

**MASTERS IN  
FINANCE**

**MASTERS FINAL WORK  
PROJECT**

**EQUITY RESEARCH:  
Tesco PLC**

**INÊS DO PESO CATALÃO**

**OCTOBER 2022**

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**SUPERVISOR:**

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**OCTOBER 2022**

# Abstract

This project consists of estimating the target price of Tesco for the end of 2022 and giving an investment recommendation. The employed methodology is based on CFA guidance.

Tesco PLC (“Tesco”) is a food and grocery retailer with headquarters in Hertfordshire, United Kingdom (UK). It is one of the major retailers in the UK and in the world. The company operates a network of hypermarkets, supermarkets and convenience stores. It has business presence across Europe and had, until 2020, in Asia.

To perform the valuation of Tesco, is used the Discounted Cash Flow method (DCF) with Free Cash Flow to the Firm (FCFF). The target price for 2022YE is 592.98GBP/share, against the closing price of 265GBP at August 1<sup>st</sup> 2022. To support the valuation, is also used the Free Cash Flow to Equity (FCFE), Adjusted Present Value (APV), Dividend Discount Model (DDM) and Relative Valuation with multiples.

The recommendation for Tesco is **STRONG BUY** with medium risk, taking into consideration a price target of 592.98GBP with an upside of 55.31%. It is considered a medium-risk investment given the high competition in this industry and also the uncertain macroeconomic conditions, such as inflation and the volatility of commodities prices.

JEL classification : G10 ; G32 ; G34

Keywords: Equity Research; Valuation; Discounted Cash Flow method; Free Cash Flow to the Firm; Multiples Valuation; Tesco PLC; Food Retail Industry.

# Resumo

Este projeto consiste em estimar o preço alvo da ação da Tesco para o final do ano de 2022 e formular uma recomendação de investimento. A metodologia utilizada é baseada no instituto CFA.

Tesco PLC (“Tesco”) é uma empresa de retalho alimentar com sede em Hertfordshire, United Kingdom (UK). É um dos maiores retalhistas do UK e do mundo. A empresa gere uma rede de hipermercados, supermercados e lojas de conveniência. A Tesco está presente na Europa e esteve, até 2020, na Ásia.

De forma a avaliar a empresa, é utilizado o método Free Cash Flow to the Firm (FCFF). O preço alvo no final de 2022 é de 592.98GBP/ação, face ao preço de fecho de 265GBP a 1 de agosto de 2022. Além disso, foram usados o método Free Cash Flow to Equity (FCFE), Adjusted Present Value (APV), Dividend Discount Model (DDM) e a avaliação relativa com a utilização de múltiplos.

A recomendação para a Tesco é Comprar com médio risco, tendo em consideração um preço alvo de 592.98GBP com um potencial de 55.31%. Foi considerado um investimento de médio risco tendo em conta a elevada competição nesta indústria e também pela incerteza das condições macroeconómicas, tais como a inflação e a volatilidade dos preços das matérias primas

Classificação JEL: G10; G32; G34

Palavras-Chave: Equity Research; Avaliação de Empresas; Fluxos de Caixa Ponderados; Múltiplos comparáveis; Tesco PLC; Retalho alimentar.

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# List of Abbreviations

APV - Adjusted Present Value  
Bn – Billions  
Bps - basis points  
CAGR - Compounded Annual Growth Rate  
CAPEX - Capital Expenditure  
CAPM - Capital Asset Pricing Model  
CCC – Cash Conversion Cycle  
CFO – Cash Flow from Operations  
COGS - Cost of Goods Sold  
CPI - Consumer Price Index  
CRP - Country Risk Premium  
D – Debt  
D&A – Depreciation & Amortization  
DCF - Discounted Cash Flow  
DDM – Dividend Discount Model  
DIO – Days of Inventory Outstanding  
DPO – Days Payable Outstanding  
DPS - Dividends Per Share  
DSO – Days Sales Outstanding  
E – Equity  
EBIT - Earnings Before Interest & Taxes  
EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization  
EPS – Earnings Per Share  
EV – Enterprise Value  
F - Forecast  
FCFF - Free Cash Flow to the Firm  
FY - Fiscal Year  
g - Terminal Growth Rate  
GBP – Great British Pound  
GBp – Great British Pence  
GDP - Gross Domestic Product  
GPM – Gross Profit Margin  
H - Historical  
IMF - International Monetary Fund  
ITS – Interest Tax Shield  
Kd – Cost of Debt  
Ke – Cost of Equity  
LFL - Life-for-Like  
M – Millions  
M&A – Mergers and Acquisitions  
MRP - Market Risk Premium  
NPM – Net Profit Margin  
NWC - Net Working Capital  
OECD/FAO - Collaborations between Organization for Economic Co-operation and Development and the Food and Agriculture Organization  
RFR – Risk-free Rate  
ROA – Return on Assets  
ROE – Return on Equity  
SWOT – Strengths, Weaknesses, Opportunities and Threats  
TP - Target Price  
TV - Terminal Value  
WACC – Weighted Average Cost of Capital  
YE - Year End  
YoY – year on year growth



# Tesco: “Serving shoppers a little better every day”

(2022YE Price Target of 592.98GBP (+55.31%); recommendation is STRONG BUY with medium risk)

## 1. Research Snapshot

With a 2022YE price target of 592.98GBP, we issue a STRONG BUY recommendation for Tesco PLC (Tesco), using a DCF - FCFF model, implying a 55.31% upside potential from the closing price of 265GBP at August 1<sup>st</sup> 2022, with medium risk (Figures 1 and 2). In a very competitive industry, Tesco proved to be resilient and became even more competitive by creating strategies that benefited both the company and its customers.

### Improving competitive position

In October 2021, Tesco committed with some strategies to become more competitive, and the results are (1) stronger relationships with more customers via the digitalization of the Clubcard, (2) more convenience stores to serve more costumers, (3) customer satisfaction increased, which can be observed through Figure 3, that represents the answers to the question “Based on your most recent experience, how likely is it that you would recommend this store to a friend or colleague?”, and (4) offering products at a much lower price by combining “Aldi Price Match<sup>1</sup>”, “Low Everyday Prices<sup>2</sup>” and Clubcard prices<sup>3</sup>.

### “Strong sales and profit performance”

Tesco’s revenues have been increasing, with 2019 being the year where revenues reach their highest value, in the period of analysis. This can be explained by the fact that this year’s results include the consolidation of Booker since the company’s merger, completed on March 5, 2018. On the other hand, we can observe a decrease in revenues in the period 2019-2021, due to a decrease in sales in Central Europe, and COVID-19 pandemic. Nevertheless, Tesco still presented a high value for revenues when compared with previous years. Finally, in 2022, revenues increased by 6% (Figure 4).

### Generating Cash Flows

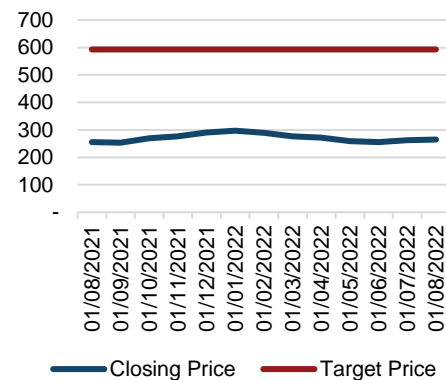
In 2022, the company generated a £2.3bn of retail free cash flow, which represents an increase of 69% over the previous year. This situation was observed due to (1) an increase in retail adjusted operating profit, (2) the pension contribution decreased, (3) a benefit from lower working capital, and (4) the dividend received from Tesco Bank increased, following its return to profitability in 2022. Regarding the Retail operating cash flow, that measures all the cash generated from continuing operations, this cash flow increased by 22.5%, recording a value of £4.5bn. With this

<sup>1</sup> This strategy allows the company to match the same prices that Aldi offers in several products.

<sup>2</sup> Through this strategy, which includes more than 1000 branded and private label products, Tesco matches market prices.

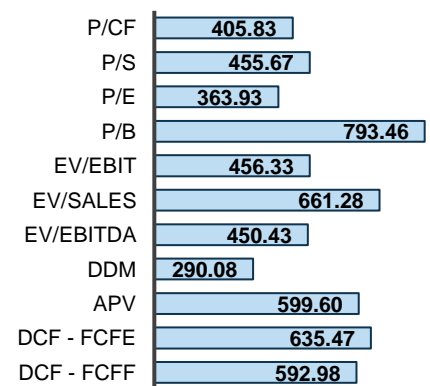
<sup>3</sup> This strategy rewards Tesco’s Clubcard members on selected products, both in store and online.

Figure 1. 52-week stock price vs target price



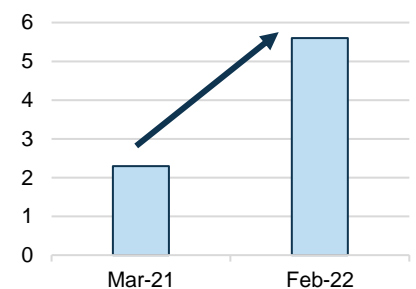
Source: Reuters, Author analysis

Figure 2. Price Targets (in GBP)



Source: Reuters, Author analysis

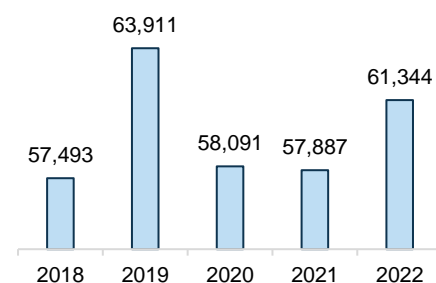
Figure 3. Tesco outperformance increasing vs rest of big 4 (in bps)



Source: Company data, Author analysis

Note: UK Multichannel Tracker. 3 period rolling data. “Rest of big 4”: Sainsbury’s, Morrisons and Asda

Figure 4. Revenues (£m)



Source: Company data, Author analysis

Figure 5. Revenue by Geography (%)

ability to generate a stable cash flow, the company can grow and deliver improved returns for its shareholders.

### Associated Risks

Food retail industry is non-cyclical, mature and highly competitive. The risks that Tesco faces are related to (1) Operational Risks, such as health, data security, climate change, etc., (2) Economic Risks, (3) Financial Risks, (4) Regulatory and Legal Risks and (4) Pandemic Risks. More detailed information can be found in Chapter 8.

## 2. Business Description

Tesco PLC (LON: TSCO) is a food retail company based in the United Kingdom. The company was founded in 1919 by former soldier Jack Cohen who started selling tea bags in the local markets. Nowadays, Tesco is considered one of the world's largest food retailers and is present in five countries: United Kingdom (UK), Ireland (ROI), Czech Republic, Slovakia and Hungary (Figure 5 and Table 1). The Tesco Group operates in 4752 stores and has a total of 354744 employees. Tesco's stores can be classified in several categories: (1) **Express**, which are convenience stores; (2) **Metro**, which offers a greater range of products when compared to (1); (3) **Superstore**, one-stop-shops designed for daily shopping; (4) **Extra**, are the largest stores that offers not only daily essentials but other products such as electrical and homewares.

### United Kingdom and Republic of Ireland

UK and ROI represent the largest business in the Group counting with 3822 stores from convenience formats through larger stores, including Booker.

Booker is a British grocery wholesaler, which supplies convenience stores and large restaurant chains. In 2018 the merger process with Tesco was finalized, which had the major goal of improving their supply chains, and making the company even more competitive as Tesco now supplies its own convenience stores as well as those of its competitors.

In 2022, UK & ROI like-for-like (LFL) sales, which measures revenues generated from stores with similar characteristics, increased by 2.2%, due to an increase in Booker sales and the outperformance in the UK.

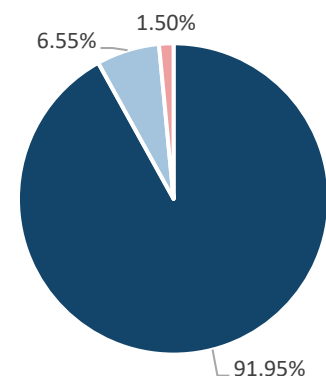
UK was the strongest market in terms of sales, with a growth in LFL sales of 0.4%. However, there were segments where LFL sales decreased, such as online shopping and convenience stores, due to the easing of pandemic-related restrictions. In other words, customers tend to shop more frequently at supermarkets. This decrease was 6.5% for the online market and 0.8% for convenience stores. Finally, non-food sales grew mainly driven by Clothing 19.4% and food sales decreased by 0.4%, especially meat, fish and grocery.

Regarding ROI, LFL sales declined by 2.9% due to COVID-19 pandemic, where restrictions lasted longer than in the UK. Online grew 3.1%, so Tesco has expanded its offer by increasing Click & Collect locations and increasing its total slot capacity by 69%. Also, in January 2022, Tesco launched "Aldi Prince Match", applicable to an extensive variety of products.

