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Study of share price variations of publicly traded football clubs

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Paraules clau del treball:
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Summary of the work submitted

The Stock Exchange Market is very dynamic due to the different events that occur constantly around the world. Such events may have a very close correlation with the company listed on the Stock Exchange Market. In this work, there is going to be made an analysis of football teams which are negotiated publicly.

This study involves analysing for football teams, from four different countries, and trying to see those events that most volatility creates in the prices. For doing so, first, a fundamental analysis is carried out which consists in linking these events with the price variations they cause. These events are then compared within the Stock Market. At last, a technical analysis is performed using different patterns and indicators.

Finally, from each football team various conclusions have been drawn regarding the hierarchy of events that affect the club's share prices more, and also, it has been predicted what the next movements within the Securities Market could be for these teams.

Resumen del trabajo presentado

El Mercado de Valores es muy dinámico debido a los diferentes acontecimientos que ocurren constantemente en todo el mundo. Dichos acontecimientos pueden tener una correlación muy estrecha con la compañía que cotiza en el Mercado de Valores. Es por ello que, en este trabajo, se ha procedido a realizar un análisis del mercado bursátil en relación a los equipos de fútbol que se negocian públicamente.

El presente estudio consiste en analizar cuatro equipos de fútbol, de cuatro países diferentes, y localizar aquellos eventos que más afectan a la volatilidad de los clubes. Para ello, en primer lugar, se realiza un análisis fundamental que consiste en relacionar dichos eventos con las variaciones de precios que ocasionan. Posteriormente, se comparan dichos eventos con los movimientos dentro del Mercado de Valores. Finalmente, se realiza un análisis técnico utilizando diferentes patrones e indicadores.

Por último, de cada equipo se han obtenido diversas conclusiones en relación con la jerarquía de eventos o acontecimientos que afectan más a los precios de las acciones del club, y también, se ha predicho cuáles podrían ser los próximos movimientos dentro del Mercado de Valores para estos equipos.

Introduction of the work submitted

The Stock Exchange Market constantly evolves in different directions and behind every movement in price there is a reason why it's moving that way. During my academic career we almost haven't studied anything about what is behind every movement in the share prices of a company. This concern to know why stock prices rise or decrease alongside my passion for football have led me to conduct this research.

This research aims to know which external factors may affect a football team's share price and how does it affect to it. Personally, this research is going to help me a lot in relation to what I want to work on in the future and also to fill my previously mentioned concerns. This investigation can be very useful for investors who are interested in investing in football teams that are traded publicly, as in this work there will be a clear hierarchy of which events affects most the share prices of a football club.

To achieve this detailed hierarchy of the events that most affect the share prices of the football teams that are traded publicly, different analysis are going to be used. First of all, a fundamental analysis; in which different events will be compared with big movements that have happened at the same time and that can have a correlation between them. From this analysis a conclusion will be drawn explaining which events have created the biggest movements in the share prices of the football club.

Secondly, a technical analysis will be made; different indicators will be used such as Bollinger Bands, RSI and DEMA among others. Also, we will be looking at the supports and resistances of each share and finally, with the combination of indicators and geometrical figures a conclusion will be given about which direction the share price might evolve.

The main objective of this research is to have a clearer idea of how the financial market works, which are the factors that affect most a publicly traded football club and finally, try to predict which might be the new trend the share prices are going to follow after the big economical crash due to the Covid-19.

1. England: Premier League

1.1. Introduction.

In this section Manchester United Football Club, one of the biggest and historical football teams, will be analysed.

We will see when Manchester United decided to list on the stock exchange market, which impact it had on their economy and also how it has been evolving since then.

It is difficult to say why the shares of Manchester United have been going up or down, and that is why we are going to focus rather on a fundamental analysis and also a technical analysis instead of just looking how it has evolved in the market over time. In the technical analysis some techniques and patterns will be used, such as; trend lines, ABCD pattern, geometric figures, canals, resistances and supports among others.

It will be necessary to relate events that have occurred over time with the ups and downs of the price shares of Manchester United in the stock market. To achieve this an analyse needs to be done for knowing exactly when the prices went up or down and then we will need to look for which events occurred during that time period.

We will be focusing on different events that may affect Manchester United's share prices. As Elizabeth Díaz – specialist in football trade market – defends in her article, the most important events that affect the share prices are: (Díaz Zúñiga, 2019)

- Results on the field: good or bad results impact the spirits of the fans, but also the share prices. We will be analysing if finally, the investor is a fan of the club in which he/she is investing.
- Sport titles: it will be demonstrated that winning titles is a very important indicator for investors.
- Players: signing a valuable player or selling someone can have a significant impact on the added and real value of the club. Human factors, for example, a scandal of an important player may also affect the reputation of its player and as a consequence of the club.
- The brand: maybe television right, promotional items among others play an important role in addition to the capital injection and is reflected in its valuation within the market.

After these analyses there will be an order within the events that will demonstrate the importance of the different occurrences that occur in relation to Manchester United share prices. With this order it will be possible to see if it's more important

for the shareholders to win the Premier League rather than selling or buying a valuable player, for example.

Finally, the necessary conclusions will be drawn to give us an idea of what affects the Manchester United's share prices most.

1.2. The beginnings of Manchester United in the stock market.

As Elizabeth Díaz informs us,

“Manchester United's stock (NYSE: MANU) began to be traded in the stock market in 1991 on the London Stock Exchange. In 2005, when the entrepreneur Malcom Glazer acquired 75% of the shares, the club's shares left the stock market. In August 2012, the club's share went public again, this time, on the New York Stock Exchange, managing to place only 16,6 million securities at a price of 14\$, below the 16\$-20\$ range that Glazer wanted”. (Díaz Zúñiga, 2019)

Immediately, 10% of Manchester United was sold in the initial public offering (IPO), raising 233 million \$, a third less than hoped. (BBC, 2012)

1.3. How Manchester United's stock has evolved.

In this section a study of the evolution of Manchester United's stock will be made. The period that is going to be analyzed will go from the moment that the shares started to be traded on the New York Stock Exchange, the 10th of August 2012, until today.

As mentioned before, important movements in the stock market will be analyzed and compared with casual events that might have occurred during that certain period.

1.3.1. Fundamental analysis.

As mentioned in the introduction, and how IG defines:

“Fundamental analysis is a method used to evaluate the intrinsic value of an asset and to analyse factors that could influence its price in the future. This type of analysis is based on the assessment of assets based on external facts and influences, as well as financial statements and industrial trends.” (IG, n.d.)

In this analysis we will look at the peaks of the trend cycles of Manchester United shares. As we have said before, we will compare the most important moments of rise and fall in the stock market with the news that has emerged at the time.

First, we will see the hole chart, extracted from Macrotrends, that shows us the complete evolution of the share prices of Manchester United, from now called MANU. (Macrotrends, s.f.)

Chart 1. MANCHESTER UNITED HISTORICAL CHART



The chart from above shows us the evolution from 10th August 2012 until 24th February 2020. Since Manchester United's shares started to be traded, important movements have occurred. Some big movements will be analysed and will be related with different events.

As signalised in the graph, three big movements are going to be analysed. This three movements are going to be represented in a daily chart. This means that every candle stick is going to be equal to one full day. If the candle stick is green it means that there has been an increase in the price, and, on the other hand, if the candle stick is red, the price of the stock has decreased.

- **1st important movement:**

Chart 2. 1st important movement MANU



In this first important movement, that goes from 15/10/2012 until 08/02/2013, we see that during this four month there has been a constant increase in the market share prices.

In this period the minimum price was of 12.25 \$ (19/10/2012) and it reached a maximum price of 18.66 \$ (08/02/2013). This means that in only four months MANU share prices increased 6.41\$, or said in other words, in four months there has been an increase of 52.33% in the share prices.

The season began bad for MANU losing their first match against Everton and having a hard start in the Premier League which is reflected on the left of the chart where we see how the prices where decreasing because of the fear of the investors that it would be a bad season. After the hard start, from mid-November they won 18 consecutive games which is reflected in a constant increase in their market share price.

Investors throughout December realized that MANU had a chance of winning the Premier League, that they had a strong and competitive team and that they were seen with forces to compete in the Champions League because of the 'weak group' in which they were placed (Galatasaray, Braga, CFR Cluj and Manchester United). This positive thinking made stock prices increase in early 2013.

After being classified for the round of 16 in the Champions League they were drawn against Real Madrid. At that moment the market share prices reached the

maximum of 18.66\$ but after losing against Real Madrid the prices started to decrease, as we can see at the final of the chart above (13/02/2013). (Towle, 2013)

- **2nd important movement:**

Chart 3. 2nd important movement MANU



The second important movement in the history of MANU stock prices goes from 09/09/2015 until the 27/03/2015. It can be observed that during this specific period of time, since the 12/11/2015 (the first large green candlestick), there has been a constant decrease of MANU stock market prices during more than six months, going from 18,990\$ on the 12th November to 13,330\$ on the 22th of March.

This means that in only 6 months there has been a decrease of 29,81% in the MANU stock prices, which is equivalent to a diminution of 5,630\$ in the share prices.

The season in the Premier League began good for Manchester United, but as we can see in the next table, they had a bad streak of 7 consecutive game without winning, since the 7th of November until the 2nd of January, when they defeated with 2-1 Swansea City. This bad streak is clearly seen in the evolution of MANU stock prices.

Table 1. MANU results 15-16

Barclays Premier League Jornada XII; 7 de noviembre de 2015, 10:00 UTC-5	Manchester United 	2:0 (0:0)	 West Bromwich Albion	Old Trafford, Mánchester
Barclays Premier League Jornada XIII; 21 de noviembre de 2015, 10:00 UTC-5	Watford 	1:2 (0:1)	 Manchester United	Vicarage Road, Watford
Barclays Premier League Jornada XIV; 28 de noviembre de 2015, 10:00 UTC-5	Leicester City 	1:1 (1:1)	 Manchester United	King Power Stadium, Leicester
Barclays Premier League Jornada XV; 5 de diciembre de 2015, 10:00 UTC-5	Manchester United 	0:0 (0:0)	 West Ham United	Old Trafford, Mánchester
Barclays Premier League Jornada XVI; 12 de diciembre de 2015, 10:00 UTC-5	Bournemouth 	2:1 (1:1)	 Manchester United	Dean Court, Bournemouth
Barclays Premier League Jornada XVII; 19 de diciembre de 2015, 10:00 UTC-5	Manchester United 	1:2 (0:1)	 Norwich City	Old Trafford, Mánchester
Barclays Premier League Jornada XVIII; 26 de diciembre de 2015, 10:00 UTC-5	Stoke City 	2:0 (2:0)	 Manchester United	Britannia Stadium, Stoke-on-Trent
Barclays Premier League Jornada XIX; 29 de diciembre de 2015, 10:00 UTC-5	Manchester United 	0:0 (0:0)	 Chelsea	Old Trafford, Mánchester
Barclays Premier League Jornada XX; 2 de enero de 2016, 10:00 UTC-5	Manchester United 	2:1 (0:0)	 Swansea City	Old Trafford, Mánchester

Source: Premier League 15-16

During the month of February, we observe a little increase in the share prices because they classified for the quarter finals for the FA CUP, but after a few weeks the early elimination of UEFA against Liverpool caused the value of the shares to fall further to 13.33\$. (Premier League, 2016)

- **3rd important movement:**

Chart 4. 3rd important movement MANU



Source: MacroTrends

Following the evolution of the graphic above, it's observed that from the period going from 23/07/2018 until 09/12/2018 there has been a lot of differences in the share prices.



