatility on Exchange within the international trade flows and even the decisions of investment of the economic agents. It document exposes them results on a comparative between Colombia and eleven countries, to identify the features and the determinants of said phenomenon economic. Likewise, is stands out the low level of volatility in the rate of change Colombian with regard to them countries analyzed being to his time the second more persistent within the shows analyzed; the report highlights also, that the variations in the rate of change is intensified in periods of devaluation, as a consequence between others, by high ratings of risk for the country.

Another aspect relevant is the concerning to the situation of the competitiveness of the country captured in the National Report of Competitiveness 2014-2015 of the Private Council of Competitiveness (2015), that allows reveal information on them sectors as the market labor, the performance logistics, the system financial and the tax, between others. As regards the market labor, is can observe that in our country them levels of unemployment in them past years have decreased substantially registering even levels of a digit, but even so, are high compared with the average Latin American. The informality labor is another of them factors fundamental to consider in this aspect, since in the year 2014 Colombia recorded the second rate of informality more high of Latin America, despite the expedition of them laws 1429 of 2010 and 1607 of 2012, on formalization and generation of employment and reform tax respectively, issued with the end to reduce them costs labor not wage

and the others costs that implies it formality labor; this ranked our country in 2014 as 84 of 144 Nations according to figures from the World Economic Forum.

In the case of logistics performance, the report suggests a deterioration in this respect mainly generated by the lack of infrastructure, lack of competitiveness of the conveyor load sector, high logistic costs (caused in turn by the high costs of land transport), absence of logistics platforms and lack of multimodal transport joined the inefficiency in the ports to foreign trade operations, which ranked to our country in 2014 in the since 97 among 160 countries with regard to the index of performance logistics of the Bank World (Consejo Privado de Competitividad, 2015).

The stage of the system financial Colombian according to the report, is much more encouraging since provides stability and strength thanks to the enlargement of the coverage financial in the territory through the execution of the program banking of them opportunities from the year 2006; clearly, there are a few gaps of access that must be closed and aspects to strengthen inter-departmental but perception is really positive and the challenge lies in developing efficiently the Colombian financial market. To end, the report collects information on the system tax that highlights the increase of the resources but that in comparison with others countries still being very low; also reveals the challenge important that should sort the Government national facing the raised effective of them taxes, attacking mainly you scourge of the evasion that bled them finance of the State and limited the power of the same, facing the goal that has proposed of be the third country more competitive of America Latin in 2032. (Consejo Privado de Competitividad, 2015)

The competitiveness to level national, is the base on which is gesta the frame referential of the trigger of them companies in our country and therefore of them SMEs, all time that make part of a system interdependent that seeks results favorable to each sector of the economy. Of there that is important understand the level competitive of them SMEs in our country, which is evidence in the article of Montoya, Montoya, & Castellanos (2010) called "situation of the competitiveness of the SME in Colombia: elements current and challenges", where is fundamental highlight that the companies must analyze the context micro and macroeconomic to

identify them factors that can enhance or decrease its level of competitiveness; between them the rate of change. Similarly, it indicates that to achieve sustainability in the business today, not enough to achieve superior performance over the competition but that competitive advantage generation is made relevant through time; that among other things and in accordance with the author of this article the competitiveness must be seen

not only as advantage competitive or a property or attribute of an organization, but also as a measure of its capacity operational (from the design to the sale and after-sales) for offer a set of attributes that allow meet of way competent them needs of them customers, and that differ its activity of them rival in the market. (Montoya et to the., 2010, p. 107)

In synthesis, them SMEs should focus its management to the *core* of his business since the competitiveness also is the result of a capacity optimal in the execution of their operations and of there, that that constitutes the challenge to which them companies but especially them SMEs should direct all their efforts, for win participation in the market local e international.

In the same vein, there is an article named "The competitiveness of exporters and importers of the Colombian through financial instruments and non-financial SME offered in the market" which was developed by Rosero (2007) stating that the leaders of SMEs in our country lack of financial and non-financial information relevant to the exercise of their operations against the global market which is becoming more dynamic and demanding. I.e., the increase in the levels of competitiveness of the SMEs in Colombia, is directly proportional to knowledge and use that acquire employers on financial and non-financial instruments of a public or private nature offered in our economy, in short, no.

#### 1.1.1 State of the art

In the development of the research, is that there is an approach on the impact of the rate of change real in the sector industrial, expressed in an article of Sierra & Manrique L (2014) called "impact of the type of change real in them sectors industrial

of Colombia: a first approximation", where of way fundamental is indicates that from 2003 the country underwent a process of strengthening of the weight facing the dollar American, driven by the increase in the prices of the oil and by the dependence of them exports Colombian of this category. Now well, the relationship between the revaluation of the weight during the period 2003-2011 and the competitiveness of the sector industrial had a behavior inversely proportional, attributed largely to the rising of the prices of them products local facing those markets global. From there that is important indicate that the type of change real can "have an effect negative in the product and the employment of sectors that produce goods tradable" (Sierra & Manrique L, 2014, p. 128)

The article allows also, observe it uncertainty that generates it appreciation real of the weight Colombian facing the dollar American to the inside of the sector industrial and in the "voice to voice" of them political of the country, as is could generate with said phenomenon a deindustrialization in Colombia, encouraged in great part by them higher costs of the matter prima (imported) subject to it transformation for later sale to the outside. All this, has led to reflect to them leaders of the country in the development and implementation of strategies that do more attractive them investments in sectors different to the of the oil for achieve so it diversification, so that the increases in them prices of this well not generate an effect of "disease Dutch" in it economy, since in times of devaluation it can affect the income perceived for the nation generating to your time problems of liquidity and deficit tax to the State.

Another study which is strongly related to the theme is developed by a Valencia Toro, Pérez Ramírez & González Rodas (2016) entitled "The impact of the fluctuation of the dollar with respect to the weight on the operations of foreign trade in Colombia during the year 2015" indicating that in the preceding year, the fluctuation of the exchange rate generated among other things, a descent both in them imports as in them exports, breaking even with the so-called of that should present is a more dynamic in them exports before the phenomenon of the devaluation in the rate of change by them greater income that would receive them companies exporting to the time of reintegrate them payments of their

sales. Similarly, the authors analyze the opportunities and threats arising from certain variables that determine the rate of change and demonstrate the actions of bodies of control against the situation.