### Central Europe

The operations in **Czech Republic**, **Slovakia** and **Hungary** are managed as one. Tesco entered in Czech Republic's market in 1996, with the acquisition of K-Mart stores. Since then, Tesco acquired Zabka, which is a franchise agreement and operates under that name, and Koruna that was converted into Tesco Express. There are 185 Tesco stores across Czech Republic.

Similarly, Tesco acquired, in 1996, K-Mart Department stores in Slovakia and, in 2022, Tesco counts with 154 stores.



■ UK & ROI ■ Central Europe ■ Tesco Bank

Source: Company data, Author analysis

Table 1. Revenues (£m)

	Sales (£m)	LFL Sales
UK	39,742	0.40%
ROI	2,487	-2.90%
Booker	7,755	15.30%
<b>UK &amp; ROI</b>	<b>49,984</b>	<b>2.20%</b>
<b>Central Europe</b>	<b>3,862</b>	<b>2.90%</b>
<b>Retail</b>	<b>53,846</b>	<b>2.30%</b>
Bank	922	-
<b>Group sales</b>	<b>54,768</b>	<b>2.30%</b>
Fuel	6,576	48.00%
<b>Group revenue</b>	<b>61,344</b>	<b>5.90%</b>

Source: Company data, Author analysis

Table 2. Tesco Bank's Income Statement (£m)

	2022	2021
Revenue	922	735
Direct costs	-255	-100
Other income	15	-
Gross profit	682	635
Other expenses	-506	-810
Operating profit (loss) before adjusting items	176	-175
Adjusting items	-	295
Operating profit (loss)	176	-470
Finance income (costs)	-4	-9
Share of profit (loss of joint venture)	3	16
Profit/(Loss)	175	-463

Source: Company data, Author analysis

Tesco Hungary, Tesco's first market in Central Europe, emerged through the acquisition of 26 S-Market stores in 1995. The company operates over 198 stores in Hungary.

Central Europe registered an increase in LFL sales of 2.9%, particularly in Slovakia and Hungary. Non-food sales grew by 13.3% with strong growth in Clothing and General Merchandising and food sales grew only by 1%. During 2022, Tesco will expand Clubcard Prices to all markets and categories.

### Other Services

In addition, Tesco group includes Tesco Bank, Tesco Mobile, One Stop and Dunhumby.

**Tesco Bank**, founded in 1997, has 5 million customers and has around 3700 employees. The Bank offers banking, insurance and money services to personal costumers in the UK. Around 2008, the bank became exclusively owned by Tesco. The pandemic had a negative impact on Tesco Bank, due to the decrease in consumer spending, which caused a 23% decrease in total income, in 2021, which in turn resulted in a loss for the Group (Table 2). However, the Bank return to profitability as its revenue grew by 25.4%, as a result of the acquisition of Tesco Underwriting<sup>4</sup>, completed in May 2021. Also, Tesco Bank won "Best Overall Provider" at the 2021 YourMoney Awards, in recognition of customer service and competitive pricing.

Regarding **Tesco mobile**, which is the UK's largest mobile virtual network operator, provides a variety of benefits, like Clubcard, where the customer accumulates points and can discount them either on mobiles or in food, and family perks, which translates into benefits chosen by each member of the household, like GB of data or discounts that can be used in Tesco's stores.

**One Stop** is a retail convenience business with 900 stores, throughout England and Wales. One Stop is a Tesco's subsidiary since 2003 but operates as a different business.

**Dunhumby** is a data science company and is responsible for Tesco's Clubcard loyalty program. With this partnership, Tesco is able to understand the needs of its customers, using the data collected through Tesco's loyalty program.

## 3. Management and Corporate Governance

### Board of Directors

The Board of Directors (BoD) should promote the success of the company and guarantee to its stakeholders that the strategic objectives are achieved. The BoD is responsible for matters such as strategy, management and performance. Tesco's Board counts with 14 members of which 4 are female and 10 are male. In addition, there are 10 independent members on the BoD. Furthermore, Jon Allan is the Chairman and the Group's CEO is Ken Murphy, since March 2015 and October 2020, respectively (Table 3).

The Board has delegated specific responsibilities to four Board Committees (Table 4).

### Audit committee

The audit committee assesses and supervises the Board's responsibilities, such as financial reporting, effectiveness of risk management and internal control. This

<sup>4</sup> Tesco Bank acquires Ageas UK's stake in in Tesco Underwriting, which enables Tesco Bank to create an insurance business that is uniquely positioned to help Tesco shoppers protect their cars and homes.

Table 3. Executive Committee

Name	Position
Ken Murphy	CEO
Imran Nawaz	CFO
Natasha Adams	CEO – Tesco Ireland
Alessandra Bellini	Chief Costumer Officer
Guus Dekkers	Chief Technology Officer
Christine Heffernan	Group Communications Director
Gerry Mallon	CEO - Tesco Bank
Adrian Morris	Group General Counsel
Ashwin Prasad	Chief Product Officer
Matt Simister	CEO - Central Europe
Jason Tarry	CEO - UK & ROI
Emma Taylor	Chief People Officer
Andrew Yaxley	CEO – Booker

Source: Company data, Author analysis

Table 4. Board Committees

<b>Audit Committee:</b>	Byron Grote (Chair) Melissa Bethell Simon Patterson Karen Whitworth
<b>Nominations and Governance Committee:</b>	John Allan (Chair) Stewart Gilliland Byron Grote Steve Golsby Alison Platt
<b>Corporate Responsibility Committee:</b>	Lindsey Pownall (Chair) John Allan Bertrand Bodson Stewart Gilliland Steve Golsby Karen Whitworth
<b>Remuneration Committee:</b>	Steve Golsby (Chair) John Allan Thierry Garnier Byron Grote Alison Platt Lindsey Pownall

Source: Company data, Author analysis

committee also supervises the effectiveness of the internal and external audit roles. All the Committee members are independent Non-executive Directors. During the year, five meetings were held to address a variety of topics, including (1) capital allocation strategy, (2) cyber security and IT control, and (3) risk management.

### Nominations and Governance Committee

The Committee is responsible for 3 key areas: (1) Board composition and succession planning (reviewing the structure, composition and skills of the Board and its Committees, and leads the process for new appointments), (2) Board diversity, and (3) Governance and effectiveness (formally reviewing the independence of all Non-executive Directors each year and its performance).

### Corporate Responsibility Committee

Corporate Responsibility Committee monitors and supervises Tesco's environmental and social obligations. In addition, the Committee reviews external developments on Environmental, Social and Governance (ESG) issues that may affect the company and assess the adequacy of Tesco's sustainability commitments. In the period 2021/22, the Committee focused specially in Tesco's sustainability strategy. Regarding key decisions taken by the Committee the following can be highlighted: (1) supervision of Tesco's UK strategy focused on fighting hunger and food inequality, (2) acceleration of carbon-neutral targets for Tesco to 2035; and (3) supporting ESG metrics to be included in the remuneration policy.

### Remuneration Committee

Determining the remuneration policy for Executive Directors and senior managers is a responsibility of the Remuneration Committee, taking into account not only the workforce remuneration but also the culture and strategy of the company.

The performance outcomes of 2021/22 annual bonus are (1) 50% of adjusted operating profit, (2) 30% of group sales and (3) 20% of individual objectives. Also, the remuneration for the Executive Directors is divided into fixed pay, which includes the salary, benefits and pension, and a variable pay, which includes the annual bonus (Figure 6).

### Environmental, Social and Governance

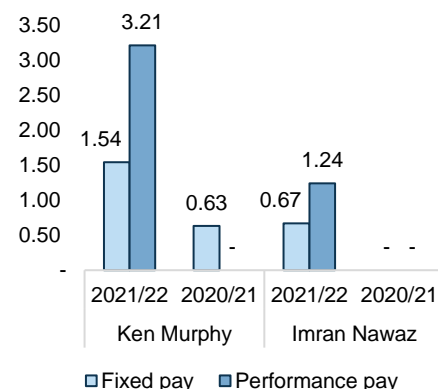
Tesco has adopted actions in favor of the environment, such as progressively removing plastic from product packaging and commits to become carbon neutral across Tesco Group by 2035 and net zero across Tesco's value chain. Also, by 2025 100% of soy in the company's products will come from regions that are verified as deforestation-free.

Highlights to date include the removal of a billion pieces of plastic, the launch of a reusable shopping service, improved the recyclability of hundreds of pieces of packaging and the launch of soft plastic recycling facilities.

In addition, Tesco recognizes the threat of climate change and adopted a sustainable financing strategy that includes a £2.5bn revolving credit facility, with associated interest for the achievement of environmental objectives and the launch of a €750m sustainability-linked bond on the basis of how effectively Tesco reduces emissions. Accordingly, Tesco has become the first UK-listed retailer to launch a bond related to sustainability.

Since June 2017, Tesco has implemented the Task Force Financial Disclosures (TFFD) recommendations and, in 2021-2022, Tesco implemented a scenario analysis based on an appraisal of the business areas most at risk from the effects of climate change, for example, animal protein and UK property estate, and both have negative impact in Tesco's operating profit.

Figure 6. Remuneration paid to Ken Murphy and Imran Nawaz (£m)



Source: Company data, Author analysis

Table 5. Top holders

BlackRock, Inc.	6.78%
Vanguard Group Inc	5.43%
Silchester Intl Investments	3.47%
Fidelity International (FIL Limited)	3.13%
Norges Bank	3.08%
Schroders plc	1.92%
Legal & General Group	1.92%

Source: Company data, Bloomberg, Author analysis

Table 6. Tesco's ESG Rank vs Peers

Company Name	Sustainalytics ESG Rank
<b>Average</b>	<b>17</b>
<b>Tesco PLC</b>	<b>18</b>
Sainsbury PLC	17
Magnit PJSC	24
Casino Guichard Perrachon	22
Jeronimo Martins	16
Ahold Delhaize	21
Carrefour SA	20
Dino Polska SA	26
Axfood AB	-
Colruyt SA	24
Sonae	-
Kesko OYJ	15

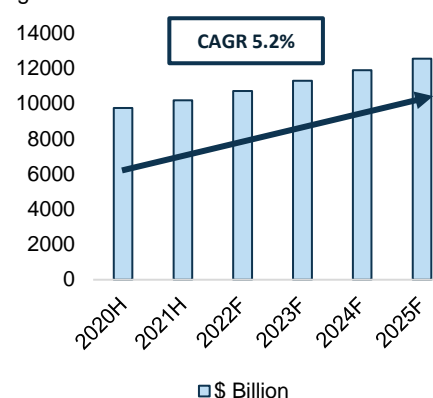
Source: Company data, Bloomberg, Author analysis

Tesco has specific targets for its operations and supply chain. Regarding operational targets, the goal is to limit global warming to 1.5°C. Also, Tesco achieved the 2030 target to shift to 100% of the Group electricity from renewable sources.

Finally, Tesco has defined priorities for 2022/23 that include the development of internal abilities in modeling climate-related scenarios, in order to determine the risks and opportunities faced by Tesco over different periods, in partnership with Resilience, from the University of Cambridge Judge Business School.

According to Morgan Stanley Capital International (MSCI), Tesco's rating is AA, which is a level below the top rating AAA but it is still considered high credit quality. Also, Sustainalytics places Tesco in the "Low" risk category, with a risk score of 17.95 and is ranked 26 out of 199 companies in the Food Retail Industry (Table 6).

Figure 7. Global Food Retail- Market Size



Source: MarketLine, Author analysis

## 4. Industry Overview and Competitive Positioning

### 4.1 Industry Overview

The global food retail market is non-cyclical, mature and highly competitive. A key indicator for the retail sector is consumer spending, which typically accounts for around two-thirds of the GDP.

In 2020, the retail market grew 8.4%, due to the preventive buying and the shift from the foodservice market during the COVID-19 pandemic. Also, and according to Mckinsey (2022), in Europe, sales decreased 0.6% in 2021, but, as stated in the report, the value of sales in 2021 was above 2019 (pre-pandemic). In the period 2020-2025, the market is expected to grow but at a slower pace, achieving an expected CAGR of 5.2%, as can be observed in Figure 7. This growth in the food and grocery market can be explained by the macroeconomic shock to employment, disposable income, rapid urbanization and middle-class population growth. In addition, consumers are expected to become more price sensitive.

#### Key Drivers of Costs

The principal costs in this industry are property rental rates and labor costs. Another important cost is advertising, which takes an important role in this industry, since is through advertising that companies can attract new customers and increase its sales.