On the 31st of August, MANU stock prices reached their maximum in history, having each stock a value of 26,200\$. As it's observed in the graphic, during the month of August there has been almost a constant increase in the market share price, going from 20,75\$ on the 6th of August until 26,20\$ on the 31st of August. In other words, in nearly one month there has been an increase of 26,27% in the price (increase of 5,45\$). As it can be observed in the next table, this increasement is not due the results they had during this month in the Premier League, in which they lost 2 of 3 matches:

Table 2. MANU results 18-19



Monday 27 August 2018

Man Utd  0 | 3  Spurs

Sunday 19 August 2018

Brighton  3 | 2  Man Utd

Friday 10 August 2018

Man Utd  2 | 1  Leicester

Source: <https://www.premierleague.com/clubs/12/Manchester-United/results?co=1&se=210>

One of the main reasons because the market share price increased is because Manchester United reinforced with good players their team during the summer market They spent a total of 82,70 million € and that became a big hope for investors for a successful season.

With the optimism that was at the beginning of the season and after seeing how Manchester United started the season, the market share prices started to decrease. After only 3 months of being at the maximum value price of the MANU stocks, the prices decreased from 26,2\$ to 17,275\$.

The main reasons of this decrease are that they fell eliminated from the Carabao Cup on the 25 September against a second division team (Derby County) and also because on the 18th of December 2018, Jose´s Mourinho team had only won 7 games of 17 football matches. They stopped this terrible beginning and also the decrease on the market stock prices with the destitution of Jose Mourinho after losing 3-1 against Liverpool. (Premier League, s.f.)

1.3.2. Technical analysis.

As defined in the introduction, different technicism are going to be used in order to elaborate a completely technical analysis.

This analysis will be focused on a long-term period. The graphic that is going to be studied will be only one graphic that provides the entire evolution of the stock market price of MANU since they started to be traded on the New York Stock Exchange, in August 2012.

Chart 5. Technical analysis MANU



Source: Macrotrends (edited by me)

As it can be seen above, during the last 8 years, in the evolution of the market share prices of MANU there has been a clear price range that has been oscillating between 14,60\$ and 19,970\$. This range of prices is shown in the graphic with the blue rectangle. This range of price can also help us to observe which are the main resistance and support of the MANU´s shares.

The main support during the evolution of MANU´s shares has been more less around the price of 14,60\$. This means that several times when the prices decreased more less until the level of 14,60\$ there has been a rebound in the

support that has raised the share prices of Manchester united. These rebounds are shown with a green circle (6) in the graphic above.

The opposite happens with the main resistance of MANU's shares. When the price increases more less until 19,970\$ than it tends to decrease again. These rebounds down are shown with a red square in the graphic above (5). Here, the thing is that when the price consolidates above the resistance of 19,970\$, this resistance turns over into a support for the MANU's shares. This is what happened from the 5th of July of 2018 until the 22th of November of 2018:

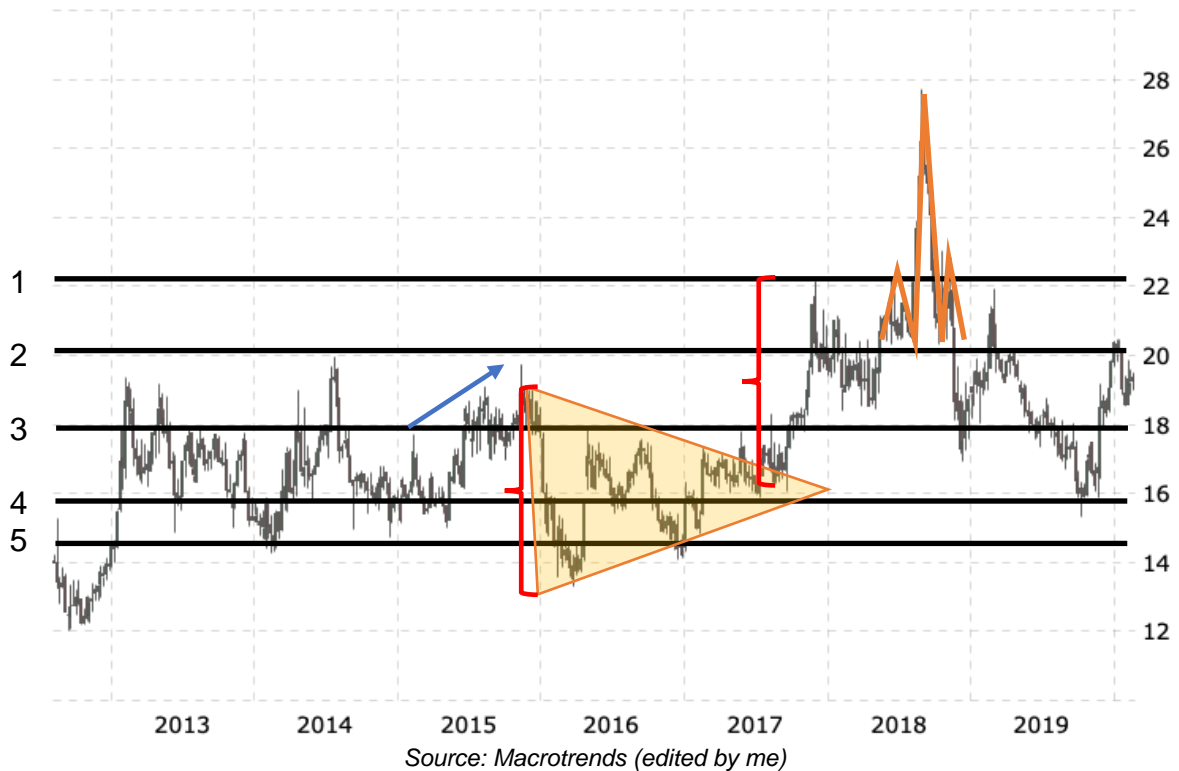
Chart 6. Technical analysis MANU



As it's shown with a black line in the graphic above, once the price was consolidated above the main resistance of 19,970\$, this resistance became an important support for the next 6 months until the last week of November when the price broke the support and consolidated below which made it a resistance again.

Now, going back to the graphic in which is seen the entire evolution of the shares, a more detailed technical analysis will be made. Different levels of resistance and support will be shown, including different channels and different patterns that may guide us to a prediction of how the shares are going to evolve.

Chart 7. Technical analysis MANU



The supports and resistance drawn on the graphic depends on the price market at a current time:

- | | | | | | |
|-------------------------|---|---------|----------------------|---|------------|
| 1. If $P > 22\$$ | → | Support | If $22\$ > P > 20\$$ | → | Resistance |
| 2. If $22\$ > P > 20\$$ | → | Support | If $20\$ > P > 18\$$ | → | Resistance |
| 3. If $20\$ > P > 18\$$ | → | Support | If $18\$ > P > 16\$$ | → | Resistance |
| 4. If $18\$ > P > 16\$$ | → | Support | If $16\$ > P > 14\$$ | → | Resistance |
| 5. If $16\$ > P > 14\$$ | → | Support | If $P < 14\$$ | → | Resistance |

The triangle that started to get form from middle´s of 2015 and ended its form at the beggning of 2017 shows us that it was quite predictable that there would be an increase in the market share prices if we look at the theory of the Triangle Form.

This theory explains that if before the triangle was formed there was an uptrend in the prices (blue arrow), after the trend has followed at least half of the triangle and then the trend breaks the triangle upwards, there would be a high probability that there would be a price growth more less equal to the width of the triangle (red bracket).

Finally, another pattern that can be observed is the shoulder-head-shoulder that was created during 2018 when the price reached its all-time high. Normally when this pattern is created, at the moment that the last shoulder is drawn, once the price starts to decrease, the price tends to drop more or less the length of what we have called head.

1.4. Events related to major movements within the stock market.

There are several events that are directly related to different movements within the stock market.

On one hand, as analysed in the fundamental analysis, the first important movement in the stock share prices became because MANU had a very competitive team and in November, they won 18 consecutive games plus their classification in the Champions League and the good luck of playing against less powerful teams in the first round. This made the investors invest more in the MANU's shares because they thought it would be a good season for them.

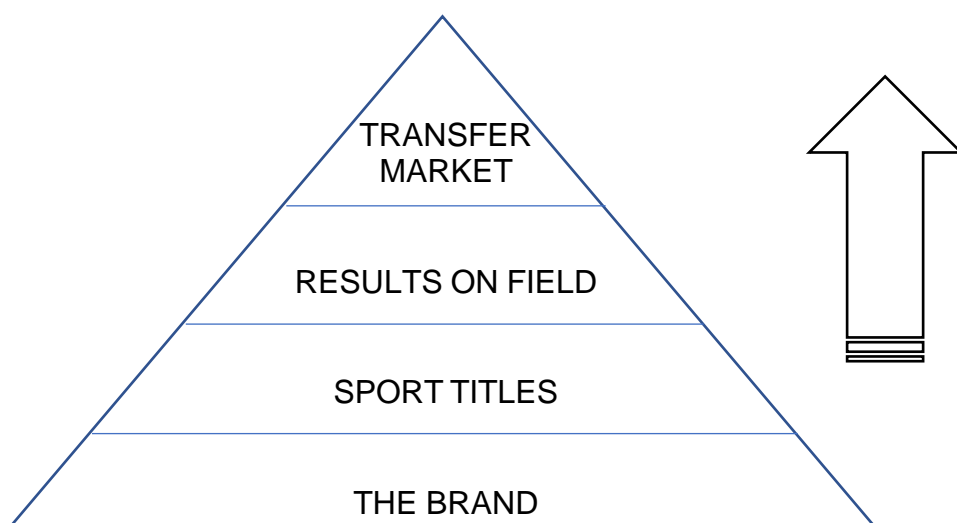
On the other hand, bad results affect also negatively in the MANU market share prices. Bad results have even a greater effect than positive results, the reason is that investors doesn't like to speculate when things are going moving in a bad situation. Investing is very nice when everything goes like it has to go, but with a slightly unstable situation the investors prefer to take out their money.