#### 1.2 Approach of the problem

The phenomenon of the prolonged devaluation of the weight Colombian facing the dollar has generated a series of alterations in the economy Colombian, that largely have affected to them companies belonging to them different industries participate of the trade international through the import of goods and/or services; and to a lesser extent to them companies exporting, in the sense that many must import materials raw for it transformation and later sale to the outside of their property. Given the boom at global and regional levels that currently crosses our economy and taking into account the above considerations, the concern arises about what the impact that the fluctuation of the local currency against the US dollar, has generated in SMEs in the industrial sector in Medellin within the last three (3) years? Such questioning, is the central axis of the research and fosters the spirit of collecting sufficient information to deal with it, understand it and reply to it, bearing in mind that as the investigation progresses may arise additional questions aimed at answering the central approach.

Likewise, it is important to highlight the greatest benefit of the fluctuation of the exchange rate in our country in recent years (which has been strongly marked by the devaluation of our currency against the dollar), has impacted positively on exporting enterprises, given that in simple terms they are receiving more Colombian pesos for each dollar billed and in this sense, could decrease the prices of their products to make them more attractive in them markets international; phenomenon that must be exploited to the maximum for contribute to the improvement of the competitiveness both of the sector exporter Colombian as of the sector importer, being this the another face of it currency that also is important cover, understand and enhance, allowing so, the application of new alternative that reduce the grade of uncertainty to which is exposes this last sector, facing them depreciation of our currency.

#### 1.3 Justification

The presence of SMEs in Colombia, is the largest portion of corporate muscle, since they represent 99.9% of the total number of companies in the country (Dinero, 2015). In this sense, the importance of analyze the impact that the object of study exerts on these, takes greater force because of their understanding and analysis can derive is a series of considerations that of not be studied would limit the spectrum of alternative for them companies can sort favorably them situations that of there is derived. Now well, sort the situation not always seeks to have zero impact or zero involvement, is it desired, but in sometimes minimize them impacts can be more favorable that claim to disappear them. Is by this, that the approach that is aims to give to it research includes offer possibilities (according to them conclusions) that help to reduce the degree of uncertainty for them companies more affected in the situation and that boost them aspects of them companies that by the contrary, have a great alternative of growth by make part of the Guild exporter in the country.

#### 1.3.1 Theoretical justification

The global economic dynamics, the international situation on oil prices and investments along with the economic dynamics of the country, constitute the main source of motivation for the development of research, within the framework of international business and foreign trade these increasingly dynamics are higher and impact individually to different economies than in the international market interact. Is by this that must be studied and analyzed, to facilitate the understanding of the phenomenon and offer alternatives of improvement in them cases that is required and enhance the alternative offered, for the companies more favoured.

#### 1.3.2 Social justification

The update of the information that luggage them observations on phenomena economic that have emerged through them times in our country, is fundamental for nourish the present and serve of base for the future, attending so, to them questions of character academic, social and even cultural that can present is in the becoming national e international. In this sense, the primary motivation that arises with the completion of this research project is that you update the existing information, which will allow to strengthen the knowledge that the entities and social actors may have on the subject of equally and not least, is that it will extend the landscape of action and this will facilitate the decision-making process either in enterprises, in the Government and even in the families.

#### 1.4 Objectives

#### 1.4.1 General objective

Determine the impact that has generated it devaluation or revaluation of the weight Colombian facing the dollar, in the competitiveness of the SMEs exporting and importing of the sector industrial in Medellin from 3 years ago.

#### 1.4.2 Specific objectives

- Analyze them detonating of the phenomenon of the rate of change to international level, that allow contextualize the news of the devaluation or revaluation in Colombia.
- Identify the exchange rate factors affecting the competitiveness of importing and exporting SMEs in the industrial sector in Medellin.
- Determine how it affects the factors identified to the competitive level of SMEs through information in the industrial sector nationally and specifically of Medellin.

 Propose alternative facing the maximization of them benefits and the minimization of the effects negative, through them factors found.

## 1.5 Methodological frame

#### **1.5.1 Method**

The method that is used to address the object of study is equivalent to a research qualitative of type descriptive where is relevant determine the impact that has generated it rate of change on the level competitive of them SMEs of the sector industrial in Medellin in the last three years.

#### 1.5.2 Methodology

Secondary data collection: performed primarily in internet, academic search engines and databases. Is held a research in internet, to find different works research, descriptive that serve as background and base of the finds of the research. Likewise, held through academic search engines and databases, while seeking to ensure the accuracy of the information for further analysis.

#### 1.5.3 Scope

The development of the research has a horizon clear and defined, framed in the environment national e international, since performed the analysis of the devaluation or revaluation of the weight Colombian facing the dollar American. In this sense, the limit of the project is extinguished a time disaggregated them elements of the phenomenon and analyzed within the context of the economy and the dynamic of

the trade, that have effected them SMEs located in the sector industrial of Medellin in the last 3 years.

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### 2 Project execution

#### 2.1 Theoretical frame

The international trade with the elapse of them times has strengthened its bases according to them changes that is have presented, due in part, to the dynamism of the globalization and to the exercise of them operations that of there is derived. Is by this, that the present research based their bases theoretical mainly grouped in three large pillars how it are: the traditional, the new and the "newest", which are mentioned in the article of Gonzalez Blanco (2011) called "Different theories of the trade international". Fits highlight, that the essence according to the author mentioned previously of them theories within the trade out of them borders, aims to serve basically to them questions on would what are the causes that lead to them countries to trade between itself? and what is the impact that this trade have generated on production and domestic consumption?.