Taxes, government regulation and inflation can influence substantially the costs of any company and lead to price changes. Also, Food Retail's major players are exposed to exchange rates risks and commodities prices, since this companies, such as Tesco, operate in different countries.

#### Key Drivers of Revenues

Food Retail is correlated to the economic evolution. For example, during the COVID-19 pandemic this industry grew by 6.7%, in Europe, due to precautionary buying and spending shift from foodservice channels (Figure 8).

Therefore, the main drivers of revenue are spending power, inflation and population growth. Despite the fact that food is an essential good, when spending power increases there is an increase in consumption. Also, when inflation is low, demand tends to increase due to lower prices. Finally, more population means more demand and consumption.

#### Demand Drivers

The main demand drivers in this industry are economic and political stability, population growth, urbanization, GDP per capita growth, disposable income and prices.

Figure 8. Europe Food Retail- Market Value



Source: MarketLine, Author analysis

Table 7. Population projection (millions)

Region	2022	2030	2050
<b>World</b>	<b>7,942</b>	<b>8,512</b>	<b>9,687</b>
Sub-Saharan Africa	1,152	1,401	2,094
Northern Africa and Western Asia	549	617	771
Central and Southern Asia	2,075	2,248	2,575
Eastern and South-Eastern Asia	2,342	2,372	2,317
Latin America and the Caribbean	658	695	749
Australia/New Zealand	31	34	38
Oceania	14	15	20
<b>Europe and Northern America</b>	<b>1,120</b>	<b>1,129</b>	<b>1,125</b>
Least developed countries	1,112	1,328	1,914
Small island developing States	74	79	87

Source: UN, Author analysis

According to the World Bank, high-income countries present the strongest economic and political stability, so these countries have higher confidence to spend. On the other hand, the countries that have the weakest economic and political stability are low-income countries, meaning lower confidence to spend.

In the period 2010-2021, the world population presented a CAGR of about 1.12%, the Least Developed Countries (LDC) presented a CAGR of 1.31% and the More Developed Countries (MDC) presented a CAGR of only 0.36%. According to the UN Population Division, world population is expected to have a CAGR of 0.87% in the forecasted period 2022-2030 (Table 7). Evidently, this expected growth in population will increase the demand for food in the next years.

The world economy is facing some adversities, such as the recovery from the pandemic, a high inflation rate worldwide, a slowdown in the Chinese economy, and also the negative effects of the war in Ukraine. Nevertheless, and according to IMF projections (2022), GDP per capita is expected to grow 7.43% in 2022 and after that, it is expected that GDP per capita growth slows down gradually. By 2027 is expected to achieve a stable global growth of 4.14% (3.61% for advanced economies and 5.55% for emerging markets and developing economies) (Figure 9).

In this moment, as already mentioned, the economy, despite the fact that is facing some adversities, is also recovering and the unemployment rate is falling. For 2023, the expected projection is achieving 4.7%, which is below the pre-pandemic level of 4.8% (Figure 10). In contrast, the disposable income of households is forecasted to increase every year until 2023, contributing these two effects for a positive outlook for world food demand in the next years. To confirm this, in Figure 11 can be seen the prospects for the food spending and it is expected that consumers continue to prioritize the spending on essential goods, like happened in 2020.

### Supply Drivers

The Food Retail's supply chain is composed by base ingredients, food production, distribution, food retail and end user.

The first stage of the supply chain is dominated by large players, but in developing economies, individual farmers are more frequent. Regarding food production and distribution, some food retailers are integrated backwards meaning that they produce private label goods and distribute from warehouses to stores, in order to dilute the power of suppliers, as lower prices can divert branded products.

Large retail chains have their own distributors who purchase the products from producers and manufacturers, promoting costs saving and boosts power of retailers against suppliers, which enables retailers to have greater control across the supply chain and negotiate prices. Also, these retailers maintain a long-term relationship with a wide range of suppliers to reduce their dependency. However, these long-term relationships have high switching costs.

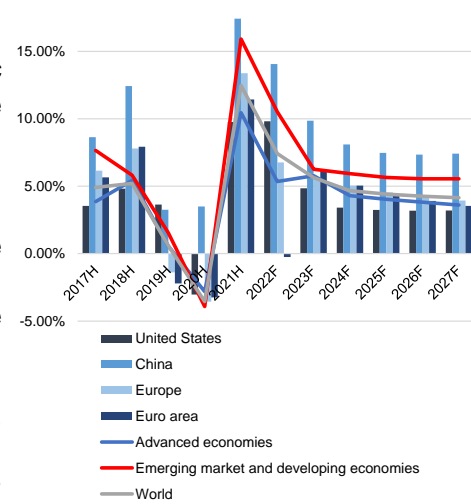
One of the constraints faced by agricultural production is input disruptions, especially labor. Some agricultural sectors are more dependent on labor than others, for instance, fruits and vegetables are labor-intensive, while grains and oilseeds generally require less labor.

According to OECD-FAO (2022) Agricultural Outlook 2022-2031, global demand for agricultural commodities is projected to increase by 1.1 percent. Also, the conflict between Russia and Ukraine raised energy and fertilizer prices, which in turn (1) increased international food prices and production costs, and (2) contributed to logistical disruption. The conflict impacts agricultural markets, especially grains and oilseeds, where these two countries are among the major exporters.

### Trends

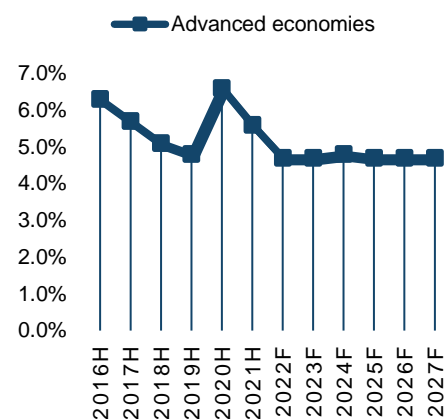
The main demand trends in this industry are digitalization, sustainability, organic and healthier products, and millennials' habits.

Figure 9. GDP per capita



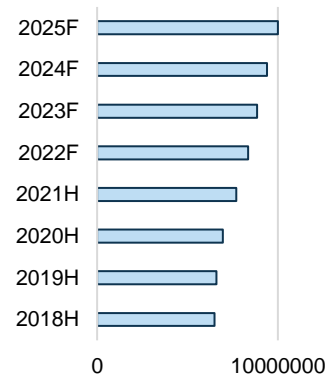
Source: IMF, Author analysis

Figure 10. Unemployment Rate



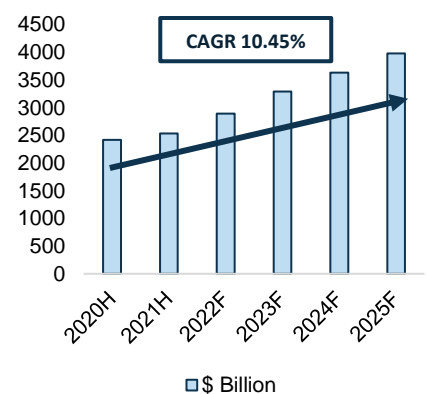
Source: IMF, Author analysis

Figure 11. Global Food Sales



Source: MarketLine, Author analysis

Figure 12. Global Online Retail Market Size



Source: MarketLine, Author analysis

Digitalization includes online shopping which had a significant increase during the pandemic, enabling retailers to operate with low overhead costs. This trend will continue to have a strong growth in the future, with an expected CAGR of 10.45% in the period 2020-2025 (Figure 12). Another example of digitalization is automation, like self-service checkout machines and cashless checkouts, it is a “just walk out” system with contactless.

Sustainability includes the reduction of plastic through reusable bags, buying in bulk, machines that exchange plastic bottles for money and the reduction of carbon emissions. Also, avoiding food wasting through programs and apps, such as “Too Good to Go”. This app sells food that would be wasted at supermarkets, bakeries, and restaurants at lower prices.

According to Deloitte (2022), 34% of consumers consider sustainability as a key aspect when choosing products and 28% have stopped buying some products because of environmental and ethical concerns. Also, according to Mckinsey (2021), 19% of consumers have intentions to spend more money on environmentally friendly products in the current year. For this industry, following this trend is extremely important.

Other demand trend is organic and healthier products, there has been a rapid growth of health consciousness and consumers opt for a more organic range of goods. In addition, MarketLine data indicates that the organic food market grew, globally, at a CAGR of 13.5%, in the period 2013-2017.

Sustainability, organic and health are aligned with millennial’s habits since this generation is more conscious about the quality of the product itself rather than the brand associated.

### M&A Activity

Mergers and acquisitions in food retail industry are crucial, given the fact that this is a very competitive and establish market. Through M&As, companies can grow their business and expand operations. According to Forbes (2022), Coca-Cola was the leading company in the Top 5 deals of 2021 (Table 8).

In Tesco’s case, the company merged with Booker, in 2018, to create synergies and access to the “Out-of-Home” food market. Also, in November 2021, Tesco announced its intention to acquire ten Joyce’s Supermarkets in Galway.

## 4.2 Competitive Positioning

### Peers Identification and Strategies

The peer group was identified through an analysis from platforms such as Bloomberg and Reuters (Table 9).

In the **UK**, there are two main competitors: Sainsbury’s and Morrisons. In 2022, Sainsbury had a 2.6% increase in **sales** recording a **total sales** of £28.09bn whereas Tesco’s **sales** increased 3%, amounting a **total sales** of £54.8bn. In conclusion, and through Table 10 and Figure 13, we can observe that Tesco is placed in 15<sup>th</sup> whereas Sainsbury is placed only in 27<sup>th</sup> and Tesco is the company with highest market share in UK. Morrisons was not included in the peer group since is not publicly traded and doesn’t have public financial statements. Other players are Lidl and Aldi, which are discount stores with smaller market shares.

Regarding **Czech Republic**, Tesco’s main competitor is Albert from Ahold Delhaize (based in Netherlands). Albert counts with 328 stores across the country while Tesco counts with 185 stores. In Czech Republic, Tesco has Tesco Express and Zabka, which are convenience stores, whereas Albert consists of supermarkets, convenience stores and hypermarkets. Finally, in **Slovakia**, the main competitor is Kaufland, from the Schwarz Gruppe, and in **Hungary** the main competitor is Auchan, but, similarly to Morrisons, Kaufland and Auchan are private companies.

Table 8. Top 5 M&A deals in 2021

Acquirer	Target	Value
Mondelēz	Hu Chocolate	\$388M
Hershey	Lily’s Sweets	\$423M
L Catterton	Kodiak Cakes	\$500M
Coca-Cola	BodyArmor	\$8B
Hershey	Dot’s Pretzels	\$1.2B

Source: Forbes, Author analysis

Table 9. Peer Group

Company Name	Country
Sonae	Portugal
Sainsbury PLC	UK
Kesko OYJ	Finland
Jeronimo Martins	Portugal
Dino Polska SA	Poland
Colruyt SA	Belgium
Casino Guichard Perrachon	France
Carrefour SA	France
Axfood AB	Sweden
Ahold Delhaize NV	Netherlands

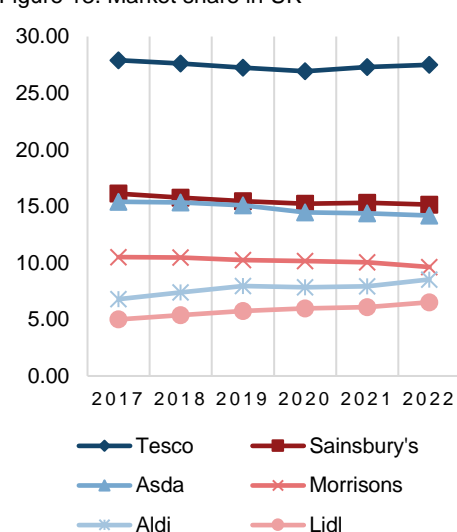
Source: Bloomberg, Reuters, Refinitiv, Author analysis

Table 10. Global Powers of Retailing 2022

Rank	Company Name
#4	Schwarz Group
#8	Aldi Einkauf GmbH & Co. oHG
#13	Ahold Delhaize
#15	<b>Tesco PLC</b>
#27	J Sainsbury plc
#28	Casino Guichard-Perrachon
#29	Auchan Holding SA
#49	Jeronimo Martins
#52	Magnit PJSC
#113	Colruyt
#132	Kesko OYJ
#144	Sonae

Source: Deloitte’s Global Powers of Retailing 2022 report, Author analysis

Figure 13. Market share in UK



Source: Statista, Author analysis

In Food Retail industry, the leading players sell their products through a multi-channel format, i.e., they operate in hypermarkets, supermarkets, convenience stores, cash-and-carry, online stores, etc., which enables the company to serve a broad customer base, thereby increasing sales. These companies also partnered with other retailers, for example Tesco partnered with Carrefour, in 2018, forming a strategic alliance with global suppliers in order to improve the quality of their products and sell them at lower prices.