Other important events that have influenced in the market share prices are the classification for the FA Cup and specially how Manchester United does it in the transfer market. It's observed in the 3rd big movement that they started spending almost 83 million euros which was seen with very good eyes for the investors.

1.5. Hierarchy of influences on Manchester United's stock.

The events that have occurred since Manchester United went on the Stock Market in 2012 can be classified according to their level of importance in relation to the price movements of the MANU's shares.

For MANU's investors, in line with what we have analysed, the order of the most important events that occurs in relation with the prices of Manchester United's stock market is:



Source: Created by me

1.6. Conclusions.

After all the above information, it is concluded that since Manchester United went out on the New York stock exchange market, it has been evolving more or less with a steady growth, pointing out that in the long term it has always maintained an uptrend, going from a price of 12,25\$ in August 2012 until 19,970\$ in February 2020, having an increase of 7,72\$ in the total price along the time, which is equal to an increase of 63,02% in the value of the MANU's shares in almost 8 years.

Going on with the conclusion, after analysing the fundamental analysis of the evolution of Manchester United share prices and comparing them with different events that have occurred along the years, a correlation is observed between some movements in the prices and the events that have taken place in a specific time.

As Elizabeth Díaz said: ``the most important events that affects the share prices are results on the field, the branch, sport titles and players´´. As analysed before, Manchester United investors focus on how the team is doing and what is happening related with the team. These events can be classified in a hierarchy of influences on Manchester United's stock:

- 1) The biggest movements in the share prices happened when Manchester United did some big moves in the transfer market, buying new players and selling others. The investors look very close at every movement the club does in the transfer market.
- 2) The second most important fact that affects MANU's stock prices are obviously how they are doing it in the season, which results they obtain and if they get classified for different tournaments, such as the Champions League or FA Cup among others.
- 3) Finally, it's difficult to see how the titles affects the prices of Manchester united because they haven't won a title in the last years. That's why, along with the brand are the events that have the least correlation with the evolution of the price shares.

In conclusion, there have been factors that have impacted more and others that have had less impact on the evolution of Manchester United prices in the financial markets. But, looking at long-term data, even if it has had a good or a bad season, the price of MANU's shares have been rising steadily.

2. Italy: Serie A

2.1. Introduction.

Juventus Football Club is one of the three teams of the Serie A that are traded on the stock exchange market of Milan, the other two teams are Lazio and Roma. As defined in the official webpage of Borsa Italiana:

“Juventus Football Club S.p.A. is one of the prominent professional football clubs internationally, boasting a fan potential of approximately 12 million in Italy.

Juventus' entire winning track-record is the richest among all Italian football clubs, with 36 Italian Championships, 13 Italian Cups and 7 Italian Super Cups domestically, and a number of international trophies, i.e. 2 Champions Leagues, 2 Intercontinental Cups, 2 European Super Cups, 3 U.E.F.A. Cups, and 1 Cup Winners' Cup.

Sporting achievements have greatly contributed to the Company's reputation and prestige and Juventus' very name elicits perceptions of success, professionalism and tradition. The Company has successfully supplemented its core competitive sporting activities with a comprehensive effort to exploit its corporate name, which has become one of the world's best known and most popular brands, achieving significant economic results.” (Borsa Italiana, 2020)

In this section, the beginnings of Juventus in the stock market, the evolution of the share prices and different events related with the movements in the market will be analysed.

Two main methods will be used to analyse this Juventus shares in the stock market:

- 1) Fundamental analysis: in which is going to be analysed the different events that may affect the movement of the share prices. These events, as explained before, mainly are going to be: the results of the team, the classification for different tournaments, titles that they have won and specially, in this case, the transfer market will play a very important role in the movement of the share prices.
- 2) Technical analysis: just looking at the evolution of the share price, an analysis will be done focusing on the main patterns, resistances and supports that may cause a change in the prices because of speculation with technical methods.

Finally, there will be a clear conclusion explaining the hierarchy of the events that affects Juventus share prices and which way the share price can go during the next months.

2.2. The beginnings of Juventus in the stock market.

Before Juventus stock were going out on the exchange market, on the grey market, which is an unofficial market that serves to test the acceptance that a company's IPO will have, the shares were paid at 3.45€ compared to 3.70€ (-6,35%) to which it was going to be released the next day, the 20th of December of 2001, when it finally went out officially on the Exchange Market of Milan. (CincoDias, 2001)

This means, that before going out on the market, the family Agnelli, known as the proprietaries of FIAT and also having more than 50% of Juventus FC, were already losing 0.25€ of each share they were going to put on the market.

The positive thing was that small investors were very enthusiastic with the offer from Juventus. The demand doubled supply and the main reason for this high demand is because those small investors are loyal fans of one of Italy's historic clubs, Juventus. As a fact, the Juventus fans are one of the most loyal club fans of all football clubs.

2.3. How Juventus stock has evolved.

In this section a study of the evolution of Juventus stock will be made. The period that is going to be analysed will go from the moment that the shares started to be traded on the Borsa Italiana, the 20th of December 2001, until today.

As mentioned before, important movements in the stock market will be analysed and compared with casual events that might have occurred during that certain period.

As regards the shareholding of Juventus, it's very important to know how the shares are distributed:

“The shares belong 60% to Exor NV of the Agnelli family, 7.5% to an investment firm based in Libya and 32.5% to other types of minority shareholders.” (Estrategia Bolsa, s.f.)

2.3.1. Fundamental analysis

As its already mentioned before, for doing correctly the fundamental analysis, it's needed a lot of information of events that relates in some way the movement of the share prices and the facts that may have occurred.

In the process of doing the fundamental analysis of Juventus FC, it will be very important to compare all information we have related with the club since they started to be on the Stock Exchange of Milan. Once again, we will look at the

peaks of the trend cycles of Juventus shares and compare them with events that have occurred during that certain period of time.

For seeing better and more detailed the whole evolution of Juventus share prices since they went on the stock market, 2 graphics are going to be shown: the first one goes from the day that Juventus went out on the Stock exchange, 20th December 2001, until December 2010 and the second one goes from January 2011 until March 2020.

Chart 8. JUVENTUS HISTORICAL CHART



Source: Trader Degiro (edited by me)

Chart 9. JUVENTUS HISTORICAL CHART



Source: Trader Degiro (edited by me)

The two charts above are represented with monthly candlesticks. This means that every candle we see above is an evolution of the price in one entire month. It's put monthly because as it is a very long time that needs to be analysed it would be very difficult to see a graph with daily candlesticks.

In both graphs, and also in the following graphs, the blue candlestick means that there has been a decrease in the share price, while a white candlestick means an increase.

As signaled in the graphs above, four different big movements in the Juventus share prices are going to be studied. By taking a general view of the price evolution, it's observed that three of the four big movements have been a decrease in the prices, and only one big increase movement. It's also observed that for 5 years, since 2012 until 2017, the price range has followed a straight line without hardly changing the value of the stock.

- **1st important movement:**

Chart 10. 1st important movement JUVE



Source: Trader Degiro

Above is observed the first considerable movement in Juventus stock prices. The graphic above is seen as a weekly chart, that means that every candlestick is equal to 1 week. The first important change in the price arose the first year the company was traded in the stock market. This movement goes from 15th April 2002, where the price recorded its all-time high 3,604€, until 10th February 2003 when the price had decreased to 1,223€.

This show us that it was a very bad beginning for the Juventus in the stock market, losing a total of 66,06% in the value of the share price, or said in other words, losing 2,381€ of each share.

The relation between the events that occurred during this period and the decrease in the price shares are explained in the paper CincoDías:

“Despite also winning this year (2002) the title of the Italian League and reaching the final of the European competition, Juventus - on whose board of directors sits Al Saadi Gaddafi, 28, son of the Libyan colonel, representing Libyan Arab Fore Investment, the second largest shareholder of the team after IFI, with 7.50% of the capital - does not go through its economic best. During the first nine months of its 2002/2003 financial year, the club recorded losses of EUR 11.4 million, compared to 22.3 million profits recorded in the same period of the previous year. These are negative data that, together with the defeat in the European final, have lowered the enthusiastic goals that Juventus had set out to do this year.” (CincoDías, 2003)

So it can be concluded that the first big movement in the shares of Juventus became because of economic loses in the club, plus the bad economic moment of the 2nd largest shareholder of the club and finally the snap of the decline came because they loosed the Europe League final against Milan which created more an emotional movement of the investors than a reasonable action of them.

- **2nd important movement:**

Since the first important movement between 2002 and 2003, the market share prices of Juventus were slowly falling steadily. The next important movement in the market surged almost ten years later, in the season 2011-2012.

By observing the chart below, it's observed that in this 10 year the price of the shares has decreased from 3,70€ to something less than 1€. As said before, from 2003-2011 the prices were decreasing slowly but suddenly a big movement happened in the market going from the 12th of September 2011, when one share costed 0,934€, until the 16th of January 2012 when its value was 0,154€.

This decrease, of 0,78€ in only 124 days can be misleading by the fact that “it's a question of cents” what has been lost in just 4 months. But by doing calculation, this huge decrease in the price means a loss of value of 83,51% of the share, which means that if someone invested 10.000€ before this movement, in only 4 months that person would have loosed more than 8.000€.

Chart 11. 2nd important movement JUVE



Source: Trader Degiro (edited by me)

As said before, the 2nd largest shareholder was Al Saadi Gaddafi, son of Libyan president Al Saidi Gafi. Whether it's coincidence or not, at the end of 2011, the fall of the Gaddafi regime was taken place. This event can be related with the decrease in the share prices which started in September but had a very big movement in only 1 week in December (signalized on the chart). (Sanz, 2017)

Nothing had to do with this decrease what was happening on the field, in the season 2011-2012 Juventus won the Serie A without losing a match. It became the first Italian team in history to win a league without losing a game.

Table 3. Clasification JUVENTUS 11-12

Pos	Team	[V·T·E]	Pld	W	D	L	GF	GA	GD	Pts	Qualification or relegation
1	Juventus (C)		38	23	15	0	68	20	+48	84	2012–13 UEFA Champions League Group stage
2	Milan		38	24	8	6	74	33	+41	80	
3	Udinese		38	18	10	10	52	35	+17	64	2012–13 UEFA Champions League play-off round
4	Lazio		38	18	8	12	56	47	+9	62	2012–13 UEFA Europa League Play-off round

Source: <http://www.legaseriea.it/en/>

- **3rd and 4th important movement:**

Chart 12. 3rd and 4th important movement JUVE



Source: Trader Degiro (edited by me)

At the weekly chart above its observed the 3rd and 4th big movements that Juventus has suffered in the stock market.

The 3rd movement was the first big bullish move in their history, going from 0,849€ each share on the 6th of August until 1,595€ on the 17th of September. This means that in more or less 40 days, the share price increased 87,86%. How was this movement possible after having a very constant range of share prices for the last years? The answer is very easy, and it has a name and a surname, Cristiano Ronaldo.