Respect to them theories traditional, is evidence that have State focused to resolve the first question on them causes of the trade international and whose greater contribution it made them authors Adam Smith (1776) and David Ricardo (1817) with their respective judgments on the advantage absolute and the advantage comparative. With regard to the theory about the advantage absolute,

Smith argued that, with the free trade, each country could specialize is in the production of those goods in which had an advantage absolute (or that could produce of way more efficient that others countries) and import those others in that had a disadvantage absolute (or that produced of way less efficient) (González Blanco, 2011, p. 104)

being remarkable in this approach the specialization, as axis fundamental of the growth sustained to which all country would like to arrive and that with the application of such tool, it can be fantastic always that considered all factors in international trade interact.

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On the other hand, the theory of comparative advantage by David Ricardo indicates that

even when a country had a disadvantage absolute in the production of both goods with respect to the other country, if them costs relating (or cost of a well measured in terms of the other well) are different the Exchange is possible and mutually beneficial. The nation less efficient should specialize is in the production and export of the well in which its disadvantage absolute is lower (González Blanco, 2011, p. 104).

I.e., that the advantage not always has of be in terms absolute because them conditions vary of a country to another, but not by that them possibilities of trade between a "A" country to and another "B" are limited, since there are advantages relating between them factors that employs a country on them property that produces in comparison with the other country and vice versa which makes possible to obtain benefits from trade. But in this sense, it is important to note that through the course of history, the theory of comparative advantage has been to say "reformulated" somehow since in the first instance, this was based on the "theory of work value" what was moving away from contemporary reality as unaware of other factors in the production of goods affecting part of the labour force.

Another theory that supports the development of the present research, is the reference to the "competitiveness" for which not exists a consensus global, but which is influenced mostly by them analysis made by Michael E. Porter. According to the book of Alarco et al. (2011) called "competitiveness and development: evolution and perspectives recent" the concept that introduces Porter is referred to "the ability of those countries to provide high levels of prosperity to its citizens;" i.e., the reflection of the productivity with which each country uses its resources human, natural, and capital" (Alarco et al., 2011, p. 28) be essential the role of enterprises, since they are

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such resources which combine to offer products and services to different markets." But within the context, is important specify that not only to the competitiveness is you considered in terms of the productivity because there are others approaches that indicate that this is the result of the level of trade outside that develops a country by means of them exports that performs; being executed the latter approach, through the devaluation of the local currency.

The competitiveness of the companies also involves adopt processes productive efficient, that allow improve them yields that obtained by the elaboration of goods or the offering of services; Depending on the mix of those factors of production that is required. Hence, that is relevant to mention the theory of "scale yields" mentioned in the book of Pindyck & Rubinfeld (2013) understood as "the rate at which increases the production when the increase proportionally" (Pindyck & Rubinfeld, 2013, p. 215) and which must be understood in three contexts that are: increasing returns of scale, consistent performance, and diminishing returns. Is worth mentioning, that to the increase them factors of way proportional, a first stage can generate increases in the production rather than proportional (performance growing of scale); contrary to the event where the production increases at the same rate as the increase in factors, case where it is said that returns on scale are constant. Finally, there is a last stage where to the increase them factors, the production not is doubles (yields of scale decreasing) phenomenon explained by them difficulties that represents the Organization and management of the production in them companies of great scale. I.e. "communication between workers and managers can be difficult to control as the center of work is more impersonal" (Pindyck & Rubinfeld, 2013, p. 216).

#### 2.2 Definition of basic concepts

This research comprises the understanding of basic concepts needed to enhance the interpretation of the ideas, based on the concept of devaluation (Banco de la Project execution - 18 -

República, 2016a) understood as a loss of the value of the peso (COP) in relation to the currencies, we can understand objectively the phenomenon that currently crosses the country. Similarly, it is important to note as regards the rate of change (TRM) to delimit the price that will be charged local currency per unit of foreign currency, and for the Colombian case, in recent periods has affected to a greater extent to importers, as the prices that must be paid to the outside are higher thanks to the revaluation whereas for exporters It creates a situation of bonanza by exchange rate.

When reference is made to the exchange rate, it is essential to refer to volatility, which has to be understood as the change or fluctuation affecting the price of a good and that in turn, is the response to the interaction of the macroeconomic factors in the markets but according to (BBVA, 2015a) also serve to measure the degree of uncertainty in the markets.

# 2.3 Triggers of the phenomenon of the rate of change at the international level and its context in Colombia

Is important highlight that the point of split of the rate of change in our country arises of the *Trilemma* to which is faces it authority (Banco de la República) when runs it political monetary pretending to reach certain level in the rate of change, to while want to achieve determined level in them rates of interest and that aims to it free mobility of capital within the economy; as it indicates Gómez (2006) citing to Mundell (1963) since them three objectives always will be desirable but not is may reach at the same time. Of there, that the great challenge of the authority monetary is point you to the target more successful according to the reality economic of the country, giving to pursue at least to one of them others objectives known and to be in constant rotation, to adjust is to the dynamic local and global that is develops.

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A time known them objectives to which focuses on the political monetary its trigger. is precise indicate that through it political exchange the country by means of its authority should establish the system or model exchange within which is framed it variable (rate of change) and that for the case of Colombia, corresponds to the type of change flexible; understanding also, that the Bank of the Republic before revaluations or devaluations severe of the weight Colombian facing the dollar American, should adjust the level of type of change taking in has them objectives of rate of interest and of mobility of capital mentioned previously. In this sense, the alternative of a freely floating exchange rate has "the danger that a total flexibility scheme lead to processes of "overshooting" or overfitting on the exchange rate" (Villar, 2000, p. 6) and this is reflected when there is an important phenomenon of devaluation of the Colombian peso against the US dollar, given that the Bank of the Republic (hereinafter BR) intervene by selling dollars from its reserve to promote the strengthening of the currency local and achieve so that the type of change lower. Case contrary, happens with a phenomenon of revaluation marked where the BR intervenes buying dollars American in the market, to force to the type of change to devalue is, in both cases, the Bank central must take care of the balance on them agents of the economy with regard to them decisions that takes.

