The increase in the discount rate in Mexico for investment projects over the last twenty years

El incremento en la tasa de descuento en México para proyectos de inversión en los últimos veinte años

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Abstract

This article aims to show the increase in the discount rate in recent years, driven by constant inflation, by global events that increased speculation in financial markets and generated doubts among investors. In the corporate environment, the discount rate is used as a financial parameter to measure the risk that an investment can accept. There are many methodologies and tools used to calculate the discount rate, but particularly for this work the weighted average cost of capital (WACC) method will be emphasized. The quantification of the discount rate is an essential part of the financial decision-making process of a company, so it is extremely important to see and analyse its behaviour in recent years. This article will address the role of the discount rate during an investment decision, examining the different methodologies that exist for its analysis. The discount rate is a very important indicator within the financial environment and that is why this article will mention the causes and consequences of this increase.

Resumen

Este artículo tiene como objetivo mostrar el aumento de la tasa de descuento en los últimos años, impulsada por la constante inflación, por eventos globales que incrementaron la especulación en los mercados financieros y generaron dudas entre los inversionistas. En el entorno empresarial, la tasa de descuento se utiliza como parámetro financiero para medir el riesgo que una inversión es capaz de asumir. Hay muchas metodologías y herramientas utilizadas para calcular la tasa de descuento, pero particularmente para este trabajo se enfatizará el método del costo promedio ponderado de capital (WACC). La cuantificación de la tasa de descuento es una parte fundamental en el proceso de toma de decisiones financieras de una empresa, por lo que es de suma importancia ver y analizar su comportamiento en los últimos años. A lo largo de este artículo se abordará el rol de la tasa de descuento en medio de una decisión de inversión, examinando las diferentes metodologías que existen para su análisis. La tasa de descuento es un indicador muy importante dentro del entorno financiero y es por ello por lo que en este artículo se mencionarán las causas y consecuencias de este aumento.

Investment, Risk, Real value   **Inversión, Riesgo, Valor real**

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Introduction

In today's business world, it is of vital importance to analyze an investment carefully and boldly, there are good and new business ideas all over the world, which attract the interest of investors, in order to obtain above-average returns. Such profitability is subject to the calculation and interpretation of the main actor of this article, the discount rate.

The discount rate is a fundamental tool at the moment of analyzing the real yield of an investment, since it is a thermometer of the risk that the investor is capable of accepting and at the same time, it shows a financial panorama in the present, using the cash flows of a future, in other words, the discount rate, is everything that the investor is capable of accepting, The discount rate is everything that we must demand that an investment pays me, so I have to discount it from my cash flows, once we discount the accounting and financial aspects of a cash flow and there is a return, we say that this project has an economic value added (EVA).

A vital element when analyzing an investment, is to estimate the opportunity cost of capital, in modern times there is a financial tool capable of measuring the systematic or market risk and unsystematic risk, it is known as CAPM method (Capital Asset Pricing Model), for its acronym in English. This and other financial variables together will yield the discount rate for each particular project.

The relevance of the discount rate in an investment is not in the number it has, but in the increase it has suffered over the last few years, since as part of the systemic or market risk, there are variables that directly affect it, such as inflation, the interbank interest rate, economic recession, etc.

At the time of determining the discount rate, the WACC (weighted average cost of capital) should be used average cost of capital), since it is a model that merges the analysis from an internal business approach and a systemic one, where the external aspects of an investment are analyzed.

WACC (Weighted average cost of capital)

The WACC (weighted average cost of capital) is the rate to be discounted with respect to our economic flows, since it represents the average of the debt to be covered both externally and internally, now, the external debt is easy to interpret, it has to do with the financial expenses of a company, which is reflected in the cost of external financing, called interest.

But to determine how much it will cost to use the company's own funds, it becomes somewhat complex, since it is often thought that capital will not be required, and this is a mistake, since a company's capital is also a receivable, just like its liabilities, but the way to determine it is more complex.