In the summer transfer market of 2018, there were speculations that Cristiano Ronaldo was leaving Real Madrid and the team which was best positioned for buying Cristiano Ronaldo was Juventus. So, Juventus went into a bullish market for a few weeks because investors saw an opportunity investing in Juventus because if they finally were going to buy Cristiano Ronaldo they would increase a lot their prestige as a football club and they would also have bigger chance for winning further competitions.

As its seen, just after the transfer was made official, the share prices decreased almost to the value before speculation. As explained on the webpage Finance:

``Turin's Juventus shares today (24th September 2018) are traded at drops of around 6% on the Milan Stock Exchange, as investors are selling after the rise recorded in the last few weeks prior to the confirmation yesterday of Cristiano Ronaldo's signing. Investors are now applying the typical maxim of 'buy with the

rumor and sell with the news', that is, they are making cash whenever the arrival of the Luso star is already official." (Finanzas, 2018)

Another considerable movement happened in the last Champions Edition (2019) which is marked on the chart with a blue arrow. As explained in the newspaper El País Economía:

"The Italian football club Juventus fell on Wednesday 17.6% on the stock exchange and recorded their biggest drop since October 2013. The Milan Stock Exchange punished the team led by Cristiano Ronaldo after his Tuesday's elimination in the Champions League against Dutch Ajax. La Vecchia Signora's stock closed at 1.39 euros." (CincoDías, 2019)

The case of Ajax will be studied and analysed in the next chapter.

Finally, the 4th biggest movement happened last month, in March 2020 when the Covid-19 (Corona Virus) pandemic started in Italy. In only one month, going from 10th February 2020 when the share price was 1,248€ until the 9th of March when it reached the minimum price in the last 18 months of 0,608€, the shares have fallen 52,28%.

An article of Invertia on the 12 of March explains that: "Juventus sink 18% into stock market after Rugani coronavirus contagion. The drop is extended to 53% of the Juve's stock market value if it starts counting on the day the coronavirus arrived in Italy". (Puerto, 2020)

2.3.2. Technical analysis

For doing the technical analysis, a study will be done of the movements in the share prices for the last decade. As explained in other sections, different techniques will be used, such as support and resistance levels, ABCD patterns among others.

Below a chart can be observed in which every candle stick is equal to a monthly period. As it's observable, this graphic goes from the 3rd of April 2010 until the 3rd of April 2020. As already mentioned before in this section, it's observable a very constant movement in Juventus share prices for 5 years, from 2012 to 2017, in which the price had barely changed.

Chart 13. Technical analysis JUVE



Source: Trader Degiro (edited by me)

As observed in the chart above, there have been 3 main supports and resistance during the last decade. The most important support has been at the price of 0,16€-0,20€. This support hasn't never been broken and it supported the price for 5 years long (period 2012-2017). During this period, the resistance of the share prices was about 0,52€. In 2017, once the price broke the resistance and later decreased again until touching the resistance and then went up again, it was confirming us that our previous resistance was becoming a new support.

So mid-2017, we had a support on 0,52€ and another resistance on more or less 0,78€ (which was a support before 2012). After testing twice this resistance, finally, in 2018, when investors speculated with Cristiano's Ronaldo arrival, the price broke the resistance turning it into a support. At the same time, a triangle was being formed. This triangle could have shown us that by not breaking the geometric shape at least until the movement passed half the shape, and coming from a fall, it was likely that when the geometric shape was broken there would be a decreasing movement in the price shares, what is exactly what happened in mid-2019.

On the graph below, which is the same one as before without the triangle, another pattern can be observed, the ABCD Pattern:

- ABCD Pattern: the pattern which is observed on the chart below is called an ABCD Sell Pattern. It helps identify trading opportunities in any market, on any timeframe and in any market condition. The highest probability trade entry is at the completion of the pattern (point D). For completing this pattern, as explained in the introduction, point A has to be lower than point C, and point B lower than point D. When we arrive at point D it's a good moment to sell.

Chart 14. Technical analysis JUVE



Source: Trader Degiro (edited by me)

This two patterns, the geometric triangle and the ABCD pattern, coinciding at the same period of time, would have been a very good moment to sell because this two technical analysis shows us that there is a greater probability that our prognosis will be met, which, as you can see, did.

To know more clearly the forecast of now, looking at the technical analysis, we would have to wait to see if the price is going to break what has been our support for the last year and a half or if it bounces. In case of bouncing it would be a good opportunity to buy. Considering the current situation, which has been explained in the fundamental analysis, it is likely to break our support and turn it back into a resistance.

2.4. Events related to major movements within the stock market.

As analysed in the fundamental analysis, there are different events that in one way or other way have affected the Juventus shares. This case is a little bit special, because for the investors winning the Serie A League doesn't have any affect anymore in the stock exchange because they have been winning it for the last 8 years consecutively and they already count on it that next season Juventus will win again the League. What does have a big impact on the share prices are the results they obtain in the Champions League, big movements in the market have been created due to the final champions league against FC Barcelona or the defeat from last edition against Ajax FC.

It's been observed other events that affect the share prices which normally are not so important in other football clubs who are publicly traded; the political aspect

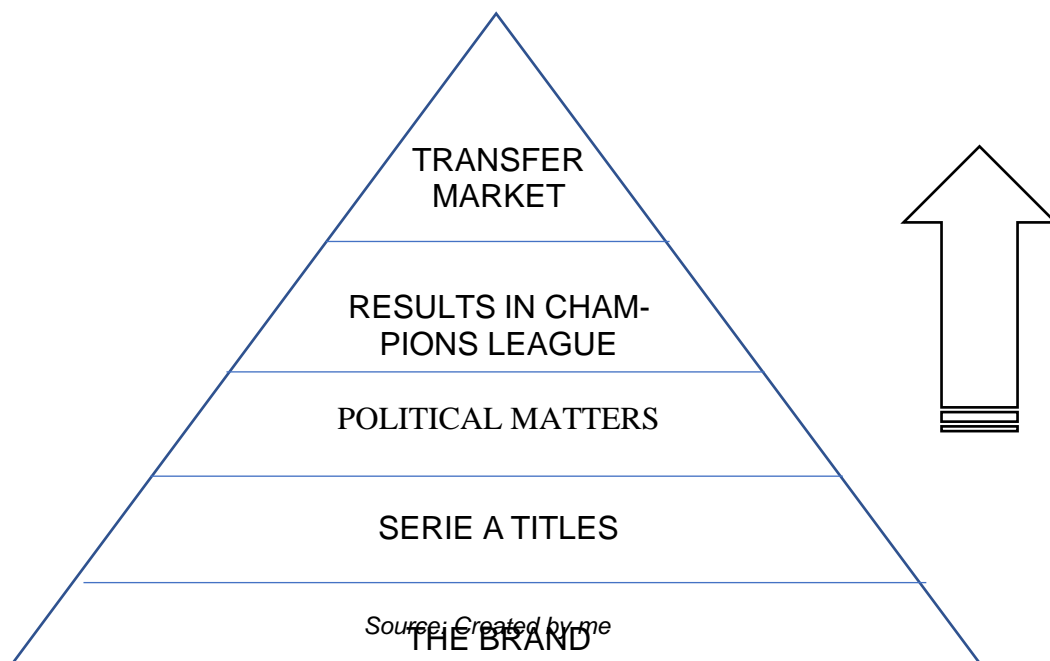
of the shareholders. As seen in the fundamental analysis, the first year Juventus went on the stock market, and one of their main shareholders, Al Saadi Gaddafi, son of the Libyan colonel, went through a bad economic moment and added to the fall of the Gaddafi regime caused the share price to fall quite a bit.

Finally, among other events related to major movements within the stock market, there is the importance of the transfer market. The investors look with a magnifying glass every movement in the transfer market. Investors approval or disapproval of what the directive does in the transfer market is clearly reflected in the share prices.

2.5. Hierarchy of influences on Juventus stock.

The events that have occurred since Juventus went on the Stock Market in December 2001 can be classified according to their level of importance in relation to the price movements of the Juventus shares.

For Juventus investors, in line with what we have analysed, the order of the most important events that occurs in relation with the prices of Juventus stock market is:



2.6. Conclusions

With the fundamental and technical analysis that we have done in this chapter; different conclusions can be drawn.

First of all, it's observable that when Juventus went on stock market in December 2001, they started at too high price, a price of 3,70€ which never has been so high again. The first years on the stock market were difficult for the club, the price was clearly in a decrease tendency until almost 2012. From this year, the club

found stability in the share prices for 5 years long. This stability was constructing the base of a new era in the Juventus share prices.

Secondly, from 2017, Juventus has been doing great things on the field and also outside the field; they have been very active on the transfer market, they have built a very good and prestigious brand among others. The good management of the club has been traduced into the market share prices with a growing trend for more than 3 years already.

This growing trend started because of different events that were related directly to the stock share prices. As seen before, Juventus investors focus on how the team is doing and what is happening related with the team. These events can be classified in a hierarchy of influences on Juventus stock:

- 1) The biggest movements in the share prices happened when Juventus did some big moves in the transfer market, buying new players and selling others. The investors look very close at every movement the club does in the transfer market.
- 2) The second most important fact that affects Juventus stock prices are how they are doing it in the Champions League, which results they obtain and which probability they think they have for winning the tournament.

Finally, the hole stock market is going currently through a difficult situation due to the Covid-19. This pandemic has stopped almost the entire world, including the Serie A. It has affected in financial terms all the clubs, obviously including Juventus. Now it's very unpredictable what is exactly going to happen, how the market will react after a big decrease in the share prices of Juventus. For knowing what is going to happen in the future, investors will have to wait to see how this pandemic is evolving and until when the football matches are cancelled.

3. Holland: Eredivisie

3.1. Introduction

"Founded on March 18, 1900 AFC Ajax is one of the largest and most storied clubs in European football. After their founding and acceptance into Dutch Football Ajax spent ten seasons in the country's second division before earning promotion for the 1911 season. The move to the first division did not last long though as just three seasons later the club was relegated for the first and only time in its illustrious history." (Ajax, s.f.)

The club is the most awarded of Dutch football having won 34 leagues, 19 cups and 9 super cups, totaling 62 national titles and holding the record for trophies won in the first two. According to a statistical study conducted by IFFHS in 2009, it was the seventh most successful European team of the 20th century.