Now, in order to understand the context it is important to mention that in our country there is a foreign exchange market in order to settle those foreign coins called "badges" where the reference currency is the American dollar on the Colombian legal currency. All this is achieved by means of the rate of change that is calculated "with base in them operations of buy and sale of badges between intermediaries financial that traded in the market exchange Colombian, with compliance the same day when is performs it negotiation of them badges" (Banco de la República, 2016) which indicates basically the amount of pesos Colombian that is must pay by a unit of dollar American; This rate is calculated and certified daily by the Superintendent financial of the country and registered by the Bank of the Republic. The IMC (intermediaries of the exchange market) are banks authorized by the BR to act in the foreign exchange market; to these agents is added the State, the companies and them people natural, where each one goes in your role particular

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to sell or buy currency to make their payments to the outside or reintegrate properly those payments received from the outside, what also is known as "channeling of them badges". In this sense, the knowledge on them phenomena economic world, the factors associated to the rate of change in our country and them different tools financial that offers it economy, for it optimization in them operations of them agents in general, but mainly of them companies (included them SME), takes greater relevance, while endow of arguments necessary to the leaders of the companies for perform it proper takes of decisions within the frame of it planning strategic. But more beyond, the great challenge of the companies lies in treat of understand the behavior of the rate of change starting from the identification of them detonating that make that fluctuate as response to the dynamic commercial and economic global, pretending to in last instance reduce the impact and the grade of uncertainty to which are constantly exposed in the development of their operations daily.

The determinants of the rate of change that affect the level of the rate of change in our country are diverse and are due to local and international in which situations is important according to survey conducted by Abi, Naranjo & Carrasquilla(2015) that captures the final of 27 experts in the field say the most representative as well: the price of the oil, the decisions on rate of interest of the book Federal of USA, it investment foreign direct more it investment of portfolio, it has current, the difference between them rates of interest (external e internal), situations associated to it economy local and to it juncture national, it political monetary in Colombia and them rates of interest, the economy international the behavior of the global exchanges, the international conjuncture and speculation among others.

Additional to them mentioned previously, are factors as it quote international of the dollar that influences directly on the level of rate of change in our country along with them different components of the balance of payments, that in latest reflect the quote that can get to have the dollar American after them inputs and outputs of badges of our economy. Another aspect important, is the level of them remittances that sent them Colombian residents in the outside, as is a factor determinant in the sense that

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allows the arrival of badges (revaluation) as result of best levels in them wages, associated in last to best performances of them economies where are rooted our nationals but that also can generate reduction in them levels of remittances, because of the performance unfavorable that can cross those economies favoring thus the phenomenon of the devaluation. Finally, but not less important is the behavior of the bag of values of Colombia, whose behavior "presents an apparent relationship of replacement between investments in currency foreign (dollar) and actions of it bag" (Bateman & Martinez, 2010, p. 10) what leaves glimpse that said aspect has been sub-valued by the authorities and by them agents of the market exchange, to establish their political of internationalization to the level of rate of change in the economy.

In terms of the price of oil, its effect on the rate of change in Colombia is due to the dependence of exports on said category where by supply and world demand, together with the decisions taken by OPEC (Organization of petroleum exporting countries) the price increases or decreases, being this last scenario lethal for the country since simmers on the phenomenon of the devaluation to lower income by sales made; case opposite happens when the price increases, since allows greater revenue for the Treasury of the nation. Decisions on interest rates from the FED (System of the Federal Reserve of USA) is another important factor that generates great expectations of investors given that significant increases in U.S. interest rates, will attract higher capital "Swallows" favouring the phenomenon of devaluation in the country after the departure of these capitals of the Colombian economy in search of higher yields.

By its part, it investment foreign direct and of portfolio, generates an impact in the level of type of change when by situations of greater promotion, stability political, membership to organizations world important (as aims to Colombia facing the OECD) and to them good concepts of them main rating of risk, arrive to the country more investors with their capital injecting badges to the economy and favoring the phenomenon of the revaluation of the weight facing the dollar. Is important highlight also, that before situations of instability political and of low ratings of risk among

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others factors, within which is relevant indicate those that come of the conflict armed by the kidnapping and the extortion, that to your time, generate practices informal e illegal as it piracy, which summed to it insecurity legal that can perceive them investors in the country This item also collapses exacerbated the phenomenon of the devaluation after the departure or non-arrival of capital into the economy.

It own happens with the behavior of the bags to level global, since situations negative in any bag of the world generate "bubbles" of panic among them agents economic that can favour or disadvantage the level of dollars in the country and perhaps, feed to your time a factor that is returns a "gun" with greater importance that the same money, the speculation, which can be used according to the needs that have the agent speculator pretending to so devalue or revalue them coins for acquire or sell in certain situations concrete, manipulating the market.

# 2.4 Factors of the TRM that affect the competitiveness of SMEs exposed to this phenomenon within the industrial sector in Medellin

According to the analysis of them determinants of the TRM and taking in has others considerations, is important noted that the competitiveness of them SMEs in the city of Medellin, as happens in the rest of the country, is sees affected mainly by factors as the structure and execution of it political monetary, that can be to your time of character expansive or restrictive (Zuluaga) (, 2004), it political fiscal, that can classify is as expansionist or contractionary (Menjura, 2015) and it political exchange, (Banco de la República, 2016b) where is important highlight that the authority central has the power of intervene the market exchange looking for be compatible with the range of inflation for accumulate: reserves international, reduce them movements of the rate of change, between others. The above, affects the action of the companies as BR takes decisions in order to meet the Trilemma mentioned by Mundell, which is encountered when you run monetary policy. Inflation

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and the level of interest rates that are evident in our economy, are part of the implementation of monetary policy since the authority, uses different tools that has at its disposal in order to maintain a balance in it, but these tools generate different impacts on the operations of SMEs and ultimately affect their competitiveness.

Another factor important, is the great absence of investment foreign direct (FDI) on the small and medium-sized companies in Colombia, phenomenon supported in them results of the study of Garavito, Iregui, & Ramirez (2012) where is indicates that

firms that attract FDI are those larger, well established business structures that carry out foreign trade activities and which are more intensive in capital. Additionally, the results also show that the probability of that a company have FDI decreases for those companies located out of Bogota and for those that operate in sectors economic different to the sector oil. (Garavito et al., 2012, p. 3)

It previous allows glimpse that the SMEs have a difficulty important facing the attraction of FDI and this represents an obstacle for improve your competitiveness, in the measure that limited its trigger in them markets local and greater in them markets international.