The formula for determining the WACC (weighted average cost of capital) is presented as follows average cost of capital) is presented as follows:

$$WACC = (\text{We} * \text{ke}) + (\text{Wd} * \text{kd}) \qquad (1)$$

Where

We: Weight of equity
Ke: Cost of equity
Wd: Weight of debt
Kd: Cost of debt

If the formula used to obtain the WACC (weighted average cost of capital) is broken down, it can be seen that the first step is to consider the contribution to the capital that is managed for investment projects; this rate is obtained from a vertical analysis between the total investment versus the project's capital, where the percentage of capital that the investment project has is obtained. The next variable in this formula is known as the cost of equity, which is the rate of callability of the capital employed in the project and, as mentioned at the beginning, the CAPM (Capital Asset Pricing Model) tool is used to obtain it, which is described in more detail below.

The CAPM method (Capital Asset Pricing Model) as a financial tool shows the relationship between risk and return on an investment, therefore, the model assumes that investors seek the lowest possible risk with high profitability.

The CAPM method is presented in a simple way and is defined by a series of assumptions linked to the financial markets, although the assumptions embedded in the model are not always met, the CAPM method has shown good predictive efficiency in investment portfolios, the model assumptions are listed below:

1. Investors are risk averse and seek high returns where returns on investment are taken as parameters, risk is measured through BETA and neutral volatilities are sought.

2. Investors have an expectation of returns based on the market environment.

3. There is a risk-free rate that serves as a central pillar for return expectations, i.e., the return on an investment should be above the risk-free rate. The information is the same for all investors, this phenomenon is known as "perfect information".

The CAPM method (Capital Asset Pricing Model) involves different financial variables, such as the risk-free rate (Rf), the Beta (B), the market yield (Rm) and the country risk (Rp), and the formula for obtaining them is presented below:

$$CAPM = (Rf + B(Rm - Rf) + Rp) \qquad (2)$$

In order to achieve the purpose of this article we will analyze and inquire into each of the variables of the CAPM (*Capital Asset Pricing Model*) method, in order to show its vital role in investment decision making today, starting with the risk-free rate.

Risk-free rate

In the financial environment, the concept of risk-free rate is used to indicate that the profitability of a financial asset is obtained by investing in a financial product that is considered to be one hundred percent safe and for that reason is risk-free, the interesting thing is that when talking about an investment all involve risk.

In fact, the term risk-free has to do with the fact that the financial asset where the investment is made is a fixed income, this means that from the beginning the yield to be obtained is known, in addition to the fact that there is a guarantee by the person offering the asset, in reality the risk of non-payment by the offeror is null, hence the concept of risk-free is based on this.

For a financial asset to be considered as a risk-free rate, it is necessary that the financial entity offering the asset has a known solvency over a long period of time, so that investors will perceive that their investment can be safe, both in terms of yield and compliance.

At present, only the fixed income securities offered by the governments of countries around the world have a risk-free rate title, it should be noted that not all financial assets issued by countries are considered risk-free rate, they have this title, since it is practically impossible that the government does not comply with its payment commitment, it would have to go through a financial catastrophe to do so and even then it would have the tools to liquidate its debt commitments.

In Mexico, the central bank (Banco de México) is responsible for determining the risk-free rate. This rate is used as a financial thermometer, since it determines the yield of the CETES (Treasury Certificates), which are fixed income assets offered by the Government in order to finance its current spending, but it is also taken as a measure of interbank interest, in other words, it is the main rate from which banks and financial entities start to charge interest for the use of the money they lend to account holders.

BETA Coefficient

Beta is a relative variable that is calculated as a comparison between the profitability of a financial product or that of the sector index where the asset is located and the profitability of the market, in other words, Beta buys the yield of an asset versus the yield of the market where the asset moves.

