

Applicability of Warren Buffett's investment criteria in equity securities trading on the Quito Stock Exchange, Ecuador

Aplicabilidade dos critérios de investimento de Warren Buffett em ações negociadas na Bolsa de Valores de Quito, Equador

DOI:10.34117/bjdv7n10-148

Recebimento dos originais: 07/09/2021

Aceitação para publicação: 13/10/2021

Mikel Ugando Peñate

Doctor in Economics - from the University of Santiago de Compostela - Spain
DEA in International Convergence Doctorate Program in the Financial and Accounting Field, by the University of Vigo – Spain - Master in accounting from the University of Oriente, Cuba - Pontifical Catholic University of Ecuador - Santo Domingo Headquarters - Ecuador

Vía Chone Km 2 - Santo Domingo - Ecuador

E-mail: mugandop@pucesd.edu.ec, ugando75@gmail.com

Andrés Wladimir Herrera Manosalvas

Master in Finance with a mention in International Financial Management, from the Institution: Pontifical Catholic University of Ecuador - Santo Domingo Headquarters Ecuador - Master's Degree in Technologies for Management and Teaching Practice from the Pontifical Catholic University of Ecuador - Quito Headquarters - Ecuador
Pontifical Catholic University of Ecuador, Quito Headquarters, Ecuador

Av. 12 de Octubre 1076 – Quito – Ecuador

E-mail: awherreram@pucesd.edu.ec, awherreram@yahoo.com

ABSTRACT

The Quito Stock Exchange (QSE) through its objective of offering security to investors, has reflected an act based on good corporate governance practices, however, 2% of amounts correspond to shares that are traded nationally, being Ecuador one of the Latin American countries with the lowest amounts traded compared to 8% of GDP. The objective of the investigation is framed in determining if the investment criteria of Warren Buffett have applicability in the negotiations of actions in the QSE, added to this the presumed existence of aversion to risk on the part of the investor, but also the ignorance of the movement of market and securities transactions, with a population that possibly lacks financial education and does not have benchmarks to invest in a seemingly unknown market. The fields of inquiry that have been defined have to do with the buffettology that involves the investment techniques and criteria that have made Buffett the most famous investor worldwide and, on the other hand, the equity certificates of or documents that represent a Part of ownership of the assets of a company that in the future allows you to enjoy the derived benefits. In conclusion, the criteria are partially applicable in an average 72.23% within companies that could be very close to being excellent, with economic, legal and operational barriers that hold back the development of the stock market in the city of Quito.

Key-words: stock exchange, investment, finance, financing, financial market

RESUMO

A Bolsa de Valores de Quito (QSE) através de seu objetivo de oferecer segurança aos investidores, tem refletido um ato baseado nas boas práticas de governança corporativa, porém, 2% dos valores correspondem a ações que são negociadas nacionalmente, sendo o Equador um dos países latino-americanos com os menores valores negociados em comparação com 8% do PIB. O objetivo da investigação está enquadrado em determinar se os critérios de investimento de Warren Buffett têm aplicabilidade nas negociações de ações no QSE, somada a isso a suposta existência de aversão ao risco por parte do investidor, mas também o desconhecimento do movimento de transações de mercado e valores mobiliários, com uma população possivelmente carente de educação financeira e sem benchmarks para investir em um mercado aparentemente desconhecido. Os campos de investigação que foram definidos dizem respeito à buffetologia que envolve as técnicas e critérios de investimento que fizeram de Buffett o investidor mais famoso do mundo e, por outro lado, os certificados de patrimônio ou documentos que representam uma parte da propriedade de os ativos de uma empresa que no futuro lhe permite usufruir dos benefícios derivados. Em conclusão, os critérios são parcialmente aplicáveis em uma média de 72,23% dentro de empresas que podem estar muito próximas de serem excelentes, com barreiras econômicas, jurídicas e operacionais que impedem o desenvolvimento do mercado de capitais da cidade de Quito.