The not get FDI, financing (local and foreign) is another alternative with which have it great most of them SMEs, factor that is sees highly affected by them variations of the rate of change in our country (for the case of the collapsed in currency foreign) limiting the capacity productive of them same in particular. Likewise, the purchase of raw materials from abroad represents a factor that plays against the operational efficiency and generates, in turn, increases in prices of final products. (Portafolio, 2015)

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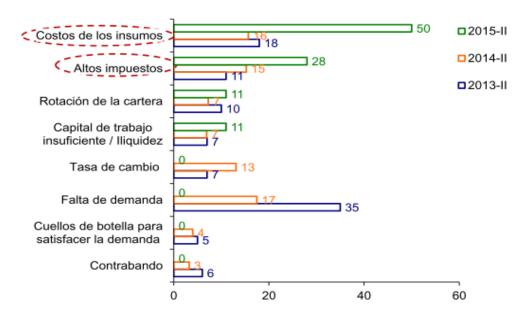
# 2.5 Impact of those identified factors on the competitive level of them SMEs importing and exporting by means of information of the sector industrial

#### 2.5.1 National situation of SMEs

The Center for economic studies of ANIF (2016b) enables to perceive a stable national economic situation for industrial SMEs through great survey SMEs that make year after year, where it is important to stand out from other considerations, that they have because of a series of problems as they have been in the past three years as follows: the costs of raw materials obtained from abroad, in the measure that different factors as the increase of the rate of change, internal situations as the "paros" of conveyors, between others, have made more expensive it obtaining of them inputs necessary for the production, to while more expensive them processes logistics for its distribution in the country. Raw materials, accounted for 50% of the surveyed SMEs an important determinant in 2015, 16% for the year 2014, much lower than that recorded in the last year and 18% by 2013. Added to the costs of materials raw, another aspect that has affected greatly to them SMEs industrial, has been the load tax that these have had that assume for the development formal of their operations, as part of a process of political fiscal contractionary as a result of the deficit fiscal with which has the country, caused to its time, by them under income that have received them finance national before them low prices International of the oil and by our dependency of said factor in those exports. Other factors have been the rotation of portfolio, working capital, the rate of change, lack of demand and smuggling among others.

The graphic 1, allows observe them main factors that affected to them SMEs industrial and their respective percentages of affectation, in the last three (3) years in Colombia.

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Grafic 1. Main problems that affected to the SME industrial to level national (%). Source: (ANIF, 2016b)

Factors that were not greater impact by 2015, in fifth place is the rate of change, which represented a not so large in 2013 problem, year in which began to develop the phenomenon of devaluation in the country today is experienced, given among other things, by the less dynamic in the international prices of crude oil. Likewise, and in accordance with it graphic previous, it greater incidence of the TRM is observes for the year 2014 since it economy believed that said phenomenon was to stabilize is very soon, reducing their levels near to it registered in years previous but given the permanence of the phenomenon, them SME importing and exporting had that adapt is and run their operations in 2014 within it uncertainty and the distrust that generated expose is to said phenomenon, decreasing in latest its competitiveness.

#### 2.5.2 Monetary policy, national considerations

The execution of the political monetary from the Bank of the Republic in our country, has been determinant for the development of the operations of them agents that

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interact in the economy. This is has characterized by it rate of intervention, understood as "it rate minimum of them auctions of expansion monetary to a day" (Bank of it Republic, 2016d)tool with which the BR impacts (contracts or expands) it amount of money circulating in the economy, through the modification of the rate of interest minimum that the Bank central cobra to them institutions financial by them moneys that les lends within them auctions of expansion or it rate of maximum interest that pays for surplus monies you receive from these, through auctions of contraction; the foregoing, seeks in addition, place inflation within the range of 2-4% to guarantee the sustainability of the purchasing power of the economic agents. The table 1, evidence the development that has had the rate of intervention of the Bank of the Republic according to the date in that has been modified after them meetings of the Board directive, in the last three years.

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**Table 1.** Rate of intervention of the monetary policy pursued by the Bank of the Republic in Colombia. Source: development itself with data of Bank of the Republic (2016)

Date	Rate
1/08/2016	7.75%
23 / 06 / 2016	7.50%
31 / 05 / 2016	7.25%
2 / 05 / 2016	7.00%
22 / 03 / 2016	6.50%
22 / 02 / 2016	6.25%
1 / 02 / 2016	6.00%
21 / 12 / 2015	5.75%
30 / 11 / 2015	5,50%
3 / 11 / 2015	5.25%
28 / 09 / 2015	4.75%
1 / 09 / 2014	4.50%
1 / 08 / 2014	4.25%
24 / 06 / 2014	4.00%
3 / 06 / 2014	3.75%
28/04/2014	3.50%
26 / 03 / 2013	3.25%
25 / 02 / 2013	3.75%
29 / 01 / 2013	4.00%

Such rate of intervention, that has had a growth remarkable justified in them higher increases on the level of index of prices to the consumer (IPC) that reflect the cost of life of them people, in last instance, impacts the cost of them credits that offer them entities financial among others, to them SMEs industrial, limiting its access to

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the financing local that these should perform for invest mainly in Capital of work, consolidation of the passive that possess, purchase or rent of machinery and adjustments or remodeling. In accordance with them results of the great survey SMEs (2016) exists an aspect fundamental that plays in detriment of the competitiveness of them small and medium-sized companies in the country, and corresponds in first instance to them high rate of interest and in second instance, to the difference between them levels of them rates that pay them SMEs by them credits ordinary and what pay them large companies by them credits preferential that acquire, as to data of April of the present year supplied by the Superfinanciera, such levels were of 14.3% and 11.4% respectively.