The Beta coefficient shows the sensitivity of the financial asset, with sensitivity referring to how much the financial product is affected by market speculation, i.e., how much the product's yield rises, or falls compared to other companies in the same sector.

There are parameters that explain in a more specific way the value of a Beta within an investment analysis, which are mentioned below:

- If the Beta is negative, we speak of an inverse relationship between the asset and the market, if the market earns returns, the asset suffers losses and vice versa, if the market presents losses the asset will obtain returns.

- If the Beta is equal to 0 or very close to 0, it is mentioned that the asset does not suffer alterations in reference to the market.

- If the Beta is positive, but less than 1, it means that the asset will suffer less profit or less loss with respect to the market behavior.

- If the Beta is equal to 1, the asset will gain or lose in the same proportion as the market.

- If the Beta is greater than 1, it means that the asset will suffer a greater gain or a greater loss with respect to market behavior.

The formula to obtain the Beta is as follows:

$$BETA = \frac{Ra-Rf}{Rm-Rf} \qquad (3)$$

Rm: Yield per share

Rf: Risk-free rate

Rm: Market return

Whenever we talk about Beta in an investment, it will always be linked to risk, since it is responsible for measuring the sensitivity of an asset with respect to the market, which is why it is so important in the middle of an investment analysis, since it is an extremely important variable at the moment of knowing the feasibility of an investment.

Market performance

Market profitability is a factor that deserves more attention when talking about investments. The profitability of a company is measured through three factors: ROA (Return on Assets), ROE (Return on Equity) and ROI (Return on Investment). The latter shows us what is the return on the money invested in it, so we can say that the market return is the average return on investment that has a sector or a niche in an economy.

But not only the ROI (Return on Investment) serves as a parameter when analyzing the market, another tool widely used are the price indexes and quotes within the stock exchanges around the world, the CPI (Index of prices and quotes), is an indicator that shows the performance of a sector in a given period of time, in most stock exchanges are grouped to companies listed in them by sector, technology sector, commercial, automotive, etc., also known as commodities.

Thanks to the IPC (index of prices and quotations) we can know how a particular sector behaves and we can take it as an opportunity cost in an investment, in other words, we will have to demand from our investment what the market is generating in returns.

Country Risk

Country risk can be defined as the percentage of risk that an investor incurs by investing in a country, in other words, the risk rate that you should demand from that investment.

The weighting in the risk rating of a country is subject to several financial indicators, some examples are Inflation, growth rate, unemployment rate, international balance of payments, income from fiscal products, among others.

Those responsible for quantifying the country risk of a nation are the risk rating agencies, which are part of the international financial system and are supervised by the International Monetary Fund, among the most famous rating agencies are: Standard and Poors, Fitch, JP Morgan, which are based in the United States of America. The rating is based on five dimensions, which are presented below:

a)   Demographic indicators.

-        Population growth.

-        Population pyramid

b)   Economic indicators.

-        GDP growth.

-        Foreign direct investment.

-        Employment rate.

-        Per capita income.

c)   Financial indicators.

-        Trade surplus or deficit.

-        Tax revenue growth.

-        Expenditure growth.

-        Percentage of expenditures (Not financed with debt).

d)   Debt indicators.

-        Direct debt.

-        Indirect debt.

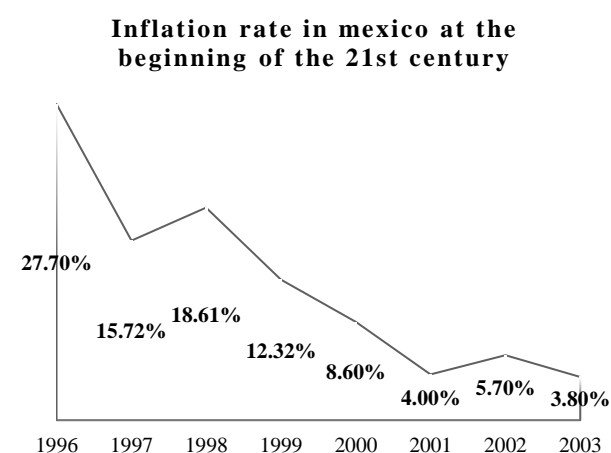-   Total foreign debt.