Palavras-chave: Bolsa de Valores, investimento, finança, financiamento, mercado financeiro

1 INTRODUCTION

Warren Buffett's influence on business and investment selection is undeniable in the USA market, so much so that the shares of companies that are bought by him immediately rise in price. On the other hand, he has been one of the few people who has gone from selling newspapers on the streets to being one of the twenty billionaires on a list published by Forbes magazine. Thus, Warren's criteria and strategies have become highly relevant worldwide for investment in the stock market, producing risk mitigation and increasing certainty regarding the validity of the application of financial principles that help accelerate the path to financial freedom, even more so in the Ecuadorian market,

The objective is to determine if Warren Buffett's investment criteria are applicable in trading equities on the QSE. Additionally, the investigation is justified because it tends to solve the problem detected: what are Warren Buffett's investment criteria that have applicability in the negotiation of equities in the QSE?, Which pragmatically guides the identification of use for the benefit of investors and companies that issue equity securities. In turn, it is in accordance with Book II of the Organic Monetary and Financial Code that defines the functions of the QSE in terms of offering services and mechanisms for the

negotiation of securities endorsed by the Superintendency of Securities and Insurance Companies. Further,

The fields of inquiry that were defined have to do with the buffettology that involves the investment techniques and criteria that have made Warren Buffett the most famous investor worldwide and, on the other hand, the equity certificates of or documents that represent a Part of ownership of the equity of a company that in the future allows to enjoy the derived benefits (Buffett and Clark, 2000). Mainly there are two essential concepts, on the one hand, Warren Buffett's investment criteria seen as guiding tools that tend to maximize wealth, wealth and business value. (Gómez et al., 2014).

2 LITERATURE REVIEW

Warren Buffett's investment criteria have had notable success in the USA stock market, but limited applicability to the Colombian Stock Exchange, not only for its characteristics, but also of the Colombian market composition, more appropriately. According to their applicability, they are effective and allow maintaining a long-term relationship with successful businesses (Betancur, 2010).

The trajectory of the Ecuadorian stock market in the last 10 years has been stalled by the unfavorable macroeconomic environment, the impact of the setting of nominal interest rates that caused negative returns and a not very clear legal framework. However, several changes in economic-financial policy have achieved a commercial reopening, adapting modern negotiation processes and giving the opportunity for new people to invest (Ortiz, 1994).

Financial markets have existing fallacies, these are found in Behavioral Finance contrasted with the Market Efficiency Theory, and in this questionable and highly analytical situation according to Lima, Coelho & Frias (2021). Warren Buffett has managed to beat the market through knowledge of the underlying business which is one of the tools most used by the successful financier, thus allowing the correct valuation of the shares (Larena, 2014).

2.1 INFLUENTIAL THEORIES IN WARREN BUFFETT'S INVESTMENT PHILOSOPHY

At present Warren Buffett is considered as a benchmark when it comes to investments and investment criteria. This conspicuous position has been forged through the demonstration of very high competencies in cash handling. (Buffett and Clark, 2000).

Investment theory and philosophy begin with his tutor Benjamin Graham, who emphasized price as the main motivator for investment selection. Another of his influences lies in Philip Fisher, who points out that the best company to invest in is the one with excellent economics and it is not a good time to sell a company of this type. Additionally, Lawrence N. Bloomberg injected the idea of the greater investment value of the consumer monopoly, John Burr Williams guided Warren on how the value of a company is related to the profits of the future. Lord John Maynard Keynes, cemented the reduced portfolio and the attachment to the knowledge of an area. Edgar Smith, taught him the value of reinvestment and finally, Charlie Munger who taught him to work with excellent businesses with good business sense (Buffett and Clark, 2000).

2.1.1 Description of Warren Buffett's investment philosophy

The description has been rescued from the experience of Mary Buffett who lived together and had the opportunity to closely follow in Warren's footsteps. (Buffett and Clark, 2000).

2.1.1.1 Prospects of investments in the stock market

According to Nava. (2020) The key to applying the investment criteria of Warren Buffett and making a lot of money is to see the capitalization objectives as a game, referring mainly to developing a trade with pleasure and not seeing it as a job, to more than managing five key requirements when managing. For example, making money is an interesting game if you have communication skills. You have to overcome fear in front of the public and increase fluidity and performance within the big business arena. You have to surround yourself with people who are better than you. - It is a way in which the investor's weaknesses become strengths, increasing quality and promoting the enrichment of work teams. Warren Buffett calls successful people heroes or those who are better than one, leaving aside the ego and certain complexes that block healthy interaction and individual growth within a group. This allows for victory in the money game.

2.1.1.2 Identification of an excellent company.

Warren has been able to build a test to define which companies are the focus of attention when investing, as well as how to envision their opportunities (Buffett and Clark, 2000).