On the other hand, is important mention, that has existed an impact positive on them SMEs in the measure that these have children to them different loans that offers Bancoldex, as entity of the Government national that helps to the growth of them same through support of type financial through them lines of credit for the modernization, capital of work or development of the trade outside exist for this last line resources up to \$ 30 million. On the other hand, the entity provides support not financial through the training business, among others. The table 2, reflects the level of them disbursements with data to December of 2014 that has made Bancoldex to them MSMEs of them main sectors and sub-sectors of the economy and their respective participation on the total paid.

Table 2. Level of disbursements of Bancoldex to those MSMEs in Colombia. Source: (2016 DNP)

Desembolsos de Bancoldex a Mipymes					
Sector	Monto (Miles de millones de pesos corrientes)	Participación			
Comercio al por mayor-menor; reparación vehículos	682.537	33,0%			
Actividades profesionales, científicas y técnicas	108.625	5,3%			
Transporte y almacenamiento	185.245	9,0%			
Industrias manufactureras	428.974	20,7%			
Otras	663.084	32,1%			
Total	2.068.466	100,0%			

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This allows glimpse at national level, even though you have paid a significant amount of resources there is a degree of "undercutting" or on "ignorance" or sometimes total, about the alternatives of access or support that are small and medium-sized enterprises of different sectors, to advance its growth strategies in efficient and competitive. Likewise, according to Maria Claudia Lacouture (2016) Minister of trade, industry and tourism on its participation in the first Congress national of the SME, indicates that others results favorable of it interaction with Bancoldex have reflected the participation of them SME with a 31% on them more than \$ 23.076 trillion that have been disbursed from the year 2010, where have been around 24.204 companies benefited economically and some 22,000, on issues of training and development business.

### 2.5.3 Funding, considerations national

In terms of the absence of foreign direct investment (FDI) on SMEs in general, there is evidence of a negative impact limiting characterized by increasing access to funding sources in the financial costs having to resort to credits in local and international character against the attraction of capital, where by its characteristic of long-term, this last can mean decrease in the costs financial and likewise, contribute to the increase of the competitiveness. In this sense, the line of external financing is another alternative that can count SMEs to generate the development planned in their growth strategies, since sometimes it is much more attractive with respect to the local market, in terms of financial costs arising from lower interest rates which can offer overseas banks.

According to the report of the Sub-management of studies economic (2016) by the central bank in Colombia, the balance of the debt reached \$116.363 billion dollars (in later th.us\$) after the first half of the current year. Although the newsletter is not disaggregated by size of companies that request them, you can tell that within the

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private sector debt level reached the th. US \$ 46.287 representing a 16.5% of the gross domestic product (GDP). The loans made to financial institutions from abroad recorded a 68 percent share of the total amount requested, allowing to observe the importance that represents for our companies such a tool against certain dynamics of the variables in our economy. He impact that generates the use of such tools from them companies in general with regard to the rate of change and what represents facing the level competitive of them same, is that both them depreciation as the payment of the capital must perform is by means of transfers to the outside involving so it conversion of it currency local towards it currency, payments that before phenomena marked of devaluation generate cost overruns financial important or that by its part, before phenomena of revaluation, allow maximize the benefits through the use of minor resources to comply with such obligations.

### 2.5.4 Situation of the sector industry in Medellin

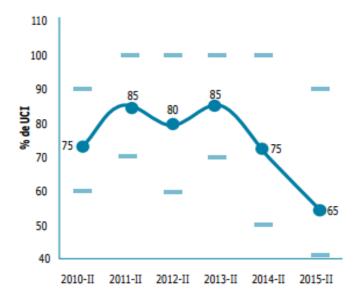
In an interdependent economy with respect to their regional dynamics but is centralized in the administrative and economic, with respect to the policies established by the national Government, through its institutions, is relevant to indicate that national impacts mentioned above have equal effect on SMEs in the city of Medellin.

According to the great survey SMEs (ANIF, 2015, 2016a) by regions, in them last years the perception of the situation economic in general for them SMEs belonging to the sector industrial in Medellin, represented improvements that for the second semester of the year 2013, were by the order of 51% with regard to them companies surveyed; for the same period in the years 2014 and 2015, is recorded a decrease until place is in 41% of the 976 and 1,095 companies surveyed respectively. Another aspect relevant, is which concerns to the level of entrepreneurs that not were satisfied with their performance in them auction records of year, registering 10% in 2013, for the 2014 recorded an increase to place is in 13% level that is would argue for the year 2015.

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The sales and the volume of orders for the second half of 2014, had a behavior whose dynamic was unfavorable with regard to the 2013 as consequence of the lower growth in them levels of production, which generated to your time less dynamic in it demand. Moreover, behavior by the year 2015, reflected an improvement between the businessmen of the sector given that growth in sales was the factor that leveraged the dynamic favorable demand. But despite this recovery over the past year, the optimization of the installed capacity was reduced to half of the SMEs surveyed registering 65.5% utilization (2015), figure it was 75% in 2014 and that in 2013, it recorded 85%. Of there that is evidence a deficiency operational since not are maximizing the utilization of the capacity installed with which have to develop their processes productive.

The graphic 2, shows the behavior that has had the SE of the capacity installed measure in them seconds semesters from the year 2010 to the year 2015, for the half of them SMEs industrial surveyed in the city of Medellin.



Grafic 2. Use of the installed capacity (half of industrial SMEs). Source: (ANIF, 2016a)

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### 2.5.5 Funding, considerations of the sector industry in Medellin

The applications of credits of them SMEs industrial in Medellin, increased significantly in the second half of the year 2015 registering a 50% facing the 38% registered in the year 2014. As regards the rates of approval of such requests, the system financial evidence a behavior favorable to the support intensively to the sector, although had a minimum reduction in the year 2015, where the 97% of them requests were approved facing the 98% registered in 2014. Said phenomenon impacts of way positive to the sector and is backed by the greater dynamic that has had the same in the city in the last year, added to the increase in the level of orders that has driven it production and them sales, what has led to them same to capitalize on is by means of the funding before the lack of capital by it absence important of FDI. (ANIF, 2016a)

### 2.5.6 Outlook of the region

Meanwhile, expectations of industrialists in Medellin are encouraging with respect to the dynamic waiting during the performance in 2016, since nearly half of the respondents agree that a better performance of the production, will be presented after the recovery in the level of orders that SMEs have had at the beginning of this year. Likewise, is the reflection of an optimal behavior in the demand with regard to it registered in years previous (ANIF, 2016a). Such expectations van in guideline with them expressed by the executive president of the camera of trade Aburrá South, Lylliam table, who said that with base in the year 2015, the perspectives for the sector industrial with regard to it economic improved case contrary, for them sectors of trade and services.