In addition, there are two main pricing strategies in this industry: “Everyday Low Price (EDLP)” and the “High-Low Pricing (Hi-Lo)”. The first strategy allows retailers to offer consistently low prices instead of practicing temporary price cuts. This strategy is not only associated with discounters but also with dominant players who tend to be price leaders. In contrast, through the second strategy retailers offer periodically temporary price promotions. This approach is more evident in popular brands.

For example, Tesco has increasingly focused on competing with discounters, such as Aldi and Lidl, through its everyday low price strategy, i.e., lower prices on several products. Moreover, in 2020, the company adopted a strategy that consisted in offering discounts only to its Tesco Clubcard members.

### SWOT Analysis

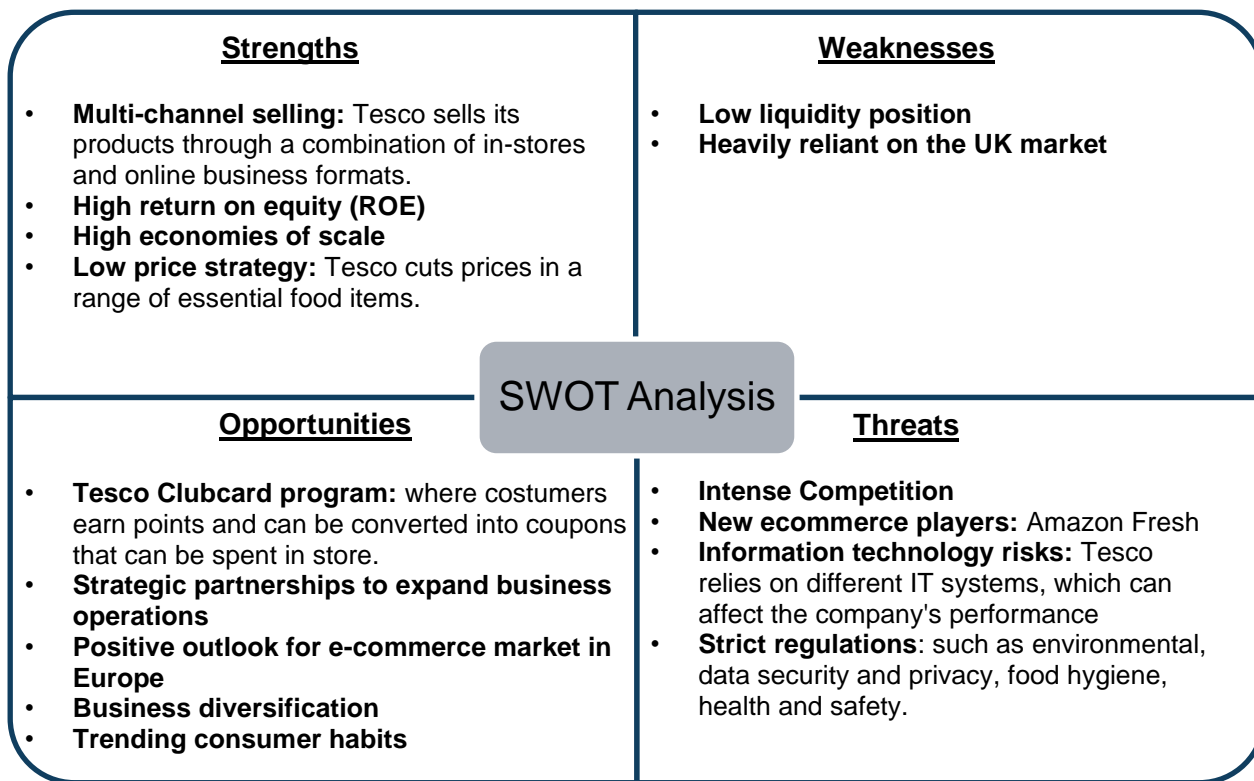


Figure 14. Porter's Five Forces

### Porter's Five Forces

#### Threats of New Entrants (2)

Due to the fact that food retail is a concentrated industry, dominant large food retailers benefit from economies of scale and employ aggressive pricing schemes, which cannot be matched by smaller retailers. However, this industry has low entry and exit costs, so potential new entrants may be encouraged to enter in this industry through online shopping and selling its products at lower prices, taking advantage of consumer's price sensitivity.

#### Threats of Substitute Products (2)

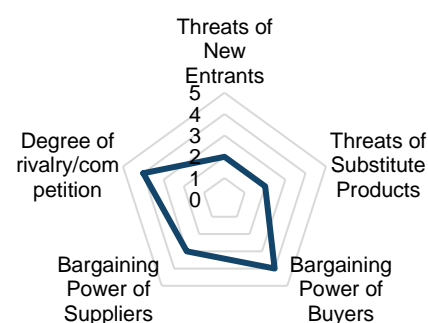




Figure 15. Growth projections

Since food is an essential good the threat of substitute products is low. So, convenience stores, online services and food services can be considered threats.

#### Bargaining Power of Buyers (4)

Bargaining power of buyers is strong in food retail industry as consumers are sensitive to price and have low switching costs, which means consumers can easily shift from one retailer to others. Additionally, consumers have diverse possibilities available aside from typical grocery stores. Nowadays, e-commerce plays a very important role in the lives of many consumers.

#### Bargaining Power of Suppliers (3)

Bargaining power of suppliers is moderate in this industry and is crucially impacted by the size of the retailer they are dealing with. For example, large retailers usually establish their supply chain with multiple suppliers, meaning that their dependency is reduced. Also, large retailers can negotiate lower prices with suppliers. In contrast, large food producers who provide well-known brands have bigger bargaining power when compared to small producers. Furthermore, backwards integration allows retailers to produce their own product under their private label, which dilutes the power of suppliers.

#### Degree of rivalry/competition (4)

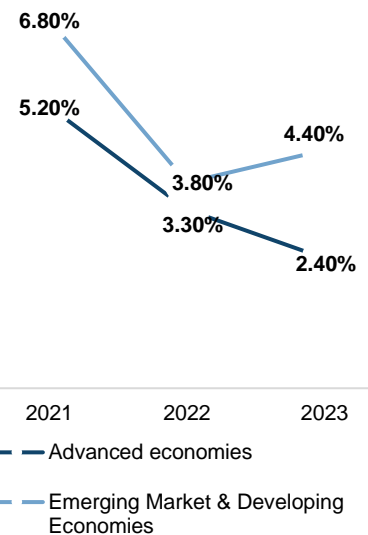
Food retailers operate in a very competitive industry. Companies compete through price non-price competition. Since there is a lack of product differentiation, price is fundamental. Nevertheless, non-price competition includes advertising, loyalty programs and customer service, for example, large retailers improve customer retention through loyalty card programs. Also, leader players tend to diversify their offer, offerings products such as electronics or financial services. Finally, the degree of rivalry is highly correlated with the level of demand that is affected by the level of disposable income and consumer confidence.

## 5. Investment Summary

The recommendation for Tesco PLC is Strong Buy, with a 2022YE price target of 592.98GBp, which implies a 55.31% potential from the closing price of 265GBp at August 1<sup>st</sup> 2022, with medium risk. The undervaluation of Tesco can be explained by the global macroeconomic conditions.

The conflict between Ukraine and Russia has led to an increase in inflation around the world, an increase that the central bank of the United States of America has estimated to be 1.3 percentage points. Also, the Fed (2022), estimated that the global GDP will decrease by 1.5%. According to IMF (2022), the global growth will slow down from 6.1% in 2021 to 3.6% in 2022 and 2023. In Figure 15, can be observed the projections for global growth for advanced economies and emerging economies.

Finally, Brexit increased the prices of food imported from the EU. According to a report of UK in a Changing Europe (UKICE) (2022), Brexit led to a food price increase of 6%, during the period December 2019-September 2021. It is also explained in the report that with barriers presented by Brexit, such as checks, increased waiting times, and other paperwork, producers face an increase in costs and, consequently, these costs will pass to consumers, which implies an increase in consumer prices.



Source: IMF, Author analysis

Table 11. DCF with FCFF approach

DCF FCFF	
<b>Enterprise value</b>	<b>46422.84</b>
Debt	8661.12
Provisions	466.00
Cash & Equivalents	7193.00
Non-controlling interests	-16.00
<b>Equity value</b>	<b>44504.72</b>
Shares outstanding	7505
<b>Stock price in GBp</b>	<b>592.98</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	55.31%

Source: Author analysis

Table 12. DCF with FCFE approach

DCF FCFE	
<b>Equity value</b>	<b>47693.62</b>
Shares Outstanding	7505
<b>Price Target in GBp</b>	<b>635.47</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	58.30%

Source: Author analysis

Table 13. APV Method

APV	
PV of Tax Shield	921.06
<b>Intrinsic EV</b>	<b>46919.77</b>
Debt	8661.12
Provisions	466.00
Cash & Equivalents	7193.00
Non-controlling interests	-16.00
<b>Equity value</b>	<b>45001.66</b>
Shares outstanding	7505
<b>Price Target in GBp</b>	<b>599.60</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	55.80%

Source: Author analysis

These macroeconomic conditions may affect Tesco's operating costs, mainly the ones related to supply chain. Also, Tesco's customers will have constraints on their income.

Additionally, Tesco's P/E is 13.06x which is lower than the average of its peers (16.65x) (Appendix 17). Through this ratio we can see that Tesco's stock price is low relative to earnings, which supports our analysis.

However, Tesco's First quarter of 2022 has demonstrated a **strong performance**, taking into account the macroeconomic environment. In Table 15 is presented the one-year like for like (LFL) sales growth, in order to compare the 1Q22 with 1Q21, and is also presented the three-year LFL sales growth with the intention to have a comparison pre-pandemic performance, i.e., 1Q22 vs 1Q19.

In conclusion, all segments presented sales ahead of pre-pandemic levels, but UK and ROI presented a decrease when compared to 1Q21. Booker was the segment that presented the highest growth especially due to an increase in catering sales.

Table 16. Sales performance in the first quarter of 2022

	Sales (£m)	One-year LFL	Three-year LFL
<b>UK &amp; ROI</b>	<b>12,596</b>	<b>1.50%</b>	<b>9.70%</b>
UK	9,879	-1.50%	8.10%
ROI	612	-2.40%	10.10%
Booker	2,105	19.40%	19.60%
<b>Central Europe</b>	<b>976</b>	<b>9.00%</b>	<b>11.30%</b>
<b>Group Retail</b>	<b>13,572</b>	<b>2.00%</b>	<b>9.90%</b>

Source: Company data, Author analysis

## 6. Valuation

### Valuation methods

To perform Tesco's valuation are used both absolute and relative valuation methods. Absolute methods correspond to the DCF model, the APV and DDM. Regarding relative methods, are used both EV and Price multiples.

Through Figure 2, can be observed all the valuation methods used. In order to reach the target price of Tesco, was selected the DCF FCFF method.

As previously mentioned, Tesco's valuation is based on absolute and relative valuation methods. In order to performed this valuation is also used Tesco's financial statements and is considered a period of 10 years for the forecasts.

Regarding absolute valuation models, the ones employed are (1) the Discounted Cash Flow (DCF), (2) the Adjusted Present Value (APV) and (3) the Dividend Discount model (DDM).

Firstly, the DCF method presents the target price of a company based on its expected future cash flows. So, in order to reach the target price of Tesco for 2022YE are used the **DCF with Free Cash Flow to Firm (FCFF)** approach, with WACC as a discount factor, and the **DCF with Free Cash Flow to Equity (FCFE)** approach, with cost of equity as a discount factor. Based on these models, the target prices are **592.98GBp and 635.47GBp**, respectively. Secondly, the **APV** model is a more flexible model since it takes into account the benefits of raising debt, i.e., interest tax shield. This model yields a target price of **599.60GBp**. Lastly, for the **DDM** method is reached a price target of **290.08GBp**. In this model is applied a two-stage model plus a H-model for the terminal value (Tables 11-14).