2.1.1.3 Discarded companies before taking the 9-question test

The famous investor has managed to detect certain characteristics of companies that could not be defined as excellent and that, if the nine-question test were applied, would obtain unsatisfactory answers. Likewise, it considers these companies should be fully identified before the test in terms of not wasting resources in less than excellent organizations and whose characteristics support this principle, proven repeatedly by Warren Buffett. (Buffett and Clark, 2000). It is also possible to add companies whose debt to equity ratio is greater than 1, in the sense that a growth in sales demands a higher external financing requirement (EFR) as asset needs grow to a degree much higher than retained earnings., this factor would project a possible over-indebtedness, quality problems, competition and in some cases bankruptcy (Ugando, et al., 2021).

2.1.1.4 Test of the 9 questions

The nine questions proposed by Warren to invest in a certain company are:

- 1) Does the company have a competitive advantage?
- 2) Are the company's earnings solid and trending upward?
- 3) Does the company continually earn a high rate of return from shareholders?
- 4) Is the company financed prudently?
- 5) Does the company retain its profits?
- 6) How much does the company have to invest to maintain its current operations?
- 7) Can the company reinvest the undistributed profits in new business opportunities, in expanding its operations or in reacquire its shares? Does the management fulfill this task well?
- 8) Can the company adjust prices for inflation?
- 9) Will the added value of undistributed profits increase the market value of the company? (Buffett and Clark, 2000).

2.1.1.5 Identification of a purchase opportunity.

The buying opportunity is based on technical and fundamental analysis, very important techniques when forecasting the future value of a share, thus determining the moment to buy or sell it (Murphy, 2003). The identification and correct use of econometric models is imperative to determine the upward trend or not of the company's

profits so the precise levels of profitability are determined according to the operating cycle (Ugando, et al., 2019).

A good management approach can trigger the price of a share to rise to more than one process that optimizes the accounts receivable of a company with policies that tend to reduce delinquencies and increase liquidity. Profitability must be considered and the situation diagnosed periodically so decisions can be made on the fly and no longer when the financial statements reflect an irreversible situation (Ugando, et al., 2019).

An increasingly globalized world places countries from different economies under the same context, with technology being a key element of communication and negotiation by allowing access to national and international stock exchanges. Just as there are positives, there are other negatives that do not take purchasing habits into account and sometimes block the development of efficient markets. From another point of view, within equity securities negotiations, the balance between risk and return is imperative, considering emotions as a factor of vital importance in the perspective of behavioral finance and neurosciences (Ugando, 2018).

There are closely related markets, in terms of industrial and commercial sectors, but if risk diversification is really required, the investor's actions must be focused on disjointed markets so that they do not put all their eggs in the same basket as they would say. Buffett, additionally there is the volatility of the market and the abrupt changes in it, whose analysis allows to reduce the risk of a portfolio significantly, although not eliminating the disadvantages but mitigating them to calculated and expected degrees (Reboredo & Ugando, 2015).

Being in a dollarized economy, changes in the currency directly affect the price of variable income securities, having a profound influence on investment and risk strategies, as well as on the management of markets that are increasingly inserted in processes of investment. financialization, that is, the capital market exceeds the industrial sector. Therefore, since the American dollar is a strong mining company, this allows the reduction of risk in terms of investments (Reboredo & Ugando, 2014).

The environment in which the issue takes place does not recognize security prices, therefore, the key to analysis is in those securities outside the Securities Market Line (SML), a line of the stock market that represents the expected rate of return of a individual value based on risk, then those undervalued values will exceed the systematic risk level or will be above the SML. This means, if there are values below the SML, investors will choose to purchase undervalued financial assets (Gómez, et al., 2014).

It is imperative to know the age of the shares, between the old and the new, they may have different economic rights and therefore their negotiation may or may not be carried out in the same market. Additionally, transaction costs, taxes, and illiquidity asymmetries can influence the prices of new shares with different economic rights (Riaño, et al., 2006).

3 MATERIALS AND METHODS

The approach used was the mixed one, closely combining the quantitative and the qualitative, following the criteria set out by Hernández, Fernández & Baptista (2014). further, a documentary investigation was carried out to identify those companies with competitive advantage and that trade in the QSE, in addition to the evaluation regarding the applicability of Warren Buffett's investment criteria through Buffettology, collecting quantitative and qualitative data that later they will allow the elaboration of the conclusions of the study.