Table 4. Titles AFC AJAX

Titel	Year
National champions:	1918, 1919, 1931, 1932, 1934, 1937, 1939, 1947, 1957, 1960, 1966, 1967, 1968, 1970, 1972, 1973, 1977, 1979, 1980, 1982, 1983, 1985, 1990, 1994, 1995, 1996, 1998, 2002, 2004, 2011, 2012, 2013, 2014, 2019
Divisional champions First Class:	1918, 1919, 1921, 1927, 1928, 1930, 1931, 1932, 1934, 1935, 1936, 1937, 1939, 1946, 1947, 1950, 1952
National Cup winners:	1917, 1943, 1961, 1967, 1970, 1971, 1972, 1979, 1983, 1986, 1987, 1993, 1998, 1999, 2002, 2006, 2007, 2010
Intertoto	1962
Dutch Super Cup:	1993, 1994, 1995, 2002, 2005, 2006, 2007, 2013
European Champions Cup/Champions League (from 1956):	1971, 1972, 1973, 1995
European Cup winners' Cup:	1987
UEFA Cup (from 1972):	1992
European Super Cup (from 1972)	1972, 1973, 1995
World cup (from 1930)	1972, 1995

Source: <https://english.ajax.nl/the-club/history.htm>

In this section we will see when Ajax decided to list on the stock exchange market, which impact it had on their economy and also how it has been evolving since then.

As already seen with Manchester United and Juventus, It is difficult to say why the shares of a football club have been going up or down, and that is why we are going to focus on:

- Fundamental analysis: in which is going to be analysed the different events that may affect the movement of the share prices. These events, as explained before, mainly are going to be: the results of the team, the classification for different tournaments and titles that they have won among others.
- Technical analysis: looking at the evolution of the share price, an analysis will be done focusing on the main patterns, resistances and supports that may cause a change in the prices because of speculation with technical methods.

Finally, and following with the method of the other chapters, a conclusion will be drawn in which there will be highlighted which are the most important events that affects the evolution of Ajax share prices and the chapter will be concluded with a prognostic of what may happen during the next months related to the share prices.

3.2. The beginnings of Ajax in the stock market.

Since 17 May 1998 the club is registered as a Naamloze vennootschap (N.V.) listed on the stock exchange Euronext Amsterdam. Ajax is the only Dutch club with an initial public offering (IPO).

Only a limited amount of the shares in AFC Ajax NV are publicly traded on the Stock Market. The AFC Ajax Association retain 73% of the shares. The following majority shareholders are Insurance Company Delta Lloyd Group with 9.95%, followed by former stockbroker Adri Strating with 8.65%. (Ajax, s.f.).

AFC Ajax was able to go on the stock exchange market because at the end of 1960's and beginnings of 1970's Ajax had created a very powerful team with one leader: Johan Crujff. he was the one who made ajax compete in the European leagues against the best clubs of those times. This was giving a great prestige to the club that later would be of great help to be able to make the leap of going out to trade on the stock market

3.3. How Ajax stock has evolved

In this section an analysis is going to be made of one of the greatest historical clubs of Europe. It will be observed how were the beginnings of AFC Ajax in the stock exchange of Amsterdam, through what they have gone for already 3 decades and why there have been changes in Ajax's stock prices.

For doing the analysis, as in the other sections, there will be made a fundamental analysis in which is going to be related some events with movements that happened in the stock market at the same time. The other part of the analysis will

be a technical analysis, which is going to be similar as the Manchester United and Juventus ones but including some different indicators that will help us to understand better the movements from a technical point of view.

3.3.1. Fundamental analysis

For doing this type of analysis, it is very important that we compare as many information we have of events that have occurred since AFC Ajax went on stock market and compare them with the movement of the stock prices to see what events have had more effects on the share prices.

As is done with Manchester United and Juventus, we will look at the peaks of the trend cycles of AFC Ajax shares and compare them with events that have occurred during that certain period of time.

As said before, AFC Ajax is an historical European club, so since they went on the Amsterdam Stock Exchange Market in 1998, there have been many events that differ the share prices in the market. For analyse the different movement below you can observe the historical chart of Ajax, in which each candle stick is equal to a monthly period.

Chart 15. AFC AJAX HISTORICAL CHART



Source: <https://www.investing.com/equities/afc-ajax-chart> (edited by me)

In the historical AFC Ajax chart above, there are two different types of candlestick; green ones, which means an increase in the price for a period of one month and red ones, which means a decrease.

As it is observed during this section there is going to be an analysis of four big different movements inside the share prices of AFC Ajax. Two of the four important movements happened the first years Ajax went on the stock market, then for a period of almost 13 years, going from 2005 to 2018, the price range has been following a constant movement without any major up or down trend. This price range has been between 6,07€ and 10,56€ for these years.

Finally, the last two movements that are going to be analysed happened the last two years, going from 2018 to this month, April 2020.

- **1st important movement:**

Chart 16. 1st important movement AJAX



With the first chart expressed in daily candle sticks, it's observed clearly that the first big movement, like Juventus, was very bad in the stock exchange market, starting with a clear downtrend.

On the 11/05/1998, Ajax opened the Amsterdam exchange stock market with a value of each action of 14,75€. On the same day, the value of one share closed at 13,72€, and that was just the beginning of a downtrend that was going to take more than five years.

It's difficult to relate the events of 20 years ago with the movements in the share prices, but in the season of 1999-2000, Ajax was one of the favourites to win the Champions League. They passed the second round and the first round was against Mallorca, who was an "easy" rival to win. As you can see on the chart, some weeks before 2000, there was an optimistic environment within the investors and the price raised a little bit, but the worst thing still had to arrive. On the 25th of November 1999 Ajax lost 0 – 1 in their stadium against Mallorca, and two weeks after, the 9th of December, they lost 2 – 0 being eliminated from the UEFA CUP.

Table 5. UEFA AJAX 1999-2000

25 November 1999	Ajax 	0-1	 Mallorca
9 December 1999	Mallorca 	2-0	 Ajax

Source: https://en.wikipedia.org/wiki/2000-01_AFC_Ajax_season

This moment investors opened their eyes and saw that this Ajax wasn't the same team which had won so many things during the seventies. They started to get their money out of the stocks and the price decreased more and more.

During the next season, 2000-2001, they failed eliminated of the UEFA CUP in the 2nd round, even worse than the year before. This created panic among the investors who didn't trust any more in the philosophy of the best Dutch club.

This bad environment among the investors kept going on until the AFC Ajax shares reached their historical minimum on the 10th of March 2003, when the price of one share was 3,14€ reaching their minimum historical price. This means that in just under 4 years, the AFC Ajax share price decreased from 14,75€ to 3,14€ what is equal to a decrease in the price of 78,71%. This means that someone who invested 1475€ in 1998 had in 2003 only 314€ left.

- **2nd important movement:**

Since the AFC Ajax stock Price touched the historical bottom of 3,14€, a new trend was starting. After five years of having a downtrend now an uptrend was beginning that would take more or less two and a half years, until September of 2005.

In the season 2003-2004, Ajax won the Eredivisie (Dutch football competition). Investors saw that at the price that the shares were and that they had a lot of changes on winning the league, from April 2003 they started to reinvest their money after Ajax was already kicked out in the group phase of the Champions League.

The next season was a bad season for Ajax, they didn't win the Eredivisie, they didn't win the Johan Cruyff Cup and they were eliminated in the Champions league in the group phase, which was a very difficult group:

Table 6. Clasification UEFA AJAX 03-04

Team	Pld	W	D	L	GF	GA	GD	Pts
 Juventus	6	5	1	0	6	1	+5	16
 Bayern München	6	3	1	2	12	5	+7	10
 Ajax	6	1	1	4	6	10	-4	4
 Maccabi Tel Aviv	6	1	1	4	4	12	-8	4

Source: https://en.wikipedia.org/wiki/2004-05_AFC_Ajax_season

So how was it possible that the share prices of AFC Ajax were still increasing? As it's observed on the chart below, we see a clear uptrend in the prices of the shares while the results on the field of that season were terrible for them.

Chart 17. 2nd important movement AJAX



Comparing different events that occurred during this time of period, there is one important that is very related to many teams who are negotiated on the stock markets, and this concrete event is what is known as the transfer market. Ajax is very well known worldwide for the talented players they create from their football school, and one of those many professional players is Zlatan Ibrahimović, who had been playing for Ajax the last years before the season 2004-2005. In the summer market they sold their best player to Juventus for a very good price during that time plus other transfers they did what was seen with very good eyes for Ajax investors.

Table 7. Transfer Market AJAX 2004

Transfer				
 Jelle van Damme	Defender	9 June 2004	 Southampton	€2.9 million
 Petri Pasanen	Midfielder	20 July 2004	 Werder Bremen	€3.5 million
 Zlatan Ibrahimović	Forward	22 August 2004	 Juventus	€16 million

Source: https://en.wikipedia.org/wiki/2004-05_AFC_Ajax_season

The club generated a total income of 22,4 million euros and they only bought one player for 2,5 million euros. This was seen as a good income for the club which was reflected in an increase in buying the ajax shares which was traduced into an increase in the share prices.

- **3rd and 4th important movements:**

In this section there is going to be analysed the last two big movements together because between both movements less than a year has passed.

Chart 18. 3rd and 4th important movement AJAX



Source: <https://www.investing.com/equities/afc-ajax-chart> (edited by me)

After a period of almost 14 years in which the price range has been following more or less a constant movement keeping the share price between 6,07€ -

10,56€, 2019 would be an incredible season for the team and also for the investors. But as people say, everything that goes up fast, comes down faster.

We will start with the season 2018-2019 where the 3rd big movement in the share price of AFC Ajax took place. This season Ajax had new talented players coming from their young football school. The team seemed to be very competitive at the beginning of the season and it created some kind of optimistic atmosphere between the fans, the club itself and the investors. This atmosphere quickly changed into reality, when in the first fifteen matches they had won 13 games, tied 1 and lost another. This team was doing things very good on the field which was translated in an uptrend in the stock market. They were doing it good in the Eredivisie and also on the KNVB CUP (Dutch country cup), but this was something that wasn't a big surprise because during the last years they have been doing it good in that competitions.

The surprise came with the Champions League. They classified for the Champions' League group phase in which they had to fight for the first or second place. In their group there were powerful teams such as Bayern Munich, Benfica and AEK Athens. Finally, they classified as 2nd and went to the knockout phase in the champions league. With their spectacular way to play there was a very optimistic atmosphere, so the share prices were increasing but, when in the draw they were put against Real Madrid the environment changed among the investors and the share prices felled during a week more or less. The 5th of March 2019, Ajax beat 1 – 4 against Real Madrid. The price in one day grew from 15,4€ to 16,5€.