Each of these dimensions contains variables according to their measurement and therefore the rating agencies evaluate the behavior of a nation based on the points.

Each variable adds or subtracts percentage points depending on its performance, for example, if a nation has a good performance in its macroeconomic indicators, i.e., it has good economic growth, low inflation, etc., this will not add many risk points, but on the contrary, the more difficulties a country shows in its indicators, the more percentage points it will have to add.

If a country has, for example, 237 percentage points of country risk, then it will be said to have a risk rate of 2.37%, the higher the sum of percentage points of risk, the higher the rate assigned to a nation**.**

The discount rate at the beginning of the 21st century in Mexico

Once the discount rate has been analyzed as a concept or a methodology, we will have to talk about it as a tool, at the end of the 20th century the average discount rate in Latin America was 7% (Edwards, 2016), if we consider that there was a hopeful scenario, where international trade flourished driven by the new North American treaties, it would seem that it was not a rate with such a high demandability, besides that particularly in Mexico there was a fairly controlled inflation rate of 4% on average according to the Bank of Mexico. (MEXICO, 2022).

Graphic 1 Inflation rate in Mexico at the beginning of the 21st Century
Source: (MEXICO, 2022)

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Also in those days, the interbank interest rate was at a low, since in the last six years of the 20th century there was one of the worst economic recessions ever, specifically in 1994, at the hands of President Ernesto Zedillo Ponce De Leon, it was decided in consensus with the Bank of Mexico, to change from a fixed exchange rate to a flexible exchange rate, The dollar skyrocketed and the peso depreciated, consumption decreased and the country came to a standstill, interest rates at that time were very high and people had very little access to credit and as it was seen coming they began to reduce such rates, with the purpose of increasing consumption among Mexicans, according to the web page of proyectos México, the interbank interest rate dropped from 30% to 8. 14% from 1996 to the beginning of 2002 (MEXICO, 2022).
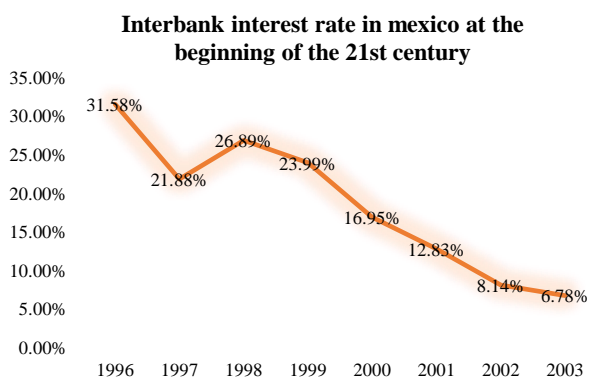
Graphic 2 Interbank interest rate in Mexico early 21st century
Source: (MEXICO, 2022)

Derived from the changes in economic matters, the Mexican Stock Exchange, found yields not so productive and as mentioned in the main financial premise that the higher the risk the higher the profits and vice versa, the risk in which an investment was infringed in the late 90's was not so high, as shown in the Investing.com page, where it shows an average VAR (Value at Risk) of 1% in the index of prices and quotes (IPC), which shows that at that time investing in the stock market was not so risky.

Figure 1 Historical IPC in Mexico 1997
Source: (Investing.com, 2022)

Similarly, speculation was almost nil at the end of the 20th century and the beginning of the 21st century, the commercial monsters such as Facebook, Twitter, Apple, etc., The markets with the highest yields were those of the manufacturing sector, specifically the automotive sector, it was very popular to invest in government bonds, since the interest paid by the government through the CETES (Treasury Certificate) was much higher in percentage points than inflation, but we must remember that government bonds are risk-free assets, it is clear that investing without risk and with good returns is a matter of the past, that today is just a utopia.