The research had a non-experimental design through categories, concepts, variables, events and contexts without the researcher altering the object, it was documentary, descriptive of all the main components of the QSE and explanatory, finding the causes related to the problem, related with the context in which it is carried out, analyzing secondary sources of information, in addition to the interview, in consideration of the criteria of Roberto Hernández Sampieri.

The fundamental parts involved the design, definition or verification of the sample that will be for convenience, the construction and validation of the research instruments, the elaboration of the theoretical framework, the application of instruments and data collection, data processing, and the elaboration of conclusions. , recommendations and diagnoses, elaboration of the proposal, validation of the proposal and elaboration.

The priority dimensions were established in reference to Warren Buffett's investment criteria: quantitative and qualitative, which obey the analysis techniques that guide the negotiation towards success. Also, important dimensions were selected regarding the negotiation of variable income certificates: the share and participation fees, which reflect indexes and analysis of key indicators to detect evidence and the product of research (Moreno, 2013).

4 RESULTS

4.1 DETERMINATION OF COMPANIES UNDER ANALYSIS.

According to the convenience sampling, whose results in terms of the analysis of market share or market share, through the last trend year, which is 2019, showed the industrial and services sectors that trade on the stock market, the leading companies in sales are: Banco Pichincha CA (PCD) named according to the code assigned in the BVQ, Holcim Ecuador (HLE) and finally the Favorita Corporación CA (SLU). Each with 44.06%, 26.14% and 86.41% respectively. It is necessary to clarify that only listed companies were considered, not all companies that manage in the sector are included.

4.1.1 Question 1 Does the company have an easily identifiable consumer monopoly?

The famous investor selects companies that are called toll bridges, that is, organizations that sell products that meet specific needs in a differentiated way and add value. Additionally, these companies must have charges related to the main product, whose consumers are willing to pay with pleasure thanks to a good cost-benefit perception. Thus, the term excellent company and consumer monopoly were born, expressions with particular definitions that do not resemble the common in terms of industrial concentration. Fundamentally, an excellent company with a consumer monopoly is one that has predictable future revenues, freedom to set prices, distinctive attributes, good location, friendly employees, fast delivery, satisfactory products, advertising, Secret processes, fast consumable products, low asset investment business growth, short- and medium-term benefits, repeatable services. It is important before investing, the game and the business line are understood very well, much of the risk comes from ignorance of not knowing what the capital is risking in, first of all it is also necessary to understand that profitable investments come mostly to pay attention to day-to-day life and to identify consumer monopolies on a daily basis.

Through the use of colorimetry, it has been possible to judge whether the selected companies have excellent characteristics, not only they show in their daily management, but also by an accessory analysis of their 2020 reports.

Table 1. Qualitative analysis of question 1

Excelencia	Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
Monopolio del consumidor			
Libertad para fijar precios			
Ventaja distintiva			
Localización			
Empleados amables			
Entrega rápida			
Productos satisfactorios			
Publicidad			
Proceso secreto			
Puente de peaje			
Gastos de expansión			

Posee	
Posee medianamente	
No posee	

Source: Self made

Compliance with most of these characteristics is evidenced by the leading companies, in contrast to this, the characteristics of the Ecuadorian economy, which are mostly primary products and commodity companies, limit the possession of all conditions, but in the general business management scheme within each sector, excellence is recognized as the majority characteristic.

4.1.2 Question 2 Are the company's earnings solid and trending upward?

If allusion is made to profits, earnings per share (EPS) represent a financial ratio widely used by the oracle of Omaha, whose trend has been affected mainly in 2020 by the effects of the economic impact of the Covid 19 pandemic.

Table 2. Earnings per share calculation

GPA			
	Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
Años	GPA	GPA	GPA
2016	\$0,08	\$5,51	\$0,29
2017	\$0,11	\$5,65	\$0,33
2018	\$17,61	\$5,42	\$0,29
2019	\$18,00	\$5,32	\$0,24
2020	\$6,23	\$3,90	\$0,22

Source: Superintendency of Companies and Banks

PCD reflects a growing trend until 2019, at the end of the period a decrease in its earnings per share can be observed due to global effects and due to the limited economic growth of one of the most chaotic years in the world.

An opposite effect is presented for HEL, which reflects a downward trend, so Warren would not be interested in this company that reflects a management beaten by the decline.