Table 14. DDM Method

DDM	
Short-term growth	10%
Long-term growth	3.34%
r (Ke)	10.34%
H	5
PV DPS	0.904
<b>Price Target in GBp</b>	<b>290.08</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	8.65%

Source: Author analysis

Table 15. EV/EBITDA

EV/EBITDA	
EV/EBITDA Peer	8.83
Tesco 22F EBITDA	4,168.16
Tesco EV	36,784.03
Tesco Net Debt	2,978.00
<b>Equity Value</b>	<b>33,806.03</b>
Shares Outstanding	7,505
<b>Price Target in GBp</b>	<b>450.43</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	41.17%

Source: Author analysis

Table 17. EV/Sales

EV/Sales	
EV/Sales Peer	0.81
Tesco 22F Revenue	64,816.07
Tesco EV	52,609.04
Tesco Net Debt	2,978.00
<b>Equity Value</b>	<b>49,631.04</b>
Shares Outstanding	7,505
<b>Price Target in GBp</b>	<b>661.28</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	59.93%

Source: Author analysis

Table 18. EV/EBIT

EV/EBIT	
EV/EBIT Peer	15.36
Tesco 22F EBIT	2,424.15
Tesco EV	37,226.89
Tesco Net Debt	2,978.00
<b>Equity Value</b>	<b>34,248.89</b>
Shares Outstanding	7,505
<b>Price Target in GBp</b>	<b>456.33</b>
Tesco 01/08/2022 in GBp	265.00
Upside Potential	41.93%

Source: Author analysis

Concerning the relative valuation methods, not only is used EV multiples but Price multiples as well. These calculations are based on the average of the selected peer group multiples (Appendix 17).

Starting with EV multiples, the **EV/EBITDA** results in a price target of **450.43GBp**, the **EV/Sales** yields a price of **661.28GBp**, whereas **EV/EBIT** yields a price of **456.33GBp**. As to Price multiples, the **P/B** presents a target price of **793.46GBp**, the **P/E** a price of **363.93GBp**, the **P/Sales** a price of **455.67GBp**, and the **P/CFO** a price of **405.83GBp** (Tables 16-22).

When comparing absolute models with relative models, absolute models seek to value a company's target price considering only that company, for example, the DCF model includes information about the company's business. In contrast, relative valuation models seek to value a company's target price based on a comparison with other companies. In conclusion, these methods are used to support the DCF estimates.

### WACC rate assumptions

Through the CAPM model the Cost of Equity (Ke) is estimated. The **RFR** and **MRP** are based on the survey "Market Risk Premium and Risk-Free Rate used for 88 countries in 2021" and an average is made of all the countries where Tesco operates, with a value of **1.6%** and **6.06%**, respectively. Regarding Beta, based on Tesco's information, raw beta was 2.44, and after applying the Blume method is reached an **adjusted beta** of **1.96**. All in all, the **Cost of Equity** is **10.34%**. Concerning the Cost of Debt (Kd), this parameter is computed by dividing the interest expense by debt, reaching a **Cost of Debt of 7.33%** and **5.93% after tax**. In conclusion, after all the calculations was estimated a **9.12% WACC** (Appendix 13).

### Sustainable growth rate

The sustainable growth rate or terminal growth rate (g) is estimated by taking into account the sales growth, with the adjustment of Europe's GDP per capita growth<sup>5</sup>. In conclusion, is reached a **sustainable growth rate of 3.34%** (Appendix 13).

## 7. Financial Analysis

### Profitability

Gross Profit Margin (GPM), EBITDA Margin and EBIT margin are expected to be constant during the forecasted period, due to income statement assumptions. Net Profit Margin (NPM) is expected to decrease from 2.24% to 1.91% in 2023YE and 2032TY, respectively. The same will happen to ROA and ROE during the same period. In contrast, ROIC is expected to increase, reaching its maximum value in 2032YE.

### Efficiency

Fixed Asset Turnover is expected to increase whereas Total Asset Turnover is expected to decrease, during the forecasted period (Figure 16). Regarding DSO and DIO, both were assumed to remain constant. Concerning DPO and CCC, they will fluctuate over this period but will be lower when compared to 2022YE (Figure 17).

Table 20. P/E

P/E	
Tesco Book EPS	21.86
Average peers	16.65
<b>Price Target in GBp</b>	<b>363.93</b>
Upside Potential	27.18%

Source: Author analysis

Tesco 01/08/2022 in GBp	265.00
Upside Potential	66.60%

Source: Author analysis

Table 21. P/S

P/S	
Tesco Sales/share	817.34
Average peers	0.56
<b>Price Target in GBp</b>	<b>455.67</b>
Upside Potential	41.84%

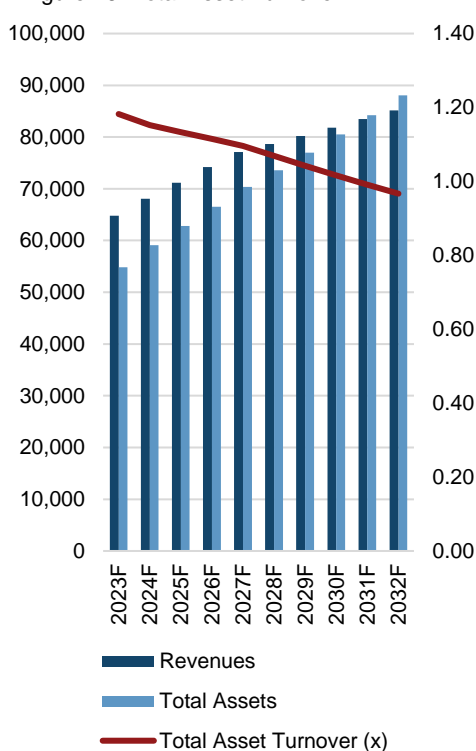
Source: Author analysis

Table 22. P/CFO

P/CFO	
Tesco CFO/share	50.01
Average peers	8.12
<b>Price Target in GBp</b>	<b>405.83</b>
Upside Potential	34.70%

Source: Author analysis

Figure 16. Total Asset Turnover



Source: Author analysis

<sup>5</sup> IMF, GDP per capita, current prices

## Liquidity

In general, Liquidity Ratios presented an improvement over the forecasted period. For instance, the Current Ratio is expected to increase from 0.76x to 0.96x in 2022YE and 2032YE. Also, Quick Ratio is expected to improve from 0.22x to 0.68 in the same period. Cash Ratio is expected to rise from 0.15x to 0.64x during this period (Figure 18).

## Solvency

Finally, Debt/Equity is expected to increase from 0.47x to 0.54x in the period 2022YE-2032YE (Figure 19). This situation can be explained by the expected growth of both Debt and Equity (CAGR of 4.40% vs 2.98%, respectively). The same situation can be observed for the Debt Ratio, which will suffer an increase from 0.32x to 0.35x, during the period of analysis. The Interest Coverage Ratio is expected to decrease during this period, from 4.72x to 2.90x. In contrast, Debt/EBITDA will face an increase from 1.73x in 2022YE to 2.08x in 2032YE. In conclusion, solvency ratios presented a good picture for Tesco. Although there is an increase in D/E and Debt Ratio, both ratios presented lower values for the forecasted period when in comparison with historical ones, e.g., D/E in 2018YE was 0.93x and Debt Ratio was 0.48x in the same year.

# 8. Investment Risks

## 8.1 Investment Risks

Figure 20 represents the risk matrix with the risks that Tesco faces. These risks are divided into 5 categories: (1) Operational Risks, (2) Economic Risks, (3) Financial Risks, (4) Regulatory and Legal Risks and (5) Pandemic Risks.

### Operational Risks

#### Health and safety (OP1)

Food retailers have to comply with safety standards, and if the company fail to meet these standards it can result in death, injuries or damage company's operations, which directly affects financial performance and Tesco's reputation.

#### Responsible sourcing and supply chain (OP2)

Exploitation of workers and human rights violations are constant in countries that supply companies like Tesco. Thus, if Tesco does not develop mechanisms to avoid situations like these, the company could see its supply chain affected as well as its reputation.

#### Data security and privacy (OP3)

Retailers hold a large amount of personal data not only on costumers but also on employees. So, there is a risk of failure to comply with legal requirements regarding data security and privacy during the company's activities.

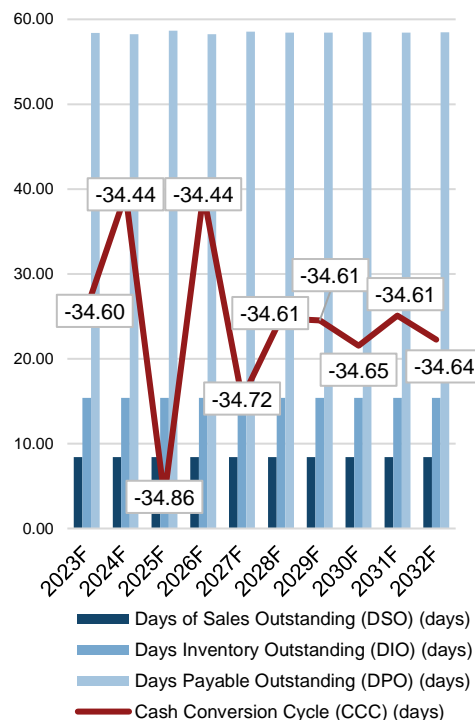
#### Brand, reputation and trust (OP4)

If the company does not generate opportunities to improve its brand and services quality and does not meet society's expectations this may result in a negative impact on the trust that communities and stakeholders place in Tesco.

#### People (OP5)

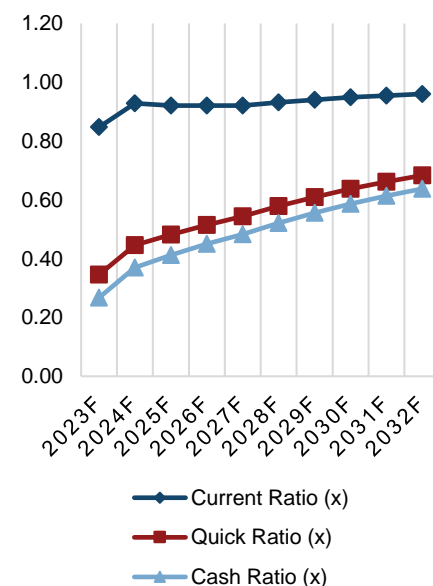
Tesco presents a strong image for market competition in leadership and talent. However, there are some factors that are affecting the company, such as the

Figure 17. CCC (days)



Source: Author analysis

Figure 18. Liquidity Ratios



Source: Author analysis

macroeconomic uncertainty, the competition in the sector, the shortage of specialists and wage inflation.

### Climate change (OP6)

The impact of climate change will affect economies and lives. Therefore, a low-carbon future in Tesco's operations and value chain is a target, in order to avoid the risks of climate change, such as physical, financial, people and reputational.

### Technology (OP7)

Our world is more technology dependent as ever. Therefore, Tesco continues to improve its technology environment in order to avoid exposure to external threats. The company can lose information, become unable to operate effectively and could have financial or regulatory penalties if its IT infrastructure fails.

### Cyber security (OP8)

With the increase in cyber security incidents the company now faces a greater risk of leakage of information, loss of assets, and reputational damage.

## Economic Risks

### Competition and markets (ER1)

Since the company is a large player in the market Tesco develops regularly strategies in order to remain competitive on price, range and services, and to maintain the firm's market share and profitability.

## Financial Risks

### Financial performance (FR1)

Markets are facing macroeconomic changes, such as inflation, commodities prices fluctuations and tax changes. Also, the depreciation of the Sterling Pound will (1) increase inflation, (2) increase the costs of living for the British, and (3) raise interest rates. These factors can affect costumers' disposable income which in turn affects the financial performance not only of Tesco but also of the retail industry.

### Tesco Bank (FR2)

During the period 2021/22 Tesco Bank returned to profit. Nevertheless, and as previously mentioned, the world is facing changes in macroeconomic conditions and carries with it uncertainty regarding the long term. Thus, Tesco Bank is exposed to operational, credit, funding and capital adequacy, liquidity and market risk.

## Regulatory and Legal Risks

### Political, regulatory and compliance (RL1)

Changes in political environment and regulations can affect the company when it fails to comply with legal requirements, resulting in penalties, litigations and consequently damage Tesco's reputation and financial results.

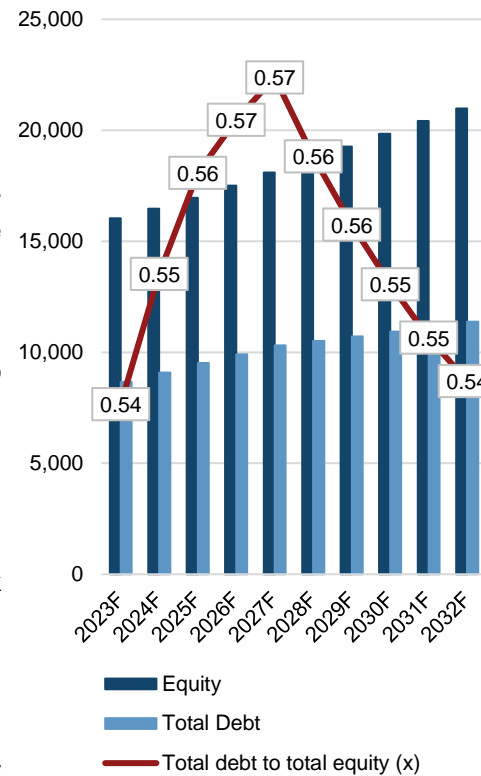
The war in Ukraine has intensified sociopolitical complexities, such as import/export controls, restriction on capital movement, and redirecting government attention. Also, Brexit affects Tesco's supply chain due to border controls, inspections of the goods, and documentations.