The big picture for SMEs in all sectors in our country, runs between the slowdown and uncertainty that reflects the economy, and as indicated in the MONEY

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Magazine (2016), this in turn, is the result of slower growth in GDP in recent years, where we have gone from grow 4.6% in 2014 to a 3.1% in the preceding year. The perspectives of growth for the year in course, not are alien to this behavior, waiting for so a growth of the economy by the order of 2.5%. Level national, according to Sergio Clavijo, (President of ANIF) sector showing a greater capacity to resist this behavior in the economy, is the industrial.

# 2.6 Alternative to maximize the benefits and minimize the effects negative by means of those factors found

The materials raw obtained of way local or international, for supply them productions of them SMEs of the sector industrial in Medellin constitute it essence same of them business, reason by which is fundamental care its acquisition and protection facing them payments that must perform them small and medium companies fundamentally with the outside, given the uncertainty that generates the level of the rate of change to the time of make them. Is by this that instruments as the *Forward*, understood as the contract through which them parts (SME e IMC) "is *commit to the purchase and/or sale of an amount specific of badges in a date future to a price established*" (Davivienda, 2016) constitute a tool important since minimize the risks in the type of change, to which is exposed them SMEs when celebrate them contracts of sale with companies of the outside.

In this same sense, the rates of intervention of the BR affect directly the level of access of the SMEs to the financing that offers it economy, since increases the cost of them credits local attempting against the competitiveness of them same. For cover them risks that can generate is by the increase in them types of interest, exists in the economy a tool called SWAP that corresponds to the "swap of goods or rights between two parties in the future" (BBVA, 2015b) where the more usual, is the contract of swap of types of interest, where the contract is sets on a type of interest punctual that can ensure "a current fixed of payments for a part and a reference" of

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type fixed to the other part or can find us contracts of swap referenced to type variable in both cases" (BBVA, 2015b)." The above, allows the SME entrepreneur mitigate the impact by the levels of interest rates and thus, guarantee an exchange of flows that could generate profits at the time that generates liquidity.

Another aspect important, consists in a greater effort by the entrepreneurship SME industrial towards the consolidation of alliances strategic with entities of the Government national, between them Procolombia, to increase the promotion of the sector in the city of Medellin that allow attract FDI on these, which will allow develop processes productive efficient and competitive. Added to this effort, is the character innovative that must adopt the SMEs of the sector to grab new markets, both local as international. In this sense, is important highlight that another alternative that favors it minimization of the impact negative of the rate of change on the operation of them SMEs industrial in Medellin, is it recruitment of personal professional qualified that is in capacity of analyze situations political, economic local and global, that can affect the level of the rate of change before take a decision on it buy or sale of inputs or goods from or towards the outside. It indicated previously, is to minimize the impact that can generate for them SMEs industrial make payments to the outside with levels of rate of change high facing them shopping (imports) that perform or by the contrary, maximize said impact facing them high levels of the TRM by them sales (exports) that made them SME to the outside.

Finally, in the absence of FDI, funding is the axis that allows you to develop the daily operations of SMEs in general; facing this aspect, is important a greater dynamic of these with them entities official that support from it economic to the development of the SMEs in Colombia, as Bancoldex, since has with resources important that allow develop markets international and that in last instance seek increase the competitiveness.

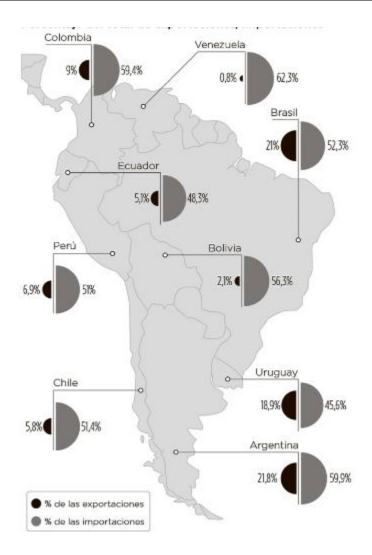
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## 3 Findings

Certainly any, the find fundamental is the impact negative that has generated the rate of change on them SMEs industrial, mainly importing of materials raw, since it devaluation marked that is has given in the economy has warm the cost of them same, what to his time, has discouraged partly it production and said phenomenon has been moved to the consumer end represented in prices of products late older facing what happened in years previous When the TRM is located by the order of them 1,800 pesos per American dollar. Moreover, and to simple view, the impact on them SMEs exporting in general has been positive facing them greater income that these perceived by their sales to the outside; In addition to this, is the increased competitiveness which gives an exchange rate devalued to international markets, in the sense that small and medium-sized businesses could reduce the prices of their goods and make them more attractive outside of the country.

However, MDR-TB has generated a negative impact through the same phenomenon of rising costs of raw materials imported for those small businesses that buy goods abroad in order to transform it for subsequent sale to the outside at the time. This impact is supported according to Uninorte & the Herald (2015) where is indicates that the sales outside of the country in mayo of 2015 decreased a 38.9% with relationship to the same period in 2014, passing of \$5.495,9 th. us \$ FOB to \$ 3.359,3 th. us \$ FOB, phenomenon that had the same behavior for them months later of April and March, with reductions facing 2014 of 25.6% and 22.8% respectively. The graphic 3, evidence the behavior of the level of the exports and imports (%) before them variations of the rate of change real in America Latin.