At the beginning of the 21st century there were no financial crises in sight, the concept of financial bubbles was very distant, the mortgage crisis of 2008 was not even seen coming in the most catastrophic scenario, this helped emerging economies of those times, since they maintained a constant acceleration and their gross domestic product (GDP) growth was regularly positive.

Among those emerging economies was Mexico, with the large injection of foreign direct investment driven by large American manufacturers, the collection of taxes for the first time in many years had a surplus, as mentioned by Paulo Cantillo in his research concerning the tax behavior of Mexico in recent years (Cantillo, 2018), there was a large income derived from oil, since the price budgeted for crude oil by the Ministry of Finance and Public Credit always fell short, the barrel of black gold always exceeded expectations, this together with other macroeconomic variables resulted in a Country risk between 150 and 200 percentage points, which was a very acceptable risk premium for a Country like Mexico that has always struggled to maintain healthy Public Finances.

Regarding the country risk in Mexico at the beginning of the 21st century, one of the most notable risk rating agencies within the financial sector, JP Morgan, together with Mr. Manuel Aguirre Botello, shows in one of his works, the historical risk of some emerging economies (Botello, 2020), where it can be noted that, in the past, Mexico enjoyed a risk premium much lower than the current one.

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PAIS	MÉXICO	CHILE	RUSIA	PERU	COLOMBIA	URUGUAY	PANAMA	BRASIL
Fin 1999	363							
Fin 2000	392		978	513	693	0	441	749
Fin 2001	308	152	628	472	568	0	411	911
Fin 2002	323	125	514	621	645	1706	446	1445
Fin 2003	199	84	256	318	435	624	439	468
Fin 2004	166	66	356	220	332	373	290	382
Fin 2005	126	80	108	206	238	275	246	311
Fin 2006	98	83	96	120	151	175	148	196
Fin 2007	149	151	147	178	195	243	184	222
Fin. 2008	362	336	743	509	474	685	516	428
Fin. 2009	165	97	188	169	201	241	175	192
Fin. 2010	144	124	199	135	137	186	162	189
Fin. 2011	175	161	321	216	195	213	201	223
Fin. 2012	126	122	128	114	112	127	129	142
Fin. 2013	155	159	181	159	166	194	199	224
Fin. 2014	181	172	472	181	196	208	189	259
Fin. 2015	232	250	243	246	321	280	218	523
Fin. 2016	232	162	152	175	227	244	166	328
Fin. 2017	189	118	178	111	174	146	112	240
Fin. 2018	251	133	214	141	233	207	276	276
Fin. 2019	172	149	130	82	161	148	214	214

INDICE DE RIESGO PAÍS DE PAÍSES EMERGENTES
EMBI+ --> Emerging Markets Bond Index Plus

Fuente:
J.P. Morgan

Figure 2 Risk index in emerging countries
Source: (Botello, 2020)

The discount rate in Mexico today

With the decrease in interest rates, access to credit was easier, but also less controlled, the clear example was the mortgage crisis of 2008 in the United States, the American Central Bank had to go out to rescue thousands and thousands of private banks in bankruptcy, since the citizens of the country of the stars and stripes had stopped paying their mortgages, This generated an economic recession comparable to the Great Depression crisis of 1929, which obviously had a worldwide repercussion, but very clearly in Mexico, where, in addition to being trading partners, there is a geographical proximity that makes macroeconomic issues more evident. With the continuous growth of the technology sector, this market was seen as a good investment tool, but it also increases speculation, there is a great dependence between fundamental analysis and the behavior of stock exchanges, fundamental analysis is understood as the measurement of qualitative variables within the financial sector, in other words, those variables that cannot be measured, but that have an impact on the performance of the shares, an example of a fundamental variable can be Politics, specifically in the case of the last elections in the United States, where the financial markets specifically the currency sector saw with good eyes the government of Hillary Clinton, this will have an impact on the Dollar-Peso exchange rate, since investors thought that with the arrival of Hillary to the Presidency there would be a greater investment in Mexican land, since in her political campaign she always saw with good eyes the National territory, but could speculators ensure that this would happen with the arrival of Clinton to the Presidency?