Continuing on their way through the Champions League, after winning against Juventus and going to the semi-final the share prices increased from 17,1€ on the 16th of April to 18,6€ the next day. As it's explained in the newspaper El Confidencial:

“The share price of Ajax Amsterdam recorded a diametrically opposed evolution after the triumph of the 'ajacied' set in the Field of Juventus that gives the Dutch their pass to the semi-finals of the top competition of the Old Continent 22 years after their last presence in the last knockout round of the tournament. Thus, Ajax securities, which began trading in 1998, were trading at all-time highs and reached 19.10 euros per share. In this season, the share price of the Dutch team has been revalued by 51% in the face of good results in the domestic and European competition, as well as by the prospect of closing several billionaire transfers of the members of their staff.” (El Confidencial, 2019)

Finally, they lost in a dramatic way in the semi-final against Tottenham which had a very bad impact on their share prices. As the newspaper Expansión tells us:

“The success or failure of investors in listed football clubs may depend on variables as unpredictable as a goal in the last minute of the match. Ajax Amsterdam stayed out of the long-awaited

Champions League final for the 95th minute goal of the second leg of the semi-finals against Tottenham. The shock over his dramatic elimination was even greater considering the 2-0 income with which he reached the break of yesterday's match. In addition, London's win in the first leg in London gave the Dutch club an advantage to achieve what would be their first Champions League final since 1996. Ajax's return from Amsterdam to the elite of European football had unleashed a spectacular rally in their price. This success, in turn, has triggered the ratings of his best footballers. The Dutch club's shares were about to triple its price over the past two years, to the point of recording all-time highs above 25 euros. The elimination 'in extremis' in the Champions League today shifts the shock to its shares, listed on the Amsterdam Stock Exchange. The Dutch club started the day with a 20% crash." (Expansion, 2019)

The 4th big movement is happening this season, 2019-2020. First of all, the soon elimination of AFC Ajax against Valencia in the Champions League affected negatively the share prices, falling 8% in the next opening of the Amsterdam Stock Exchange Market.

"Ajax's adventure in this edition of the Champions League is over and investor punishment came. The Dutch multi-champion dropped on Wednesday by 8% on the Amsterdam Stock Exchange following Tuesday's defeat to Valencia 0-1, a result that left him out of the Champions League in the group stage after being in the top two places, which qualify for the eighth round, in the previous five days. The stock exchanger's four-time champion of the European top men's soccer competition is the biggest since last May when it collapsed 20% after losing the semi-final of the last edition of the Champions League to English Tottenham at the last minute." (CincoDías, 2019)

Apart from the early elimination, the pandemic Covid-19 is affecting the entire planet, including the football world. The Eredivisie has been stopped and they don't know when they will be able to play the matches again. This, as analysed before with Juventus, is a very big problem for the teams because by not playing football matches, they don't have any income and they still have a lot of staff and players that need to be paid. This situation can bring AFC Ajax to a very difficult situation in which they will need to make very serious decisions that may affect the economic situation of the club.

3.3.2. Technical analysis

Leaving aside the fundamental analysis, now a technical analysis is going to be made of the historical chart of AFC Ajax. For doing this analysis we will be looking at the historical supports and resistances, also different patterns are going to be drowned and finally some indicators will be used in order to be able to predict

with more possibilities what is going to happen with the AFC Ajax price shares after this situation they are going through now.

Below a chart can be observed in which every candle stick is equal to a monthly period. As it's observable, this graphic goes from 1998 until April 2020. As already mentioned before in this section, it's observable a very constant movement in AFC Ajax share prices which is signalized with a purple rectangle. This is the constant price range we have mentioned earlier, which took 14 years to break the resistance, thus making it a new support. For a better understanding: if the price is between 10,14€ and 6,04€, the price support will be at 6,04€ and the price resistance will be at 10,14€. So, as it's observed on the chart, every time the price touched the support or resistance level there was a change in the trend going up if it touched the support and down if it touched the resistance. In 2018, the resistance was broken transforming it now into a new support for the price.

As explained also in the fundamental analysis, we can see that the period from 1999 – 2003 there was a clear downtrend and then came an uptrend for 2 years. It maintained for 14 years more or less the same price and in 2018 there became an uptrend for 1 year and now they are in a downtrend again.

Chart 19. Technical analysis Ajax



Going on with the next chart, which is a daily chart since 2018, when the price broke the resistance converting it into a new support. In this chart first of all in the

yellow rectangle we can see that the price is testing the new support. After testing it for 6 months, the uptrend starts that will take almost 2 years. The uptrend lines are also used as support and resistance levels, as it's observed every time the price touches the underline of the trend (support) it goes up again and vice versa.

On the evolution of the graph there is an indicator called DEMA (Double Exponential Moving Average) with the green line of period of 20 and the orange one with a period of 50. If the green line crosses over the orange line it's an indicator that an uptrend will start. The first indicator below the chart ADX (Average Directional Index) shows us the force the trend will have, if it's below 25 it means it will not be a strong trend so that means it will take a short period of time and it will change back to a downtrend. Now the strengths of the trend is 24,78 so it's not really sure if the next trend is going to be a strength or weak trend. Finally, with the 2nd indicator RSI (Relative Strength Index) shows us if the shares are overbought (more than 80) or oversold (less than 20). Now the RSI indicates us a level of 47,98. These two last indicators shows us that there is uncertainty in the market right now and the investors are not sure what is going to be the next move in the AFC Ajax share prices. For knowing the future movements, it will be necessary to wait until 2 of the 3 indicators shows us at least the same direction.

Chart 20. Technical analysis Ajax



Source: <https://www.investing.com/equities/afc-ajax-chart> (edited by me)

3.4. Events related to major movements within the stock market.

There are several events that are directly related to different movements within the stock market.

As analysed during the fundamental analysis, there are some events that can affect the share prices of AFC Ajax in the stock exchange market. As it is been studied, events such as winning the Eredivisie, or the Dutch Cup affects moderately the share prices because investors suppose already that Ajax have lots of changes each year to win these competitions.

Bigger movements within the stock market are related with what the club does in the Champions League, if they get classified and they pass the rounds it has a huge positive effect on the share prices, and vice versa, if they are kicked out quickly it has a big negative effect.

Finally, other event that affects all the clubs that are negotiated on the stock exchange market, and so, AFC Ajax too, is the transfer market. Every investor looks from very closely each movements the direction of the club is doing in the transfer market. Ajax is known as a football school club, this means that, they create good players without any cost and later a lot of them are sold for millions of euros. This is the main philosophy of the club and when a big team of Europe is interested in one of Ajax's players the investors follow the movements of the club on the transfer market from very closely.

3.5. Hierarchy of influences on AFC Ajax stock.

The events that have occurred since AFC Ajax went on the Stock Market in 1998 can be classified according to their level of importance in relation to the price movements of the Ajax shares.

For Ajax investors, in line with what we have analysed during this section, the order of the most important events that occurs in relation with the prices of Ajax's stock market is:



Source: Created by me

3.6. Conclusion

After doing the fundamental and technical analysis some conclusions can be drawn of how the price shares have evolved since AFC Ajax went on the stock exchange market in 1998.

The club has had a difficult beginning on the stock market, the same happened with Manchester United and Juventus. After five years of being in a downtrend finally, in 2003 they changed the direction of the trend. As already mentioned several times, AFC Ajax shares have had a period of 14 years in which the price range was very constant, between 6-10€ more or less. From 2018 AFC Ajax shares have noticed quickly changes in their prices due to different events that have affected more or less the price shares.

This events that are already mentioned before have different kind of impact on the price shares. For the investors of AFC Ajax shares, the most important events that are related to the stock exchange market are the classification and how they do it in the Champions League and also the transfer market. If investors see that the team has opportunities to arrive far away in the Champions League probably, they will invest more money in the shares and the prices will increase. As also said before, Ajax is very good known for the players they create from their Ajax Football School, and every 2-3 years a big team of Europe buys a player from Ajax paying millions of euros for them. So, in resume:

- 1) The biggest movements in the share prices happened when Ajax did it good in the Champions League arriving far away in the tournament. Doing it good in the most important competition of European football is a show of power and an impulse in the prestige of the club.
- 2) The second most important fact that affects Ajax stock are big moves in the transfer market, selling players they have formed. The investors look very close at every movement the club does in the transfer market.

Now, in April 2020 the share prices of AFC Ajax are quite high if the hole history in the stock market is analysed. With the pandemic Covid-19 going on there is a lot of instability in the hole world, affecting all sectors, including the football sector. Instability is seen with bad eyes for the investors, normally, when there are signs of instability investors take out their money and the prices of the share decreases. It's uncertain until when the prices will decrease and how the football season is going to end for Ajax. For the investors it will be very important being informed daily with the new measures that are going to be taken and how these measures will affect the "football world".

4. Bundesliga: BVB Dortmund

4.1. Introduction

In this last analysis section, an analysis is going to be made of BVB Dortmund, one of the most powerful team in the Bundesliga, the German league, and also a club that each year is fighting for getting as far as they can in the Champions League.

BVN Dortmund was founded on 19th December 1909. Currently the number of its partners/members exceeds 115,000.5 making it the third most members club in Germany.

“It is one of the most la awarded clubs in Germany. During their history they have won: eight Bundesligas, 5 of them professionally, four German Cups, six Super Cups nationally; and internationally, a European Cup Winners' Cup (obtained in 1966, being the first German club to win an international title), a UEFA Champions League and an Intercontinental Cup in 1997.”
(BVB Dortmund, s.f.)

In this section, we will see when BVB Dortmund decided to list on the stock exchange market, which impact it had on their economy and also how it has been evolving since then.

As seen with the other clubs already analysed, it is difficult to say why the shares of a football club can be going up or down, and that is why we are going to focus rather on a fundamental analysis and also a technical analysis instead of just looking how it has evolved in the market over time without knowing why these movements have happened. As already explained in other sections, the fundamental analysis will consist in relating events that happened during a certain period of time with the movements within the stock market. The technical analysis will be done using some patterns and indicators that may explain from another point of view the movements within the stock exchange market.

It will be necessary to relate events that have occurred over time with the ups and downs of the price shares of BVB Dortmund in the stock market. To achieve this an analyse needs to be done for knowing exactly when the prices went up or down and then we will need to look for which events occurred during that time period.

After relating those events and analysing the movement in the stock exchange market, finally, there will be a clear conclusion resuming all what has been analysed and explaining the hierarchy of the events that affects BVB Dortmund's share prices and which way the share price can go during the next months.

4.2. The beginnings of BVB Dortmund in the stock market.

BVB Dortmund was the first German club, and until now the only German club who decided to float on the stock market in October 2000. The main reason was because by going on the stock market they would have more capital inflow and so they would have more options to compete against the big teams in Europe.

“BVB have often been at the forefront of things on the field. They were the first club to become champions twice with exactly the same eleven; they were the first German club to win in Europe in 1966, and the first Champions League winners in 1997. And now, in October 2000, off the field BVB once again take the lead becoming the first German Bundesliga club to float on the stock market. The opening price on the Frankfurt market was eleven Euros.