SLU sells more shares over the years and causes its GPA to drop and tend to decline, much of this is due to the financial policy of delivering shares as benefits at the end of the year to its shareholders, but being a corporation with more of 50 companies owned, its recovery is rapid, evidence of this the flattening of the decline in 2020. So, this company would be attractive and meets the criteria.

4.1.3 Question 3 Is the company financed prudently?

Ross, Westerfield & Jordan (2012) recommend that the debt-equity ratio, which measures the degree of indebtedness in relation to the capital in common shares, should be a maximum of 1 for its growth rate to be sustainable, financial institutions do not agree with this recommendation in view of the fact that they must invest in assets so that their solvency is up to the credit, operational and financial risks.

Table 3. Calculation of the debt-equity ratio

Razón Deuda-Capital patrimonial			
	Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
Años	Razón deuda a capital patrimonial	Razón deuda a capital patrimonial	Razón deuda a capital patrimonial
2016	\$11,40	\$0,92	\$0,32
2017	\$8,95	\$0,89	\$0,32
2018	\$8,16	\$0,60	\$0,32
2019	\$0,81	\$0,71	\$0,71
2020	\$8,97	\$0,40	\$0,66

Source: Superintendency of Companies and Banks, QSE

Regarding this question, all the companies comply with the characteristics demanded, without neglecting the banking system that is part of Buffett's investment portfolio and this is evidence of a toll bridge in view of the fees associated with its management.

Additionally, a great company is one that invests to acquire more consumer monopolies or decides to marry another consumer monopoly to make the relationship great by turning long-term debt to dust. In the same way it happens with PCD, antagonistically, HEL and SLU when enjoying large incomes do not require the financial burden of a long-term debt. As such, the three companies meet the criteria.

4.1.4 Question 4 Does the company continually earn a high rate of return on shareholders' equity?

When measuring profitability based on own resources, stable growth is evidenced, with a large decrease in 2020 due to the chaotic nature of a pandemic that limits the variable, but this is not as much as that demanded by the trials of Buffett, an expert which establishes a minimum of 15%, HEL being the only one that would qualify as worthy of attention.

Table 4. Calculation of return on equity

Años	ROE y ROA					
	Banco Pichincha (PCD)		Holcim (HEL)		Corporación Favorita C.A. (SLU)	
	ROE	ROA	ROE	ROA	ROE	ROA
2016	5,29%	0,43%	33,23%	17,33%	10,65%	8,05%
2017	6,67%	0,67%	34,73%	18,36%	11,92%	9,05%
2018	10,28%	1,12%	28,19%	17,63%	10,40%	7,90%
2019	10,35%	1,14%	31,58%	18,42%	8,29%	4,85%
2020	3,96%	0,40%	20,44%	14,59%	7,77%	4,69%

Source: Superintendency of Companies and Banks, QSE

HEL would be the company that can generate profits with the existing business and is able to increase these through the profitable use that it gives to the undistributed profits, which means, a good administration of the resources to generate greater profits. It can be seen that the ROA is lower than the ROE, which represents a positive but not optimal relationship; that is, a part of the assets has been financed with debt and there is a growth in financial profitability, in other words, the average cost of debt is lower than the economic profitability.

4.1.5 Question 5 Does the company retain its profits?

When stocks earn more value than they pay out as dividends, this means that Smith's theory holds.

Table 5. Calculation of undistributed earnings per share

Años	BENEFICIOS NO DISTRIBUIDOS POR ACCIÓN		
	Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
	BNDA	BNDA	BNDA
2016	\$0,02	\$3,53	\$0,58
2017	\$0,01	\$3,12	\$0,53
2018	\$1,74	\$5,60	\$0,54
2019	\$1,98	\$5,96	\$0,52
2020	\$2,13	\$5,60	\$0,63

Source: Superintendency of Companies and Banks, QSE

A company that generates undistributed earnings per share shows that it is using them to generate value and high profitability. Around this, the increase in the value of the shares will come from the accumulation of assets made possible by reinvestment.

At this point, all three companies meet this condition by reflecting a retention of earnings that translates into better returns for their shareholders thanks to the magic of compound interest that focuses on reinvestment. So all three companies meet the condition by showing an increasing trend.

4.1.6 Question 6 How much does the company have to invest to maintain current operations?

The investment focus companies within this criterion are those that comply with the generation of profits, the retention or accumulation of the same and finally those that do not spend, but invest.