The answer is no, that is why the fundamental analysis or better said the speculation that is lived today, does not compare at all to that of twenty years ago, since there is currently a voracious competition for the creation of value in companies, but many times it is an unfair competition based on speculation or trade wars, where the goal is to try to hit the enemy where it hurts the most, its value in the market. But does this affect the discount rate? Of course, and for a very simple reason, by increasing speculation among investors, systemic risk increases, meaning that we will have to demand a higher return on investment for our money, since the risk to which we must expose ourselves is greater. To demonstrate the risk to which an investment is exposed depending on the sector, the following figure is attached:
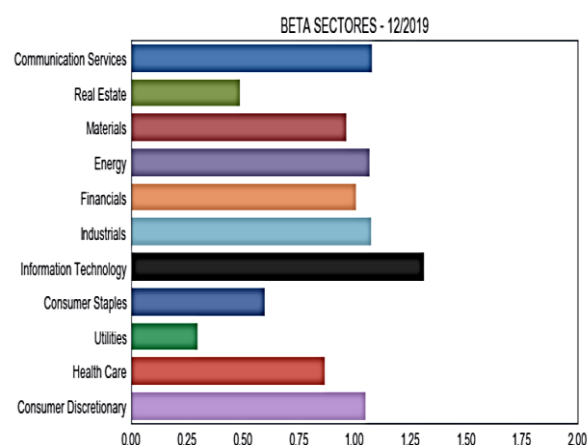

Figure 3 BETA by S&P 500 sectors
Source: (Rodriguez, 2019)

As can be seen, the technology sector is the one that shows a higher BETA, but there are few sectors that are close to the goal of 1, which is the desired one when talking about an investment, this shows the constant fluctuation that currently shows the financial markets in the world.

Another extremely important variable in the current financial scenario is the post-pandemic era, if we can speak of a post prefix, since the COVID-19 pandemic has not yet been completely overcome, there are still after-effects in the health sector, but also in the economic sector.

After the pandemic, the financial sector changed, since investment strategies did not respect a defined algorithm, the stock exchanges in the world handled minute by minute changes, no investment was safe, even fixed income investments presented changes due to increases or decreases in the interbank interest rate, human priorities focused on savings, investment routes took a different direction, investors began to turn to the health sector or green industries as a new option and, as expected, the technology sector, driven by e-commerce, exploded at an accelerated pace.

As expected, after a great economic recession, there is recovery, by way of analogy, it is like a dying person who feels better before dying, maybe there is no constant improvement, but by the mere fact of presenting better symptoms, we speak of a recovery, even the Bank of Mexico in its annual projections for 2021, predicted a growth of almost 6%, with a slowdown to 4% by 2022, Mexico had not grown to 6% for more than 25 years, but obviously, this has to do with the great recession that was experienced. (MEXICO, Mexico Projects, 2022)
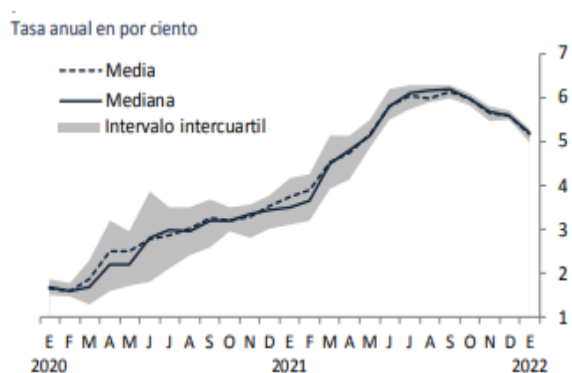
Figure 4 Forecast of economic growth in Mexico
Source: (MEXICO, Survey on Expectations of Private Sector Economic Specialists: 2022)