This move was made possible following a decision taken at the annual general meeting on 28 November 1999. It was decided to re-create the club into a joint-stock company. The aim of this move and floating on the stock exchange is to strengthen the club's finances which will allow, in turn, the club to compete internationally. BVB president Dr Gerd Niebaum described the club's going public as its second Birthday adding, „If a club like BVB can mix it with the big boys in Europe not just for the next two or three years but over the next fifteen then this move can be viewed as a success.“” (BVB, 2000)

4.3. How BVB Dortmund's stock has evolved

In this section a fundamental analysis and also a technical analysis are going to be made. It will be observed how the stock price of this football team has been evolving since they started to be traded on the stock market.

As already seen in the other cases, the fundamental analysis is going to be based on the relation between ups and downs in the market with events that have occurred during a specific period of time. The technical analysis is going to be done using different techniques, patterns and indicators in order to study and predict the next movements that the price may do.

4.3.1. Fundamental analysis

As already explained before, the fundamental analysis consists in comparing important movements within the market with events that may have affect the share prices and compare which events have had more influence on the stock exchange price of BVB Dortmund in this case. For doing this analysis, different movements within the market are going to be analysed.

In the process of doing the fundamental analysis of BVB Dortmund, it will be very important to compare all information we have related with the club since they

started to be on the Stock Exchange Market. For analysing the most important movements we are going to focus on the peaks of the trend cycles in the chart.

As explained in the section of the beginnings of BVB Dortmund in the stock market, they were the first German Club to go public on the stock exchange market on October 2000. Subsequently an historical chart with monthly candlesticks is going to be demonstrated with all the movements in the share prices since BVB Dortmund started to be traded publicly.

Chart 21. BVB DORTMUND HISTORICAL CHART



Source: <https://finance.yahoo.com/quote/BVB.DE/chart> (edited by me)

As it can be observed above, four important movements are going to be analysed in the fundamental analysis. As you can see, in the historical movements of the BVB share prices there are two big decreases in the price in few time, one at the beginning when the club went officially public on the stock exchange market and the other one in March of 2020, with the Covid-19 pandemic. There are also two important increases in a short period of time, the first in the season 2010-2011 and the second in 2018. For analysing those four movements we are going to start with the first important movement when they went publicly on the Stock Exchange Market of Frankfurt:

- **1st important movement:**

Chart 22. 1st important movement BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart>

The first important movements in BVB share prices occurred the first years they started to be traded publicly on the stock exchange market, from 31/10/2000 until 21/12/2001. What happened with BVB prices occurred exactly the same with the share prices of Juventus and Ajax.

BVB opened on the 31st of October 2000, with a price of 11€ each share. The same day the market closed with one share equal to 10,05€, In only one day there was already a decrease of 0,95€, which is equal to -8,64% in the share price in only 1 day. This decrease in the price became because it was the first time for German investors to invest into a football club and there were some insecurities about how it was going to be accepted on the market. After the first day in the stock exchange market and with this huge decrease in the price, lot of investors saw that it was quiet probable that the share prices were going to fall a lot more, following the same evolution as their neighbour club, Ajax, experienced the first years in the stock market.

So, investors saw that the initial price was too high and with that they saw an opportunity to buying short, which means that they started to buy shares for selling them later at less price and making so a good profit. That is how the price started to be in a down trend for almost 13 months, starting, as we just said, with a price of 11€ on the 31/10/2000 and ending on the 21/12/2001 with a share price equal to 4,5€. In only a little bit more than 1 year, the share price decreased 6,5€, which is equal to a decrease of 59,1% of the total price. As said before, this started because it was something new to invest for lots of investors, and with insecurities, they saw an opportunity in buying short and taking profits while the BVB share prices decreases.

Table 8. Results BVB DORTMUND 00-01

11	4 November 2000	A	Bayern Munich	2-6
12	10 November 2000	H	Hertha BSC	2-0
13	19 November 2000	A	VfL Bochum	1-1
14	25 November 2000	H	VfL Wolfsburg	2-1
15	2 December 2000	A	VfB Stuttgart	2-0
16	9 December 2000	H	SpVgg Unterhaching	3-0
17	13 December 2000	A	1. FC Köln	0-0
18	16 December 2000	A	Hansa Rostock	2-1
19	27 January 2001	H	Energie Cottbus	2-0
20	2 February 2001	A	TSV 1860 München	0-1
21	11 February 2001	H	SV Werder Bremen	0-0
22	17 February 2001	H	Hamburger SV	4-2
23	24 February 2001	A	FC Schalke 04	0-0
24	2 March 2001	H	Eintracht Frankfurt	6-2
25	10 March 2001	A	SC Freiburg	2-2
26	17 March 2001	H	Bayer Leverkusen	1-3
27	1 April 2001	A	1. FC Kaiserslautern	4-1
28	7 April 2001	H	Bayern Munich	1-1
29	14 April 2001	A	Hertha BSC	0-1
30	20 April 2001	H	VfL Bochum	5-0
31	27 April 2001	A	VfL Wolfsburg	1-1
32	4 May 2001	H	VfB Stuttgart	0-0
33	12 May 2001	A	SpVgg Unterhaching	4-1
34	19 May 2001	H	1. FC Köln	3-3

Source: https://en.wikipedia.org/wiki/2000-01_Borussia_Dortmund_season

- **2nd important movement:**

Chart 23. 2nd important movement BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart>

It's important to remark that the decrease in the share prices didn't become because of bad results on the field. Since Borussia Dortmund went public, in the season 2000-01, they only lost 4 matches of 24 they disputed in total after they went public on the stock Exchange market.

The 2nd important movement became after a constant but slowly decrease in the price since 2004 until October 2010. On the 1st of September 2010, the share price of BVB Dortmund in the financial market was 1,09€ each share. After only 75 days, the price, on the 16/11/2010, was of 3,43€.

It can be thought that it was only an increase of 2,34€ but, this increase means that in only 2 months and 15 days the share price increased 214,68%. For example, if someone invested 1000€ on the 1st of September he/she with 1000€ would have bought 916 BVB shares. After only 75 days, that person could sell his/her shares for 3141,8€, taking a profit of 2141,8€ in something less than 3 months.

With the arrival of J.J. Klopp on the bench of Signal Iduna Park things began to go better for the club, as they achieved the qualification to the UEFA Europa League for the 2009–2010 season, finishing fifth in the league. (BVB, 2011). The next season 2010-2011 started with enthusiasm because of how they ended last season. The investors saw a young team, with ambition and a new coach who started last season doing the things very well. The investors thought that it could be a very good season for BVB Dortmund, and they speculated investing and hoping that the season would go in a good direction.

Table 9. Results BVB 10-11

22 August 2010	Borussia Dortmund	0–2	Bayer Leverkusen
29 August 2010	Stuttgart	1–3	Borussia Dortmund
11 September 2010	Borussia Dortmund	2–0	VfL Wolfsburg
19 September 2010	Schalke 04	1–3	Borussia Dortmund
22 September 2010	Borussia Dortmund	5–0	1. FC Kaiserslautern
25 September 2010	FC St. Pauli	1–3	Borussia Dortmund
3 October 2010	Borussia Dortmund	2–0	Bayern Munich
15 October 2010	1. FC Köln	1–2	Borussia Dortmund
24 October 2010	Borussia Dortmund	1–1	1899 Hoffenheim
31 October 2010	Mainz 05	0–2	Borussia Dortmund
7 November 2010	Hannover 96	0–4	Borussia Dortmund
12 November 2010	Borussia Dortmund	2–0	Hamburger SV
20 November 2010	SC Freiburg	1–2	Borussia Dortmund

Source: https://en.wikipedia.org/wiki/2010–11_Borussia_Dortmund_season

As it's seen in the table above, the season 2010-2011 started very good for BVB Dortmund. In the first 13 football matches they had won 11 of 13, which means a very good beginning. While the team was winning every weekend, the price was increasing every week a little bit more. As already mentioned before, there was a lot of optimism before starting the season, and now that BVB Dortmund was showing on the field the superiority among their rivals, the investors started to believe seriously that it was a good opportunity to invest. On the 3rd of October, by winning 2-0 against Bayern Munich they really showed their intentions of winning the Bundesliga this year, the investors saw that and acted with security

by investing in BVB shares which had a directly impact on the prices, which increased a lot during this 3 months as explained before.

- **3rd important movement:**

Chart 24. 3rd important movement BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart>

In this chart we can see the 3rd big movement, the 2nd important up trend of the 4 big movements. This movement goes from 02/07/2017 until 06/11/2018. At the beginnings of July, the share price was 5,36€ and after 4 months the price reached its maximum since they went publicly on stock market, a price of 10,06€. In only 4 months the price raised 4,70€, which is equal to an increase of 87,7% in the share price.

This big increase became because in the summer transfer market they sold valuable players such as Dembelè and Aubameyang for a high quantity of money.

Table 10. Transfer Market BVB 2017

Jugador/Posición	Club	Coste
 Ousmane Dembélé Extremo derecho		125,00 mill. €
 Pierre-Emerick Aubameyang Delantero centro		63,75 mill. €
 Matthias Ginter Defensa central		17,00 mill. €
 Marc Bartra Defensa central		10,50 mill. €
 Emre Mor Extremo derecho		13,00 mill. €

Source: https://www.transfermarkt.es/Borussia-dortmund/startseite/verein/16/saison_id/2017

Only the selling of these 5 players in the Transfermarkt of 2017-2018 brought to the club 229,25 millions of euros. As seen in other sections already explained before, selling valuable players and receiving a lot of money for them is seen with very good eyes for the investors. The investors follow from very close all the movements within the Transfermarkt and in the summer of 2018 BVB Dortmund did a very good job and sold a lot of players earning a lot of money. At this moment, increases in the share price started.

Apart from the good work of the directives in the summer Transfermarkt, BVB Dortmund started the season 2018-19 having very good results in the Bundesliga. As seen in the next table, of the first 11 matches of the league they won 8 games and played tied 3, without losing any game. This, plus what happened in the summer made the investors see a great opportunity to invest money because they saw a very good beginning in the Bundesliga and the club had earned a lot of money to maybe buy valuable players in the winter market.




Table 11. Results BVB 18-19

26 August 2018	Borussia Dortmund	4-1	RB Leipzig
31 August 2018	Hannover 96	0-0	Borussia Dortmund
14 September 2018	Borussia Dortmund	3-1	Eintracht Frankfurt
22 September 2018	1899 Hoffenheim	1-1	Borussia Dortmund
26 September 2018	Borussia Dortmund	7-0	1. FC Nürnberg
29 September 2018	Bayer Leverkusen	2-4	Borussia Dortmund
6 October 2018	Borussia Dortmund	4-3	FC Augsburg
20 October 2018	VfB Stuttgart	0-4	Borussia Dortmund
27 October 2018	Borussia Dortmund	2-2	Hertha BSC
3 November 2018	VfL Wolfsburg	0-1	Borussia Dortmund
10 November 2018	Borussia Dortmund	3-2	Bayern Munich

Source: https://en.wikipedia.org/wiki/2018-19_Borussia_Dortmund_season

Beside the good results in the Bundesliga, at the same time they were doing it also very good in the Champions League. Last season they classified for the group phase of the Champions League edition 2018-19, and the first 3 matches of the group phase they beat their rivals with superiority. For the investors, the role that plays a football club in the Champions League is of vital importance for them. By winning the first 3 matches they thought that BVB Dortmund was prepared to arrive far away in this Champions League edition and that's another reason why the price shares increased, because they believed that it would be a successful year for BVB Dortmund.