Table 6. Calculation of the rate of return of undistributed earnings per share

TASA DE RETORNO DE LOS BENEFICIOS NO DISTRIBUIDOS EN 5 AÑOS		
Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
Tasa de rendimiento	Tasa de rendimiento	Tasa de rendimiento
104,65%	-6,78%	-2,55%

Source: Superintendency of Companies and Banks, QSE

By calculating the rate of return of undistributed profits, it can be noted that for PCD, the priority is to increase the fortune of its shareholders, not being a simile the case of HEL and SLU, which prioritize investment and do not benefit to its shareholders in a growing trend, thus not complying with the indicated criteria.

4.1.7 Question 7 Can the company reinvest the undistributed profits in new business opportunities, in expanding its operations or in repurchasing its shares? Does the management fulfill this task well?

Being the three holding companies of other companies, capable of diversifying their business and expanding across international borders and national geography, PCD with 9 companies, HEL with 6 companies and SLU with more than 50 companies, fully comply with the reinvestment, and its management is very concerned about growth and shared risk, through subsidiaries and a business portfolio differentiated by its original line of business.

4.1.8 Question 8 Can the company adjust its prices for inflation?

The large banks of Ecuador, among them PCD, as they represent an oligopoly and due to the lack of their own currency, control and regulate interest rates, a percentage given the price of selling money for their star product, which is consumer credit. then, the rates are well above inflation and there are few market players, they give the financial institution the bargaining power.

For its part, HEL, thanks to the quality of its products and location, can not only adapt the price to the market, but also use its subsidiaries to modify the price applying logistics strategies. That is, if it can fully adapt to inflation. Supporting this argument, data is observed in the following study.

Table 7. Cement price growth versus inflation

CRECIMIENTO DEL PRECIO DEL CEMENTO VS. INFLACIÓN			
Año	Inflación	Crec. Precio	Dif. Crec. Precio Cemento - Inflación
2002	9,36%	2,46%	-6,90%
2003	6,07%	1,60%	-4,47%
2004	1,95%	0,00%	-1,95%
2005	3,14%	4,72%	1,58%
2006	2,87%	10,15%	7,28%
2007	3,32%	0,00%	-3,32%
2008	8,83%	3,41%	-5,42%
2009	4,31%	3,14%	-1,17%
2010	3,33%	1,60%	-1,73%
2011	5,41%	7,56%	2,15%

Source: Central Bank of Ecuador. Ecuadorian Institute of Cement and Concrete

SLU, understanding that, being a commercial chain, whose star company is Supermaxi and the like, knows that all the products sold here are sensitive to economic shocks, so in order to keep up with and below its suppliers, it has decided 20 years ago, to produce and sell its own brand goods, whose prices are fully adaptable to inflation and can be promoted through discounts.

Table 8. Prices versus inflation

PRECIOS VERSUS INFLACIÓN									
Años	Banco Pichincha (PCD)			Holcim (HEL)			Corporación Favorita C.A. (SLU)		
	Productos estrella	Precios	Inflación	Productos estrella	Precios	Inflación	Productos estrella	Precios	Promoción
2019	Crédito de consumo	16,06%	-0,07%	Cemento fuerte	7,9	-0,07%	Productos propios	Shocks	% Descuento
2020	Crédito de consumo	16,06%	-0,93%	Cemento fuerte	8,66	-0,93%			

Source: Self made

The best way to adapt to the company's prices goes in the direction of costs versus the supply and demand curves, where not only flexibility represents an advantage, but also managing a tilted balance next to variable costs is essential. The 3 companies have full freedom to increase and reduce their prices by appealing to the large gap between unit price and unit cost of production.

In this question, there is a financial questioning regarding the banking companies, which do not transfer the benefits of interest rates close to zero or sometimes negative from foreign central banks such as the Federal Reserve (FED) and entities of financial systems Foreigners who lend them money at very low interest rates, but this benefit does not reach people, companies or the State, violating the principles of financial ethics by taking actions that seek excessive profitability and block the economic growth of Ecuador.

In the same way, La Favorita Corporación, has increased its prices during the health emergency and pandemic by up to a presumable 30% according to the consumption experiences of the Quito population, an aspect that involves a departure from good management practices. This exaggerated behavior, well above inflation, leaves questionable compliance with the question.

4.1.9 Question 9 Will the added value of undistributed profits increase the market value of the company?

The price of the shares reflects the intrinsic value of the same, that is where Buffett, inspired by Graham's theories, takes advantage of the casino effect. While many speculate on the fluctuations of the price of a share in the market in the short term, others buy shares below its intrinsic value and benefit in the long term.