This growth, which is not based on economic fundamentals but on speculation, has a direct impact on the discount rate, since when economic growth is budgeted as mentioned above, it generates uncertainty in the markets. There are factors that are responsible for activating or deactivating an economy, one of them is consumption, since it is responsible for circulating money in the three economic elements that are government, business and people in general, as mentioned by John Maynard Keynes in one of his theories on consumption (Ros, 2012), it is normal that after a period of recession the economic elements consume more goods and services.

Thousands of Mexican families suffered the quarantine originated by the COVID-19, once the sanitary measures were relaxed and with the support of the different vaccines that circulated around the world, the virus began to be tamed, people left their homes for tourism, recreational places, such as cinemas, parks, etc., students returned to the classroom and small and medium-sized companies obviously benefited from this, as shown in the following table, which shows the market performance of the Mexican Stock Exchange (BMV) at the beginning of the year 2022, the best performance seen in the last 11 years with 20.89%.

Figure 5 BMV Yield 2021
Source: (Santiago, 2022)

Another important variable in the analysis of the contemporary discount rate is the country risk, according to El Economista, the rate assigned for Mexico in 2021 was 3.74% (Economista, 2022) since rating agencies such as JP Morgan or 'Standard and Poors, agreed that the pandemic scenario and the Political reforms promoted by the Mexican Government would generate an environment of financial uncertainty.

The Ministry of Finance and Public Credit (SHCP) through the Official Gazette of the Federation (DOF), in the section of guidelines for the preparation and presentation of the cost and benefit analysis of public investment programs and projects in section I, mentions the following "The social discount rate to be used in the cost and benefit analysis will be 12 percent per year in real terms" (Federación, 2018), such rate has not been modified at present but what can be noticed from the beginning, which is the justification for this article, is the following, if we consider what is mentioned by (Edwards, 2016) at the beginning of the 21st century where the average discount rate in Latin America was 7%, such rate has suffered an increase of 71.42% , it should be noted that it is taken as the last parameter the discount rate used for public investment projects, of course for the private sector there is a higher risk, this will undoubtedly affect such rate.

The increase in the discount rate for investment projects has a considerable relevance, since in the informal sector of Mexican territory is not used as it should, many SMEs notice the lack of return on their money, including the loss of purchasing value that money suffers over time, but do not realize that with a discount rate above 12% as mentioned by the government of Mexico itself, its return on investment (ROI) should be above this parameter, because today in green and white territory, if an investment is not able to give you a return above 12%, you do not have a real profit as a company, maybe nominal, that is why the importance of studying the discount rate, since there are many SMEs that are losing money in a real way and do not notice it, in other words, their returns are not able to cover the annual inflation, the risk and the opportunity cost implicit in an investment.

Results

In order to show the results obtained in this article, two companies will be compared, with the same percentage weighting of debt and equity, the only thing that will change will be the variable of the cost of equity obtained by the CAPM (Capital Asset Pricing Model) method, since for this analysis, the appropriate variables will be used in each time, in this way it will be possible to better observe how the mentioned variables affect and the increase of the discount rate over time.

The data to be used in the WACC (weighted average cost of capital) methodology are presented below, for two companies conditioned by time, since the variables are in accordance with the data obtained in this research, both at the beginning of the 20th century1 and at the present time.

Beginning of the 21st century	Present time
We = 50 %	We = 50 %
Ke = 5.4 %	Ke = 31.4%
Wd = 50 %	Wd = 50 %
Kd = 10 %	Kd = 10 %
Rf = 6.78 %	Rf = 7.01 %
B = 1	B = 1.25
Rm = 10 %	Rm = 28 %
Rp = 1.99 %	Rp = 3.74 %

Table 1 Variables for WACC method
Source: (Own Authorship)

WACC weighting for companies at the beginning of the 21st century vs. the present era

Once the data for the methodology to be used have been obtained, the CAPM (*Capital Asset Pricing Model*) will be obtained as the first result, therefore, the following formula is shown.