Table 12. Results UEFA BVB 18-19

18 September 2018	Club Brugge 	0-1	 Borussia Dortmund
3 October 2018	Borussia Dortmund 	3-0	 Monaco
24 October 2018	Borussia Dortmund 	4-0	 Atlético Madrid

Source: https://en.wikipedia.org/wiki/2018-19_Borussia_Dortmund_season

- **4th important movement:**

The last movement that we are going to analyse of the stock share prices of BVB Dortmund is going to be a very recent one. This big decrease in the prices started in March 2020 due to the covid-19 pandemic.

Chart 25. 4th important movement BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart>

As it can be observed in the daily chart above, from the 25th of February until the 18th of March the share price noticed a big decrease. In only 3 weeks, the price decreased from 9,49€ to 4,61€, which is equal to a decrease of -51,42% (4,88€).

This is the most important movement BVB Dortmund has noticed during their history in the stock exchange market if we compare the price drop and the time in which it has occurred.

If we look at the results they have obtained during this season, they were in a very good position, 2nd in the Bundesliga and classified for the next round in the Champions League in a very difficult group, where they had to play against FC Barcelona, Inter de Milan and Slavia Prague. These good results nothing have to do with what has happened. Because of the pandemic, the football matches needed to be cancelled and from one day to another all the incomes BVB Dortmund were receiving stopped immediately, as with all teams. If they can't play against other teams, there isn't any income of the people who is going to watch the football match at the stadium, if they doesn't play, the match cannot be seen on TV, so the TV stops also paying to broadcast the matches.

The club saw how all the revenue they were receiving stopped suddenly, but the costs remained there, whether it was paying the wages of the players, the coaching staff, the facilities or the maintenance among others.

All this chaos is seen with very bad eyes from the investors, they didn't know what was going to happen exactly, and as already said in other sections, when there is uncertainty investors prefer to collect the money invested. So, investors started to sell their shares and the price started to decrease and decrease until the German government announced that the Bundesliga was going to be restarted and so, finish at least the season. With this announcement, and a low price, the investors started to feel again a little bit comfortable by buying BVB shares and that is why now the price is increasing slowly.

4.3.2. Technical analysis

For doing the technical analysis we are going to use an historical chart of BVB Dortmund (since they started to be traded public on the stock exchange market). As in the other sections, we are going to look at the main resistances and supports to find the different levels where the price may bounce and go in the other direction. Also, we are going to use different patterns and geometrical figures. Finally, some indicators will be used in order to be able to predict with more certainty what is going to happen with the BVB Dortmund price shares after this situation they are going through now.

Chart 26. Technical analysis BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart> (edited by me)

In the monthly chart above we can see the whole evolution of the share price of BVB Dortmund. In this graph there can be observed four different horizontal lines; one at a price of 0,79€ which is the historical support and one at 9,98€ which is the historical resistance. These two lines mean that the price never decreased below 0,79€, and when it was close to it the price bounced up, and also that the price never has been above 9,98€ (only when they started to be traded publicly).

The horizontal line, which is situated at a price of 3,34€, has been a resistance level since 2004 until 2014, when the price was between the historical support and this resistance level. Once the price broke this resistance, this resistance became a new support for the next 3 years. With a price higher than 3,34€ the new resistance was at a price of 5€ which also lasted 3 years until it became the last support so far.

We are now in the range where the horizontal support line is at the level of 5€ and the resistance line at 9,98€. It can be observed that with this situation, the price almost fell to 5€, but, when it approached to it, the price bounced upwards. This means the 3rd bounce of this support which means it is a reliable support.

Chart 27. Technical analysis BVB



Source: <https://finance.yahoo.com/quote/BVB.DE/chart> (edited by me)

In the graph above we can see that the BVB share price is in an uptrend since 2010, increasing the price a total of 566,62% until today. This means that every time the price approached the uptrend line the price bounced back up. This trend is very reliable because since 2010 it has never been broken and as we can see, with the situation of Covid-19 the price decreased until the trend line and now it is bouncing back up again. This with the support level we have mentioned before would have been a clear buying option looking only at the technical analysis.

Also, in the graph there are 2 different indicators, the RSI which shows us when the shares are overbought (near 80) or oversold (near 20). When it's close to 20 it indicates us that it might be a good moment to buy and this in addition to what is mentioned above adds up even more the odds that the price would rise again. The other indicator is the Bollinger Bands, which is the orange range that can be observed in the chart. This indicator shows us the range in which the price is going to be moved. If the price goes out of the Bollinger Bands, it means that it has been a very quick movement and the Bollinger Bands haven't had time enough to adapt the price range to the big price movement. When this happens normally the price adapts itself until being again in the range of the Bollinger Bands, what is exactly what is happening right now.

With this technical analysis, we could conclude that it's quite possible that the BVB Dortmund share price is going to rise again after this big fall because of the Covid-19 pandemic. All the indicators and the patterns show us that it's probable an increase in the price. When many indicators show us the same direction, the probabilities of being right are higher.

4.4. Events related to major movements within the stock market.

There are several events that are directly related to different movements within the stock market.

As analysed during the fundamental analysis, there are some events that can affect the share prices of BVB Dortmund in the stock exchange market. These events may affect more or less the share prices. We have seen that winning a lot of matches and being good classified in the Bundesliga is an important event for the share prices.

Another important event that relates big movements within the stock market is the classification for the Champions League. If they pass the rounds it has a huge positive effect on the share prices, and vice versa, if they are kicked out quickly it has a big negative effect.

Finally, among other events related to major movements within the stock market, there is the importance of the transfer market. Every investor looks from very closely each movements the direction of the club is doing in the transfer market. BVB Dortmund has very good and well-known young players which have the possibility to play for a big team of Europe. Almost each year they do important transfers within the market and that is seen with very good eyes from the investors.

4.5. Hierarchy of influences on BVB Dortmund stock.

The events that have occurred since BVB Dortmund went on the Stock Market can be classified according to their level of importance in relation to the price movements of the BVB Dortmund's shares.

For BVB Dortmund's investors, in line with what we have analysed, the order of the most important events that occurs in relation with the prices of BVB Dortmund stock market is:



4.6. Conclusions

With all that has been analysed in this section, some conclusions can be drawn about how BVB Dortmund has been evolving in the exchange stock market since they started to be traded publicly on 31st October 2000.

As AFC Ajax and Juventus, BVB Dortmund had also a difficult beginning in the stock market. In only 1 year, the price decreased around 59,1%. This was due the uncertainty there was because it was the first German football club going publicly on the stock market. This movement was the first big decrease in the share prices.

By comparing different results on the field with the movements within the exchange market, we have seen that the results they obtain by winning in the Bundesliga doesn't have many impacts on the share prices. One example is in the season 2000-2001, from 24 matches they only lost 4 of them but the price still continued decreasing. That is why with this case and others that are explained above, we can conclude that the results on the field are not so important for investors.

Going on with the conclusion, after analysing the fundamental analysis of the evolution of BVB Dortmund share prices and comparing them with different events that have occurred along the years, a correlation is observed between some movements in the prices and the events that have taken place in a specific time. The 3 most important events related to the share prices are:

- Bundesliga Titles: it's the less important of the three. Winning the national competition is a good sign related to the share prices and also for the club, but it's more a territorial winning than a big winning that can change something in the club. It's also less important because each year they are close to win it and sometimes they win the Bundesliga.
- Transfer Market: the 2nd most important movement is what is going on in the Transfer Market. BVB Dortmund, just as AFC Ajax, is very well-known for creating young valuable players that end up playing in the best European football clubs.
- Results in Champions League: this is the most important event for less powerful teams, winning the Champions League or arriving as far away as they can in the competition has a very big impact on their share prices. It's the most important competition of the European football and winning it gives a lot of prestige to the club.

Finally, with the technical analyses we have seen which are the current supports and resistances of the BVB share prices. With all what has happened related to the Covid-19, the share prices decreased a lot until touching the support of the last 3 years, which is around 5€. Beside this; the RSI is showing us that the BVB shares are almost oversold, added to that the share prices are out of the range of the Bollinger Bands and with the announcement that the Bundesliga will be the first European League in going back to the fields, it's quite probable that the share

prices are going to rise slowly until reaching the uptrend line the price was following for the last 9 years.

In conclusion, the current situation is uncertain for everyone, and as already mentioned in other sections, investors and uncertainty don't go hand in hand. So, it's an uncertain situation, but if everything goes as the German government has said and the Bundesliga starts again, it's likely that, along with the technical analysis done before, we can predict that the share price will rise.

Conclusions of the work submitted

We have clearly seen how the price of a team's stock has a very close correlation to important events that arise daily around the world. These events may have a more important weight on prices depending on what the main goals of each team are. We have seen that the results on the field, winning titles, the Transfer Market or the Champions League Edition are one of the main events that are related with the share prices.

For less powerful teams, such as AFC Ajax, BVB Dortmund and Manchester United, the most important thing to take into account during the season is basically how they do it in the Europe competitions, such as the Champions League and the Europe League. Instead, for Juventus, which is a team that arrives every year far away in the Champions League, it's more important for the investors how the Transfer Market evolves than how their club does it in the Champions League. Of this simple fact, it can be concluded that for football clubs who regularly get far away in the Champions League, arriving for example to the semi-finals, it has much less impact than if a less powerful team arrives to it. This is because investors, before starting the season, already count on it that the powerful teams will arrive far away in the European competitions, while if less powerful teams arrive it's much more shocking for investors and that creates bigger movements within the Stock Exchange Market.

Beside the fundamental analysis that has been done in the research, with the technical analysis we have predicted which share prices may go up or down. With the current situation, Covid-19 pandemic, all clubs analysed in this research have noticed a big decrease in their price, and that's why in the last 3 clubs studied there has been also included an analysis about the current situation. As explained during this work, currently the world is living in an uncertain situation and investors don't like uncertainty. For this reason, it's quite difficult to predict which are going to be the next movements within the Stock Exchange Market because it depends a lot on how the virus evolves and what measures are going to be taken by each government in relation with the football leagues of their country.

Finally, to conclude, each football club listed on the Stock Exchange Market has external events that affect more or less their value on the financial market. Generally, one of the most important events when it comes to big swings in the stock prices is how the club does it in the Champions League and if they sell or buy valuable players. Each team has to be analysed individually and with lots of details to know which direction might go the price and so, reduce the chances of failing the estimate.

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