Table 9. Variations in net value and market price per share

	Banco Pichincha (PCD)	Holcim (HEL)	Corporación Favorita C.A. (SLU)
Variación del valor neto por acción	\$99,31	\$0,15	\$0,04
Variación del precio de mercado de la acción	\$197,86	-\$0,13	\$0,14

Source: Superintendency of Companies and Banks, QSE

Analyzing the variation in the net value per share and the variation in the market price of the share, it can be determined that two of the three companies meet this criterion,

given that from 2016 to 2020, the two variables have been increased in great value, not HEL, organization that presents a loss of value, not complying with this criterion.

5 DISCUSSION AND CONCLUSIONS

In a quantitative and qualitative way, results are evidenced in terms of the application of Buffett's investment criteria in a partial way, given the limitations and the small market that Ecuador represents compared to great powers such as the United States (USA). However, the QSE is limited within a legal framework that does not allow the tropicalization of regulations to the transformations that regional and international markets require (F. Espinosa, personal communication, August 10, 2021).

For the answer to the test of Buffett's 9 questions, various financial tools were applied such as the calculation of market share, earnings per share, debt to equity ratio, return on equity, return on assets, non-profit. distributed per share, rate of return on undistributed earnings per share, price versus inflation analysis and value added versus market value. All the techniques define that the Ecuadorian market has economic, functional, operational and legal limitations that go against globalization and bind the QSE to an old, not modernized regulation that does not allow partial or total adaptation to the stock market or energize it by looking for a similarity with the New York Stock Exchange (NYSE).

There are benefits and losses that are transferred to the Ecuadorian economy, such as price volatility due to dollar shocks, since, if the bill for the price of goods and services increases, savings capacity decreases, reserves decrease and increases indebtedness, considering the research by Reboredo & Ugando (2014).

Resistance to using stocks as a source of financing, few consumer monopoly companies and toll bridges mean that many organizations are discarded before the 9-question test, leaving few options for analysis, the products marketed are not differentiated and in their Most are demanded for the convenience of price and not for brand identity according to the studies by Betancur (2010). This coincidence of the Colombian Stock Exchange with the Ecuadorian one emphasizes the abysmal gap compared to economies and developed countries, which is based on regulation, regulations, operations, the diversity of alternatives, the cultural degree of investment; the appetite for risk; the alternatives of investing in economic sectors owned by large companies; the listing of companies that generate significant participation worldwide; the price of oil, the economy of nations, the frequent upswings that many companies have

due to the expectations of their economic results, among other factors, are those that do not match the profile that Buffett seeks with the profile of Ecuadorian companies (F Espinosa, personal communication, August 10, 2021).

Obviously, it should be noted that having taken as objects of study the three largest and strongest companies in the different sectors that have participation in the stock market, more encouraging results were expected, but PCD meets 77.78% of the criteria, HEL with a 66.77% and SLU with an equal value. Therefore, it is imperative a legal change that promotes a new vision and changes the current approach of the Ecuadorian stock market, which, despite having the technical advice of the Ibero-American Federation of Stock Exchanges (FIAB), Sustainable Stock Exchanges Initiative (SSE), The Global Compact or the United Nations Global Compact, Association of Capital Markets of the Americas (AMERCA), has not yet been able to attract foreign investment, strengthen dollarization.