## Pandemic Risk

### COVID-19 (PR1)

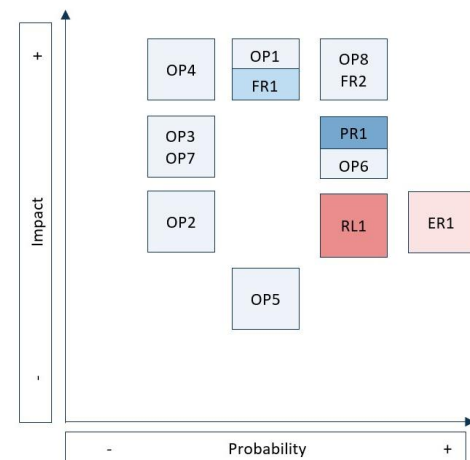
The COVID-19 pandemic impact has decreased but could affect Tesco's supply chain and operations (including Tesco Bank). Furthermore, could have an impact on company's competitiveness and financial results.

Figure 19. Debt to Equity



Source: Author analysis

Figure 20. Risk matrix



Source: Company data, Author analysis

## 8.2 Price Target Risks

In order to analyze the price target risks, is used a Scenario analysis and a Sensitivity analysis. Firstly, the Scenario analysis is based on 2 scenarios: the Pessimist and the Optimist scenarios. To perform this analysis, is taken into consideration changes in sales of +1% and -1%, applied in the DCF with the FCFF approach, in order to reach the price targets for each scenario (Table 23). In conclusion, with an increase and decrease of 1% in sales, the target price increase and decrease 12GBp and 11.6GBp, respectively.

Additionally, is performed a Sensitivity analysis to the price target with changes in WACC and g. Observing Table 24, we can conclude that by increasing the WACC by 0.02%, the price decreases and by increasing the g by 0.02%, as well, the price will increase.

Table 23. Scenario Analysis

Scenario Analysis	Δ Sales	Price Target (in GBp)	Upside Potential
Optimistic	1%	604.96	56.20%
<b>Base Case</b>	0%	592.98	-
Pessimist	-1%	581.34	54.42%

Source: Author analysis

Table 24. Sensitivity Analysis

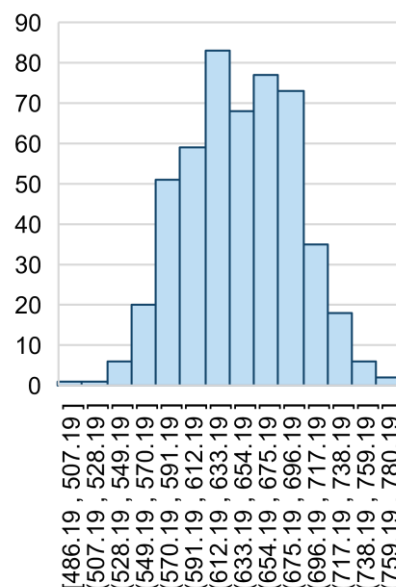
Price Target 593GBp	WACC										
	9.04%	9.06%	9.08%	9.10%	9.12%	9.14%	9.16%	9.18%	9.20%	9.22%	
g	3.24%	595	593	591	589	587	585	583	581	579	577
	3.26%	597	595	592	590	588	586	584	582	580	578
	3.28%	598	596	594	592	590	587	585	583	581	579
	3.30%	599	597	595	593	591	589	587	585	583	581
	3.32%	601	598	596	594	592	590	588	586	584	582
	<b>3.34%</b>	602	600	598	595	<b>593</b>	591	589	587	585	583
	3.36%	603	601	599	597	595	593	590	588	586	584
	3.38%	605	602	600	598	596	594	592	590	588	585
	3.40%	606	604	602	599	597	595	593	591	589	587
	3.42%	607	605	603	601	599	596	594	592	590	588
	3.44%	609	606	604	602	600	598	596	593	591	589

Source: Author analysis

## 8.3 Monte Carlo Simulation

Through Figure 21, we can observe the tests performed on variables such as NOPAT, WACC and sustainable growth rate, by running 500 trials. In conclusion, it is reached a mean price target of 642.09GBp, which means a Strong Buy recommendation.

Figure 21. Monte Carlo Simulation



Source: Author analysis

# Appendices

## Appendix 1: Income Statement

Income Statement (GBP in millions)	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	CAGR (22-32F)
Sales	57,887	61,344	64,816	68,083	71,174	74,184	77,107	78,649	80,222	81,827	83,463	85,133	3.33%
COGS	-53,921	-56,711	-60,250	-63,286	-66,160	-68,958	-71,675	-73,109	-74,571	-76,062	-77,584	-79,135	3.39%
<b>Gross Profit</b>	<b>3,966</b>	<b>4,633</b>	<b>4,566</b>	<b>4,796</b>	<b>5,014</b>	<b>5,226</b>	<b>5,432</b>	<b>5,541</b>	<b>5,652</b>	<b>5,765</b>	<b>5,880</b>	<b>5,997</b>	<b>2.61%</b>
Other operating income (expenses)	1,304	1,718	1,781	1,871	1,956	2,038	2,119	2,161	2,204	2,248	2,293	2,339	3.13%
Administrative expenses	-1,767	-2,073	-2,179	-2,289	-2,393	-2,494	-2,592	-2,644	-2,697	-2,751	-2,806	-2,862	3.28%
<b>EBITDA</b>	<b>3,503</b>	<b>4,278</b>	<b>4,168</b>	<b>4,378</b>	<b>4,577</b>	<b>4,771</b>	<b>4,959</b>	<b>5,058</b>	<b>5,159</b>	<b>5,262</b>	<b>5,367</b>	<b>5,475</b>	<b>2.50%</b>
Depreciation & amortization	-1,764	-1,718	-1,744	-1,832	-1,915	-1,996	-2,075	-2,116	-2,159	-2,202	-2,246	-2,291	2.92%
<b>Operating profit (EBIT)</b>	<b>1,739</b>	<b>2,560</b>	<b>2,424</b>	<b>2,546</b>	<b>2,662</b>	<b>2,775</b>	<b>2,884</b>	<b>2,942</b>	<b>3,000</b>	<b>3,060</b>	<b>3,122</b>	<b>3,184</b>	<b>2.21%</b>
Financial income (expenses)	-937	-542	-564	-615	-663	-713	-766	-822	-885	-951	-1,022	-1,098	7.32%
<b>Profit before taxes, associates and joint ventures</b>	<b>802</b>	<b>2,018</b>	<b>1,860</b>	<b>1,931</b>	<b>1,999</b>	<b>2,061</b>	<b>2,117</b>	<b>2,120</b>	<b>2,115</b>	<b>2,109</b>	<b>2,099</b>	<b>2,086</b>	<b>0.33%</b>
Taxes	-104	-510	-411	-426	-441	-455	-467	-468	-467	-466	-463	-460	-1.02%
Income from associates and joint ventures	26	15	0	0	0	0	0	0	0	0	0	0	-
<b>Net income</b>	<b>724</b>	<b>1,523</b>	<b>1,449</b>	<b>1,505</b>	<b>1,558</b>	<b>1,606</b>	<b>1,650</b>	<b>1,652</b>	<b>1,648</b>	<b>1,643</b>	<b>1,636</b>	<b>1,625</b>	<b>0.65%</b>
of which attributable to non-controlling interests	4	2	2.87	2.98	3.09	3.18	3.27	3.27	3.26	3.26	3.24	3.22	4.87%
of which attributable to shareholders of the parent (Net profit)	6,143	1,481	3,753	3,896	4,033	4,159	4,273	4,277	4,268	4,255	4,236	4,208	11.01%
EPS	0.119	0.219	0.250	0.260	0.269	0.278	0.285	0.285	0.285	0.284	0.283	0.281	2.52%
DPS	0.0915	0.109	0.110	0.110	0.120	0.130	0.160	0.173	0.190	0.212	0.238	0.269	9.47%

## Appendix 2: Common-Size Income Statement

% Sales	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Sales	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
COGS	-93%	-92%	-93%	-93%	-93%	-93%	-93%	-93%	-93%	-93%	-93%	-93%
<b>Gross Profit</b>	<b>6.85%</b>	<b>7.55%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>	<b>7.04%</b>
Other operating income (expenses)	2.25%	2.80%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Administrative expenses	-3.05%	-3.38%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%	-3.36%
<b>EBITDA</b>	<b>6.05%</b>	<b>6.97%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>	<b>6.43%</b>
Depreciation & amortization	-3.05%	-2.80%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%	-2.69%
<b>Operating profit (EBIT)</b>	<b>3.00%</b>	<b>4.17%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>	<b>3.74%</b>
Financial income (expenses)	-1.62%	-0.88%	-0.87%	-0.90%	-0.93%	-0.96%	-0.99%	-1.05%	-1.10%	-1.16%	-1.22%	-1.29%
<b>Profit before taxes, associates and joint ventures</b>	<b>1.39%</b>	<b>3.29%</b>	<b>2.87%</b>	<b>2.84%</b>	<b>2.81%</b>	<b>2.78%</b>	<b>2.75%</b>	<b>2.69%</b>	<b>2.64%</b>	<b>2.58%</b>	<b>2.52%</b>	<b>2.45%</b>
Taxes	-0.18%	-0.83%	-0.63%	-0.63%	-0.62%	-0.61%	-0.61%	-0.59%	-0.58%	-0.57%	-0.56%	-0.54%
Income from associates and joint ventures	0.04%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Net income</b>	<b>1.25%</b>	<b>2.48%</b>	<b>2.24%</b>	<b>2.21%</b>	<b>2.19%</b>	<b>2.17%</b>	<b>2.14%</b>	<b>2.10%</b>	<b>2.05%</b>	<b>2.01%</b>	<b>1.96%</b>	<b>1.91%</b>