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**Grafic 3.** Percentage of total exports and imports that are affected by the variance of the rate of change in Latin America. Source: (Uninorte & the Herald, 2015)

The Government Colombian, through the Ministry of trade, industry and tourism (Ministry) offers a series of alternative important and fundamental for the increase of the competitiveness of them small and medium-sized companies along the territory national, focused in position globally to them SME, between them to them industrial of the city of Medellin, through political of development productive through the formalization, the support to the innovation and the financing. The great challenges of SME according to Lacouture (2016) to achieve said goal, reside in low levels of productivity, the informal economy as a result of high costs involving the "legality" in Colombia and the discouragement on innovation, which is due in part by the

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'centralization' or 'central authority' exercising the owners of industrial SMEs in Medellin and in general in Colombia, before the conception that have on them companies considering that to the be in the most capital family which are in game, not should invest resources in innovation by risks of overcoming from the employees or by risks of lost in general.

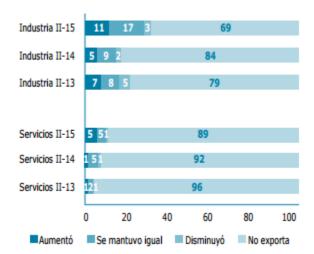
Therefore, it is important to highlight the strategy that seeks to attack the informality in SMEs in the country and the regions, called "Colombia is formalized" where the Government has invested \$19,000 million between 2012 and 2015, at the time that provides a regulatory framework for this purpose through the 1429 Act of 2010, the simplification of procedures, productive linkages and surveillance by Dian, among others. In this aspect, the fall of them prices of the oil to level international that has escalating the phenomenon of the devaluation in the country, has participated against this strategy, since facing them under income perceived by them exports and given the dependence of them same in this item, the State has with a deficit in matter fiscal important that has led to present a reform tax unless it is approved it generates a tax burden for SMEs, greater will be its impact if increases base taxable, including small and medium-sized enterprises, more and more in tax obligations.

It support on it innovation in the SME is to charge of the program "INNpulsa Colombia" which works in three axes as it are the co-financing, the credit and the development of an industry of Capital of risk. Likewise, financing is supported by Bancoldex, as entity that provides not only financial support but also support of care type, with regard to business training, among other programs. (Lacouture, 2016) The *Factoring*, constitutes another bet of the Government national for foster the development of them small and medium-sized companies, since is next to issue is a decree that seeks to regulate the operation of it invoice electronic and the record electronic, as tool that helps to improve the liquidity of them same. With base in it earlier, the point end of all these initiatives on which the Ministry has focused its

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trigger corresponds to an impact positive in the last three years on the competitiveness of them SMEs to level national, since them has equipped with of more arguments and tools that facilitate the operation and productivity of them same; where it is important to clarify, said impact extends to the regions, including the city of Medellin and its respective industrial sector.

The dynamic of them exports within the sector industrial in Medellin recorded an increase of the 11% in the volume exported during the second semester of the year 2015, as result of the confidence that has the industry SMEs facing the situation economic of the country. By its part, the percentage of them SMEs that not exported during the same period decreased with respect to the year 2014, recording a 69% (2015) in comparison with the 84% (2014) and the 79% that made it own in 2013, as it shows the graphic 4, where is can observe the behavior of the volume exported for them SME of them main sectors of the economy of Medellin in the last three (3) years.



**Grafic 4.** Behavior of the volume exported during the second semester of 2015, in the main sectors of the economy to them SME of Medellin. Source: (ANIF, 2016a)

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Although is present a best dynamic in the sector exporter of them SMEs industrial in Medellin, the Government national must increase the offer available for the development of the competitiveness of them same in general, as the figure continues being very high if is compares with the level that has reached it globalization in them last times; where the internationalization plays a factor determinant in the competitiveness of them companies in general, and by its since has of do it in them SMEs industrial of Medellin, in the measure that break them paradigms and fears that not allow advance and generate growth economic sustainable for their business.

# 4 Conclusions and recommendations 4.1 Conclusions

The phenomenon of the volatility of the rate of change in our country is very complex and its determinants at international level demand identification, comprehensive understanding and particular analysis, insofar as is desired to obtain a precise and objective diagnosis allowing at the same time, understand the real scenario that moves the exchange rate at a global level. Of there, that is fundamental rating variable not only of type economic, but geopolitical and social, as the influence that today have them decisions that take them Governments and the companies in such aspects on them business and them relations international, affect in last instance the behavior of the TRM in the context local.

The competitiveness of them SME industrial of Medellin and in general in the country, is subject to factors of type external as them decisions on the price international of the oil, the crisis geopolitical and economic world, the decisions on rates of interest in United States, among others, that not are within the domain of them same, as the main factors that influence on this they refer to economic guidelines determined by the central authorities; as well as policies on FDI that is out of the reach of SMEs, greatly limiting production development, to the extent that non-political balanced and fair, with respect to the large companies of the country, in terms of bargaining power which possess.

It sector industrial in the region and especially in the country, has a huge advantage facing them others sectors and has that see with the force that drives your resistance before them slowdowns that is have given in the economy in them last three years. Which generates important expectations in the main directors of associations and guilds that are seen in the sector an engine of growth for the country, which without a doubt should be maximized its potential to find balance in the economy.

The main challenge of them SMEs industrial of the country and of the region, lies in break them paradigms founded and seeded within the culture of the small and medium entrepreneur, allowing is thus the access to a fan of possibilities immense in development and growth, through the acquisition of new knowledge, tools financial and arguments that equip of autonomy to them same, in its road towards the conquest of a competitiveness sustainable.

#### 4.2 Recommendations

Based on the development of research, field work, allowing to collect primary data in various SMEs in the industrial sector in the city of Medellin, in order to increase the objectivity of the analysis of the impact that has generated the exchange rate in these companies is recommended. Likewise, raises the possibility of studying in greater depth the different economic policies that the Central Bank has at its disposal to maintain a balance in the economy, and how the choices, affect the level of the rate of change in the short, medium and long term.

On the other hand, is suggests perform a research that allow structure an indicator custom for them SMEs belonging to them various sectors of the economy and that is applicable in all the territory national, so that these can identify clearly their weaknesses and strengths, in the interests of improve them processes administrative and productive that boost real developments economic.

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