REFERENCES

- Pichincha Bank. (2021, April). Financial Statements 2016, 2017, 2018, 2018, 2020, Multiplica, <https://www.pichincha.com/portal/Portals/0/Transparencia/MEMORIA%20EF%202020%20BP.pdf?ver=2021-03-11-152545-237>
- Betancur, D. (2010). Applicability of the Warren Buffett Investment Criteria in the Current Colombian Stock Market. [Engineering Thesis, School of Engineering of Antioquia]. EIA Institutional Repository. <https://repository.eia.edu.co/handle/11190/1576>
- Quito Stock Exchange. (2020). Quito Stock Exchange. Quito Stock Exchange. <http://www.bolsadequito.com/index.php>
- Buffett, M. (2000). Buffettology, Deusto
Ecuador: Organic Monetary and Financial Code, 2014 [Ecuador], 12sSeptember 2014, available at this address: <https://www.refworld.org.es/docid/57f7953f24.html>.
- Díaz, J. (2013, January 27). Keys to Investing like Warren Buffett, Entrepreneurs. <https://www.emprendices.co/claves-para-invertir-como-warren-buffett/>
- Gómez, F., Bezares, L., Vargas, M. (2012) Can we beat the market with beta? An intuitive test of the CAPM, Revista Española de Finanzas y Contabilidad / Revista Española de Financiación y Contabilidad, 41 (155), 333-352
- Hernández, R. Fernández, C. Baptista, P. (2014). Research Methodology, Mc Graw Hill Issuu. (2021, April). Report Corporación La Favorita 2020, Tanquina, https://issuu.com/corporacionfavorita/docs/informe_corporacio_n_favorita_2020
- Larena, A. (2014). Behavioral Finance in Warren Buffett's Investment Strategies to Beat the Market. [Thesis Degree, Universidad Pontificia ICAI ICADE Comillas]. Comillas Institutional Repository. <https://repositorio.comillas.edu/jspui/bitstream/11531/269/1/TFG000323.pdf>
- Lima, A., Coelho, L., & Frias. D. (2021). SGF: Stop and Go Fibo–Estratégia Automatizada de Negociação no Mercado Financeiro Baseada nas Regressões de Fibonacc. Brazilian Journal of Development, v.7, (5), p. 52993-53016. DOI:10.34117/bjdv7n5-619
- Moreno, F. (2013). Fundamental Analysis of the Actions of the Companies in the Quito Stock Exchange, Relating them to the Creation and Maintenance of Employment during the 2006-2011 period. [Engineering Thesis, Higher Polytechnic School of the Army]. Institutional Repository ESPE
- Murphy, J. (1999). Technical Analysis of Financial Markets. Deusto
- Nava, C. (2020, October 19). 5 tips from Warren Buffett to Win at the Money Game, Entrepreneurship. <https://www.emprendices.co/consejos-warren-buffett-dinero/>

Ortiz, E. (1994, June). Situation and Development Prospects of the Securities Market in Ecuador, ECLAC.

https://repositorio.cepal.org/bitstream/handle/11362/5164/S9400027_es.pdf?sequence=1&isAllowed=y

Reboredo, J., Ugando, M. (2015). Downside risks in the EU carbon and fossil fuel markets. *International Association for Mathematics and Computers in Simulation*, 10 (111), 17-35. (MATCOM). DOI: 10.1016 / j.matcom.2014.12.001

Reboredo, J., Ugando, M. (2014). US dollar exchange rate and food price dependence: Implications for portfolio risk management, *North American Journal of Economics and Finance*, 30, 72-89

Riaño, C., Gil, F., Ruiz J., Santamaría R. (2006), The role of liquidity in the relative valuation of new shares with differences in economic rights, *Spanish Journal of Finance and Accounting / Revista Española de Financing and Accounting*, 35 (132), 817-836

Ross, S. Jordan, B. Westerfield, R. (2012), *Foundations of Corporate Finance*, McGraw Hill

Ugando, M., Sabando, A., Zapata, A., Villalón, A., Sabando, B. (2019). Financial modeling and forecasts of external funds required in the context of SMEs in Santo Domingo De Los Tsáchilas, Ecuador case. *Synapse, Research Journal of the EAM University Institution*, 11 (2), 65-78

Ugando, M., Sabando, A., Miranda, R., Andrade, Y. (2019). Administration, management and modeling of accounts receivable policies in SMEs. Santo Domingo case. *MKT Discover Magazine, Special Edition*, 97-109

Ugando, M. (2018). Financial Management in SMEs: Financing Policies (debt - equity) and their impact on financial economic activity in Ecuador. *Memoirs*, 1 (1), 124-138

Ugando Peñate, M., Villalón Peñate, A., Sabando García, Ángel R., Celi Pinza, DM, Pilay Toala, FS, & Racines Cabrera, A. del P. (2021). Financial modeling applied in companies in the manufacturing sector in the city of Santo Domingo de los Tsáchilas, Ecuador. *Magazine of the University of Zulia*, 12 (34), 8-28.

Valladares, C., Sánchez, K., Ugando, M., Sabando, A., & Villalón, A. (2021). Management of working capital and its effect on profitability for the group of companies in the Ecuadorian manufacturing sector. *South Florida Journal Development*. Miami, v. 2, (2), apr./jun.p.2082-2101. <https://doi.org/10.46932/sfjdv2n2-075> .