## Appendix 3: Balance sheet

Balance Sheet (GBP in millions)	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	CAGR (22-32F)
<b>Non-current assets</b>	<b>34,705</b>	<b>37,162</b>	<b>38,607</b>	<b>39,883</b>	<b>41,090</b>	<b>42,266</b>	<b>43,408</b>	<b>44,010</b>	<b>44,624</b>	<b>45,251</b>	<b>45,890</b>	<b>46,542</b>	<b>2.28%</b>
Goodwill	4,271	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	0.00%
Intangible assets	1,122	1,069	1,223	1,285	1,343	1,400	1,455	1,484	1,514	1,544	1,575	1,607	4.16%
PP&E	16,945	17,060	18,026	18,934	19,794	20,631	21,444	21,873	22,310	22,756	23,211	23,676	3.33%
Right of use assets	5,951	5,720	6,044	6,348	6,637	6,917	7,190	7,334	7,480	7,630	7,783	7,938	3.33%
Investment property	19	22	23	24	26	27	28	28	29	29	30	31	3.33%
Financial assets	5,667	8,829	8,829	8,829	8,829	8,829	8,829	8,829	8,829	8,829	8,829	8,829	0.00%
Deferred tax assets	552	85	85	85	85	85	85	85	85	85	85	85	0.00%
Investments in associates and joint ventures	178	86	86	86	86	86	86	86	86	86	86	86	0.00%
<b>Current assets</b>	<b>10,807</b>	<b>12,189</b>	<b>16,217</b>	<b>19,190</b>	<b>21,707</b>	<b>24,257</b>	<b>26,971</b>	<b>29,577</b>	<b>32,359</b>	<b>35,279</b>	<b>38,322</b>	<b>41,509</b>	<b>13.04%</b>
Cash & Cash equivalents	2,510	2,345	5,117	7,635	9,722	11,853	14,160	16,551	19,114	21,811	24,626	27,580	27.95%
Trade and other receivables	1,263	1,263	1,495	1,570	1,641	1,711	1,778	1,814	1,850	1,887	1,925	1,963	4.51%
Short-term investments	1,011	2,076	2,076	2,076	2,076	2,076	2,076	2,076	2,076	2,076	2,076	2,076	0.00%
Inventories	2,069	2,339	2,542	2,670	2,792	2,910	3,024	3,085	3,146	3,209	3,274	3,339	3.62%
Other operating assets	3,954	4,166	4,987	5,238	5,476	5,708	5,933	6,051	6,172	6,296	6,422	6,550	4.63%
<b>Total assets</b>	<b>45,512</b>	<b>49,351</b>	<b>54,824</b>	<b>59,073</b>	<b>62,797</b>	<b>66,523</b>	<b>70,379</b>	<b>73,587</b>	<b>76,983</b>	<b>80,530</b>	<b>84,212</b>	<b>88,051</b>	<b>5.96%</b>
<b>Equity</b>	<b>12,059</b>	<b>15,644</b>	<b>16,029</b>	<b>16,470</b>	<b>16,964</b>	<b>17,506</b>	<b>18,092</b>	<b>18,680</b>	<b>19,264</b>	<b>19,843</b>	<b>20,415</b>	<b>20,976</b>	<b>2.98%</b>
<b>Non-current liabilities</b>	<b>17,456</b>	<b>17,568</b>	<b>19,656</b>	<b>21,938</b>	<b>22,265</b>	<b>22,683</b>	<b>22,992</b>	<b>23,155</b>	<b>23,322</b>	<b>23,491</b>	<b>23,664</b>	<b>23,841</b>	<b>3.10%</b>
Financial debt	6,188	6,674	6,852	7,197	7,524	7,842	8,151	8,314	8,480	8,650	8,823	8,999	3.03%
Employee benefits liabilities	1,222	303	303	303	303	303	303	303	303	303	303	303	0.00%
Provisions	119	183	183	183	183	183	183	183	183	183	183	183	0.00%
Deferred tax liabilities	48	910	910	910	910	910	910	910	910	910	910	910	0.00%
Lease liabilities	7,827	7,411	7,411	7,411	7,411	7,411	7,411	7,411	7,411	7,411	7,411	7,411	0.00%
Other payables	2,052	2,087	3,997	5,934	5,934	6,034	6,034	6,034	6,034	6,034	6,034	6,034	11.20%
<b>Current liabilities</b>	<b>15,997</b>	<b>16,139</b>	<b>19,139</b>	<b>20,664</b>	<b>23,568</b>	<b>26,334</b>	<b>29,294</b>	<b>31,752</b>	<b>34,398</b>	<b>37,196</b>	<b>40,133</b>	<b>43,234</b>	<b>10.36%</b>
Financial debt	1,080	725	1,809	1,895	1,996	2,065	2,157	2,196	2,240	2,286	2,330	2,378	12.61%
Trade and other payables	8,399	9,181	9,643	10,101	10,635	11,007	11,495	11,703	11,938	12,184	12,419	12,674	3.28%
Lease liabilities	575	547	547	547	547	547	547	547	547	547	547	547	0.00%
Provisions	186	283	283	283	283	283	283	283	283	283	283	283	0.00%
Other operating liabilities	5,757	5,403	6,857	7,837	10,107	12,432	14,812	17,022	19,390	21,895	24,554	27,351	17.61%
<b>Total liabilities</b>	<b>33,453</b>	<b>33,707</b>	<b>38,794</b>	<b>42,603</b>	<b>45,833</b>	<b>49,017</b>	<b>52,287</b>	<b>54,907</b>	<b>57,719</b>	<b>60,687</b>	<b>63,797</b>	<b>67,074</b>	<b>7.12%</b>
<b>Total equity &amp; liabilities</b>	<b>45,512</b>	<b>49,351</b>	<b>54,824</b>	<b>59,073</b>	<b>62,797</b>	<b>66,523</b>	<b>70,379</b>	<b>73,587</b>	<b>76,983</b>	<b>80,530</b>	<b>84,212</b>	<b>88,051</b>	<b>5.96%</b>



## Appendix 4: Common-Size Balance Sheet

% Total Assets	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
<b>Non-current assets</b>	<b>76%</b>	<b>75%</b>	<b>70%</b>	<b>68%</b>	<b>65%</b>	<b>64%</b>	<b>62%</b>	<b>60%</b>	<b>58%</b>	<b>56%</b>	<b>54%</b>	<b>53%</b>
Goodwill	9%	9%	8%	7%	7%	6%	6%	6%	6%	5%	5%	5%
Intangible assets	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PP&E	37%	35%	33%	32%	32%	31%	30%	30%	29%	28%	28%	27%
Right of use assets	13%	12%	11%	11%	11%	10%	10%	10%	10%	9%	9%	9%
Investment property	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.03%
Financial assets	12%	18%	16%	15%	14%	13%	13%	12%	11%	11%	10%	10%
Deferred tax assets	1.21%	0.17%	0.16%	0.14%	0.14%	0.13%	0.12%	0.12%	0.11%	0.11%	0.10%	0.10%
Investments in associates and joint ventures	0.39%	0.17%	0.16%	0.15%	0.14%	0.13%	0.12%	0.12%	0.11%	0.11%	0.10%	0.10%
<b>Current assets</b>	<b>24%</b>	<b>25%</b>	<b>30%</b>	<b>32%</b>	<b>35%</b>	<b>36%</b>	<b>38%</b>	<b>40%</b>	<b>42%</b>	<b>44%</b>	<b>46%</b>	<b>47%</b>
Cash & Cash equivalents	5.52%	4.75%	9.33%	12.92%	15.48%	17.82%	20.12%	22.49%	24.83%	27.08%	29.24%	31.32%
Trade and other receivables	2.78%	2.56%	2.73%	2.66%	2.61%	2.57%	2.53%	2.46%	2.40%	2.34%	2.29%	2.23%
Short-term investments	2.22%	4.21%	3.79%	3.51%	3.31%	3.12%	2.95%	2.82%	2.70%	2.58%	2.47%	2.36%
Inventories	4.55%	4.74%	4.64%	4.52%	4.45%	4.37%	4.30%	4.19%	4.09%	3.99%	3.89%	3.79%
Other operating assets	8.69%	8.44%	9.10%	8.87%	8.72%	8.58%	8.43%	8.22%	8.02%	7.82%	7.63%	7.44%
<b>Total assets</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Equity</b>	<b>26%</b>	<b>32%</b>	<b>29%</b>	<b>28%</b>	<b>27%</b>	<b>26%</b>	<b>26%</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>	<b>24%</b>	<b>24%</b>
<b>Non-current liabilities</b>	<b>38%</b>	<b>36%</b>	<b>36%</b>	<b>37%</b>	<b>35%</b>	<b>34%</b>	<b>33%</b>	<b>31%</b>	<b>30%</b>	<b>29%</b>	<b>28%</b>	<b>27%</b>
Financial debt	14%	14%	12%	12%	12%	12%	12%	11%	11%	11%	10%	10%
Employee benefits liabilities	2.7%	0.6%	0.6%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.3%
Provisions	0.26%	0.37%	0.33%	0.31%	0.29%	0.28%	0.26%	0.25%	0.24%	0.23%	0.22%	0.21%
Deferred tax liabilities	0.11%	1.84%	1.66%	1.54%	1.45%	1.37%	1.29%	1.24%	1.18%	1.13%	1.08%	1.03%
Lease liabilities	17%	15%	14%	13%	12%	11%	11%	10%	10%	9%	9%	8%
Other payables	4.5%	4.2%	7.3%	10.0%	9.5%	9.1%	8.6%	8.2%	7.8%	7.5%	7.2%	6.9%
<b>Current liabilities</b>	<b>35%</b>	<b>33%</b>	<b>35%</b>	<b>35%</b>	<b>38%</b>	<b>40%</b>	<b>42%</b>	<b>43%</b>	<b>45%</b>	<b>46%</b>	<b>48%</b>	<b>49%</b>
Financial debt	2.4%	1.5%	3.3%	3.2%	3.2%	3.1%	3.1%	3.0%	2.9%	2.8%	2.8%	2.7%
Trade and other payables	18%	19%	18%	17%	17%	17%	16%	16%	16%	15%	15%	14%
Lease liabilities	1.26%	1.11%	1.00%	0.93%	0.87%	0.82%	0.78%	0.74%	0.71%	0.68%	0.65%	0.62%
Provisions	0.41%	0.57%	0.52%	0.48%	0.45%	0.43%	0.40%	0.38%	0.37%	0.35%	0.34%	0.32%
Other operating liabilities	12.65%	10.95%	12.51%	13.27%	16.10%	18.69%	21.05%	23.13%	25.19%	27.19%	29.16%	31.06%
<b>Total liabilities</b>	<b>74%</b>	<b>68%</b>	<b>71%</b>	<b>72%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>	<b>75%</b>	<b>75%</b>	<b>75%</b>	<b>76%</b>	<b>76%</b>
<b>Total equity &amp; liabilities</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Appendix 5: Cash-Flow Statement

Cash Flow Statement (GBP in millions)	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
EBIT	1,739	2,560	2,424	2,546	2,662	2,775	2,884	2,942	3,000	3,060	3,122	3,184
D&A	1,764	1,718	1,744	1,832	1,915	1,996	2,075	2,116	2,159	2,202	2,246	2,291
Income Tax	104	510	411	426	441	455	467	468	467	466	463	460
ΔNWC	126	-15	-659	-984	-2,374	-2,277	-2,462	-2,204	-2,383	-2,528	-2,665	-2,820
<b>Operating Activities</b>	<b>3,525</b>	<b>3,753</b>	<b>3,098</b>	<b>2,967</b>	<b>1,762</b>	<b>2,039</b>	<b>2,029</b>	<b>2,386</b>	<b>2,309</b>	<b>2,268</b>	<b>2,239</b>	<b>2,194</b>
Capex	-1,015	-1,101	-1,139	-1,196	-1,250	-1,303	-1,354	-1,382	-1,409	-1,437	-1,466	-1,495
<b>Investing Operations</b>	<b>-1,015</b>	<b>-1,101</b>	<b>-1,139</b>	<b>-1,196</b>	<b>-1,250</b>	<b>-1,303</b>	<b>-1,354</b>	<b>-1,382</b>	<b>-1,409</b>	<b>-1,437</b>	<b>-1,466</b>	<b>-1,495</b>
Financial Expenses	-937	-542	-564	-615	-663	-713	-766	-822	-885	-951	-1,022	-1,098
Dividends	-5,858	-731	-457	-550	-598	-584	-547	-570	-575	-569	-565	-570
Δ Debt	-956	131	1,262	431	427	388	401	202	210	216	217	224
<b>Financing Operations</b>	<b>-7,751</b>	<b>-1,142</b>	<b>241</b>	<b>-734</b>	<b>-835</b>	<b>-909</b>	<b>-913</b>	<b>-1,190</b>	<b>-1,250</b>	<b>-1,305</b>	<b>-1,371</b>	<b>-1,444</b>
<b>Cash Flow</b>	<b>-1,060</b>	<b>-200</b>	<b>2,201</b>	<b>1,037</b>	<b>-323</b>	<b>-174</b>	<b>-238</b>	<b>-185</b>	<b>-350</b>	<b>-474</b>	<b>-598</b>	<b>-745</b>
<b>Cash Beginning of the year</b>	<b>3,031</b>	<b>1,971</b>	<b>2,345</b>	<b>4,546</b>	<b>5,584</b>	<b>5,261</b>	<b>5,087</b>	<b>4,849</b>	<b>4,664</b>	<b>4,314</b>	<b>3,840</b>	<b>3,242</b>
<b>Cash at End of the year</b>	<b>1,971</b>	<b>1,771</b>	<b>4,546</b>	<b>5,584</b>	<b>5,261</b>	<b>5,087</b>	<b>4,849</b>	<b>4,664</b>	<b>4,314</b>	<b>3,840</b>	<b>3,242</b>	<b>2,496</b>

## Appendix 6: Common-Size Cash-Flow Statement

% Operational Cash Flow	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
EBIT	49%	68%	78%	86%	151%	136%	142%	123%	130%	135%	139%	145%
D&A	50%	46%	56%	62%	109%	98%	102%	89%	93%	97%	100%	104%
Income Tax	3%	14%	13%	14%	25%	22%	23%	20%	20%	21%	21%	21%
ΔNWC	4%	0%	-21%	-33%	-135%	-112%	-121%	-92%	-103%	-111%	-119%	-129%
<b>Operating Activities</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Capex	-29%	-29%	-37%	-40%	-71%	-64%	-67%	-58%	-61%	-63%	-65%	-68%
<b>Investing Operations</b>	<b>-29%</b>	<b>-29%</b>	<b>-37%</b>	<b>-40%</b>	<b>-71%</b>	<b>-64%</b>	<b>-67%</b>	<b>-58%</b>	<b>-61%</b>	<b>-63%</b>	<b>-65%</b>	<b>-68%</b>
Financial Expenses	-27%	-14%	-18%	-21%	-38%	-35%	-38%	-34%	-38%	-42%	-46%	-50%
Dividends	-166%	-19%	-15%	-19%	-34%	-29%	-27%	-24%	-25%	-25%	-25%	-26%
Δ Debt	-27%	3%	41%	15%	24%	19%	20%	8%	9%	10%	10%	10%
<b>Financing Operations</b>	<b>-220%</b>	<b>-30%</b>	<b>8%</b>	<b>-25%</b>	<b>-47%</b>	<b>-45%</b>	<b>-45%</b>	<b>-50%</b>	<b>-54%</b>	<b>-58%</b>	<b>-61%</b>	<b>-66%</b>
<b>Cash Flow</b>	<b>-30%</b>	<b>-5%</b>	<b>71%</b>	<b>35%</b>	<b>-18%</b>	<b>-9%</b>	<b>-12%</b>	<b>-8%</b>	<b>-15%</b>	<b>-21%</b>	<b>-27%</b>	<b>-34%</b>
<b>Cash Beginning of the year</b>	<b>86%</b>	<b>53%</b>	<b>76%</b>	<b>153%</b>	<b>317%</b>	<b>258%</b>	<b>251%</b>	<b>203%</b>	<b>202%</b>	<b>190%</b>	<b>172%</b>	<b>148%</b>
<b>Cash at End of the year</b>	<b>56%</b>	<b>47%</b>	<b>147%</b>	<b>188%</b>	<b>299%</b>	<b>250%</b>	<b>239%</b>	<b>195%</b>	<b>187%</b>	<b>169%</b>	<b>145%</b>	<b>114%</b>