Beginning of the 21st century

$$CAPM = (6.78\,\% \ + 1\,(10\,\% - 6.78\,\%) + 1.99\,\%) = \mathbf{5.4}\,\% \quad (4)$$

Present time

$$CAPM = (7.01\,\% \ + 1.25\,(28\,\% - 7.01\,\%) + 3.74\,\%) = \mathbf{31.4}\,\% \quad (5)$$

In this way, the variable Ke (Cost of Equity) is obtained, which will indicate what will be required of the capital invested by the company's partners. Once Ke (*Cost of equity*) is obtained, the second step is to obtain the WACC (*weighted average cost of capital*), the result obtained will show the weighting of the discount rate in both scenarios.

Beginning of the 21st century

$$WACC = (\,50\,\% \ * 5.4\,\%\,) + (50\,\% * 10\,\%\,) = \mathbf{7.7\,\%} \quad (6)$$

Present time

$$WACC = (\,50\,\% \ * 31.4\,\%\,) + (50\,\% * 10\,\%\,) = \mathbf{20.7\,\%} \quad (7)$$

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Based on the data collected for this article, it can be considered that the weighted discount rate in Mexico at the beginning of the 21st century was between 7% and 8%, which coincides in some way with the data presented throughout this paper.

While the discount rate currently suffers a considerable increase, using the WACC (*weighted average cost of capital*) methodology, it yields 20.7%, which seems congruent if interpreted from a fundamental analysis.

Conclusions

The increase in the discount rate is an organic consequence of the loss of the purchasing value of money over time, it is natural that the rate maintains an upward trend, what is not a good indication and is also worrying, is the abrupt jump it made in only 20 years, since if we consider the nominal discount rate given by the Ministry of Finance and Public Credit (SHCP) in recent years of 12%, the increase was over 70%, This means that it is increasingly difficult to invest in Mexico, since the expected return on such investments, to consider a business as profitable, has to be above 20%, but in an environment with so much speculation, with so much financial sensitivity, it becomes difficult to find these returns.

Now, most financial analyses based on a methodology approved by science and supported by macroeconomic and financial indicators, are regularly used for formal economies, companies that are already positioned in the market, that have a well-designed financial structure and that are able to measure their economic performance, but what about the informal economy? The small and medium-sized companies, who see that it is becoming increasingly difficult to pay their company's bills, who notice that their company is becoming less profitable, in the vast majority of cases, are not even aware that there is a financial environment that must be considered when investing in a company, such as country risk, perhaps their company is not listed on the stock exchange and it seems that this variable is focused on the stock market sector, but it is not so, in the economy of a country there are three economic agents, the private sector, which is composed of companies unrelated to the government, The private sector, which is made up of companies not linked to the government, ordinary people involved in the consumption of goods and services, and finally the government, which is responsible for generating financial certainty so that the aforementioned economic machinery works according to the expectations of each country. For this reason, we cannot separate small and medium-sized companies from large corporations, since both coexist in the same economic scenario.

A well analyzed and interpreted discount rate will help to find the real value of an investment over time, in other words, when making financial forecasts, it will always add value to have a well-studied discount rate, since this variable is the pivot where many financial analyses take shape, for example, the net present value (NPV), internal rate of return (IRR), among others.

In conclusion, if we start from an important economic premise, which tells us that the economy arises from scarcity, money must be considered as a scarce resource, where every time there is an investment, financial factors not visible to the naked eye must be analyzed, these factors are grouped in the discount rate and as a result of the increase of the same, It becomes vital to know the variables that affect it, since not having a good financial analysis runs the risk of forecasting a current value that does not correspond to the investment being made and this can generate an economic imbalance within the company that is making the forecast.

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