## Appendix 7: Key Financial Ratios

Key Financial Ratios	2021A	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
<b>Profitability Ratios</b>												
Gross Profit Margin (%)	6.85%	7.55%	7.04%	7.04%	7.04%	7.04%	7.04%	7.04%	7.04%	7.04%	7.04%	7.04%
EBITDA Margin (%)	6.05%	6.97%	6.43%	6.43%	6.43%	6.43%	6.43%	6.43%	6.43%	6.43%	6.43%	6.43%
EBIT Margin (%)	3.00%	4.17%	3.74%	3.74%	3.74%	3.74%	3.74%	3.74%	3.74%	3.74%	3.74%	3.74%
Net Profit Margin (%)	1.25%	2.48%	2.24%	2.21%	2.19%	2.17%	2.14%	2.10%	2.05%	2.01%	1.96%	1.91%
ROA (%)	1.59%	3.09%	2.64%	2.55%	2.48%	2.41%	2.34%	2.24%	2.14%	2.04%	1.94%	1.85%
ROE (%)	6.00%	9.74%	9.04%	9.14%	9.18%	9.17%	9.12%	8.84%	8.56%	8.28%	8.01%	7.75%
ROIC (%)	8.38%	10.02%	10.03%	11.50%	12.86%	14.44%	16.40%	18.85%	22.36%	27.64%	36.42%	54.02%
ROCE (%)	5.89%	7.71%	6.79%	6.63%	6.79%	6.90%	7.02%	7.03%	7.05%	7.06%	7.08%	7.10%
<b>Efficiency Ratios</b>												
Receivable Turnover (x)	45.83	48.57	43.36	43.36	43.36	43.36	43.36	43.36	43.36	43.36	43.36	43.36
Days of Sales Outstanding (DSO) (days)	7.96	7.51	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42
Inventory Turnover (x)	26.06	24.25	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70
Days Inventory Outstanding (DIO) (days)	14.01	15.05	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40
Payable Turnover (x)	6.42	6.18	6.25	6.27	6.22	6.27	6.24	6.25	6.25	6.24	6.25	6.24
Days Payable Outstanding (DPO) (days)	56.85	59.09	58.42	58.26	58.67	58.26	58.54	58.43	58.43	58.47	58.43	58.46
Cash Conversion Cycle (CCC) (days)	-34.89	-36.52	-34.60	-34.44	-34.86	-34.44	-34.72	-34.61	-34.61	-34.65	-34.61	-34.64
Operating Cycle (days)	21.97	22.57	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82
Fixed Asset Turnover (x)	2.04	2.18	2.19	2.20	2.22	2.23	2.24	2.25	2.25	2.26	2.26	2.27
Total Asset Turnover (x)	1.27	1.24	1.18	1.15	1.13	1.12	1.10	1.07	1.04	1.02	0.99	0.97
<b>Liquidity Ratios</b>												
Current Ratio (x)	0.68	0.76	0.85	0.93	0.92	0.92	0.92	0.93	0.94	0.95	0.95	0.96
Quick Ratio (x)	0.24	0.22	0.35	0.45	0.48	0.52	0.54	0.58	0.61	0.64	0.66	0.68
Cash Ratio (x)	0.16	0.15	0.27	0.37	0.41	0.45	0.48	0.52	0.56	0.59	0.61	0.64
Operating Cash Flow Ratio (x)	0.22	0.23	0.16	0.14	0.07	0.08	0.07	0.08	0.07	0.06	0.06	0.05
<b>Solvency Ratios</b>												
Total debt to total equity (x)	0.60	0.47	0.54	0.55	0.56	0.57	0.57	0.56	0.56	0.55	0.55	0.54
Total debt to total assets (x)	0.16	0.15	0.16	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.13	0.13
ST Debt to Equity (x)	0.09	0.05	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
LT Debt to Equity (x)	0.51	0.43	0.43	0.44	0.44	0.45	0.45	0.45	0.44	0.44	0.43	0.43
Interest Coverage Ratio (x)	1.86	4.72	4.30	4.14	4.01	3.89	3.76	3.58	3.39	3.22	3.05	2.90
Equity Multiplier (x)	3.77	3.15	3.42	3.59	3.70	3.80	3.89	3.94	4.00	4.06	4.13	4.20
Debt to EBITDA (x)	2.07	1.73	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08
Debt Ratio (x)	0.38	0.32	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.35

## Appendix 8: Forecasting Assumptions

Income Statement	Unit	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	Assumptions
Sales	YoY	5.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 9 for detailed forecast
COGS	% revenue	92.96%	92.96%	92.96%	92.96%	92.96%	92.96%	92.96%	92.96%	92.96%	92.96%	Historical average % revenues between 2018 and 2022
Other operating income (expenses)	% revenue	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	Historical average % revenues between 2018 and 2022
Administrative expenses	% revenue	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%	Historical average % revenues between 2018 and 2022
Depreciation & amortization	% fixed assets	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	Historical average % fixed assets between 2018 and 2022
Financial income (expenses)	YoY	4.09%	9.09%	7.74%	7.58%	7.43%	7.26%	7.68%	7.49%	7.46%	7.44%	Financial Income: Historical average Financial expenses= Financial expense t-1 * Kd
Taxes	%	22.08%	22.08%	22.08%	22.08%	22.08%	22.08%	22.08%	22.08%	22.08%	22.08%	Historical average of effective tax rate between 2018 and 2022
Income from associates and joint ventures	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Hard to predict
Net income non-controlling interests	% net income	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	Historical average % net income between 2018 and 2022
Net income shareholders of the parent	% of net income	258.95%	258.95%	258.95%	258.95%	258.95%	258.95%	258.95%	258.95%	258.95%	258.95%	Historical average % net income between 2018 and 2022

Balance Sheet	Unit	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	Assumptions
<b>Non-current assets</b>												
Goodwill	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	See Appendix 10 for detailed forecast
Intangible assets	YoY	14.43%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 10 for detailed forecast
PP&E	YoY	5.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 10 for detailed forecast
Right of use assets	YoY	5.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 10 for detailed forecast
Investment property	YoY	5.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 10 for detailed forecast
Financial assets	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Deferred tax assets	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Investments in associates and joint ventures	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
<b>Current assets</b>												
Trade and other receivables	YoY	18.34%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 11 for detailed forecast
Inventories	YoY	8.69%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 11 for detailed forecast

Other operating assets	YoY	19.71%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	Historical average % days of sales between 2018 and 2022
<b>Non-current liabilities</b>												
Financial debt	YoY	2.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%	See Appendix 12 for detailed forecast
Employee benefits liabilities	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Provisions	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Deferred tax liabilities	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Lease liabilities	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Other payables	YoY	91.52%	48.47%	0.00%	1.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
<b>Current liabilities</b>												
Financial debt	YoY	149.57%	4.76%	5.29%	3.49%	4.44%	1.81%	2.00%	2.06%	1.93%	2.06%	See Appendix 12 for detailed forecast
Trade and other payables	YoY	5.03%	4.76%	5.29%	3.49%	4.44%	1.81%	2.00%	2.06%	1.93%	2.06%	See Appendix 11 for detailed forecast
Lease liabilities	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value
Provisions	YoY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Equal to FY22 nominal value

## Appendix 9: Revenues

Sales Forecast	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Sales	61,344	64,816	68,083	71,174	74,184	77,107	78,649	80,222	81,827	83,463	85,133
Tesco Bank	922	995.13	1074.06	1159.26	1251.21	1350.45	1457.57	1573.18	1697.97	1832.65	1978.01
<b>GDP per capita</b>											
Europe	6.76%	5.66%	5.04%	4.54%	4.23%	3.94%	4.48%	4.60%	4.17%	5.46%	7.08%
<b>g</b>											

Europe's GDP per capita includes: Albania, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, KOS, Latvia, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom

## Appendix 10: CAPEX

Capex	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
<b>Capex</b>	<b>1,139</b>	<b>1,196</b>	<b>1,250</b>	<b>1,303</b>	<b>1,354</b>	<b>1,382</b>	<b>1,409</b>	<b>1,437</b>	<b>1,466</b>	<b>1,495</b>
Capex % of revenues	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%	1.76%
<b>D &amp; A</b>										
<b>Depreciation &amp; amortisation</b>	<b>1,744</b>	<b>1,832</b>	<b>1,915</b>	<b>1,996</b>	<b>2,075</b>	<b>2,116</b>	<b>2,159</b>	<b>2,202</b>	<b>2,246</b>	<b>2,291</b>
Depreciation, amortisation % of fixed assets	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%

Fixed Assets	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Goodwill	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291
Intangible assets	1,223	1,285	1,343	1,400	1,455	1,484	1,514	1,544	1,575	1,607
Intangible assets in % of sales	1.89%	1.89%	1.89%	1.89%	1.89%	1.89%	1.89%	1.89%	1.89%	1.89%
PP&E	18,026	18,934	19,794	20,631	21,444	21,873	22,310	22,756	23,211	23,676
PP&E in % of sales	27.81%	27.81%	27.81%	27.81%	27.81%	27.81%	27.81%	27.81%	27.81%	27.81%
Right of use assets	6,044	6,348	6,637	6,917	7,190	7,334	7,480	7,630	7,783	7,938
Right of use assets in % of sales	9.32%	9.32%	9.32%	9.32%	9.32%	9.32%	9.32%	9.32%	9.32%	9.32%
Investment property	23	24	26	27	28	28	29	29	30	31
Investment property in % of sales	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%
<b>Total Fixed Assets</b>	<b>29,607</b>	<b>30,883</b>	<b>32,090</b>	<b>33,266</b>	<b>34,408</b>	<b>35,010</b>	<b>35,624</b>	<b>36,251</b>	<b>36,890</b>	<b>37,542</b>

## Appendix 11: NWC

Working Capital	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Inventories	2,542	2,670	2,792	2,910	3,024	3,085	3,146	3,209	3,274	3,339
DIO	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40
Receivables	1,495	1,570	1,641	1,711	1,778	1,814	1,850	1,887	1,925	1,963
DSO	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42
Payables	9,643	10,101	10,635	11,007	11,495	11,703	11,938	12,184	12,419	12,674
DPO	58.42	58.26	58.67	58.26	58.54	58.43	58.43	58.47	58.43	58.46
<b>NWC</b>	<b>-5,606</b>	<b>-5,861</b>	<b>-6,202</b>	<b>-6,386</b>	<b>-6,693</b>	<b>-6,805</b>	<b>-6,941</b>	<b>-7,088</b>	<b>-7,220</b>	<b>-7,372</b>
<b>Δ NWC</b>	<b>-27</b>	<b>-255</b>	<b>-341</b>	<b>-184</b>	<b>-307</b>	<b>-112</b>	<b>-137</b>	<b>-146</b>	<b>-133</b>	<b>-152</b>

## Appendix 12: Debt

Debt	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
ST Debt	1,809	1,895	1,996	2,065	2,157	2,196	2,240	2,286	2,330	2,378
ST Debt % accounts payable	18.76%	18.76%	18.76%	18.76%	18.76%	18.76%	18.76%	18.76%	18.76%	18.76%
LT Debt	6,852	7,197	7,524	7,842	8,151	8,314	8,480	8,650	8,823	8,999
LT Debt % capex	601.81%	601.81%	601.81%	601.81%	601.81%	601.81%	601.81%	601.81%	601.81%	601.81%
<b>Total Debt</b>	<b>8,661</b>	<b>9,093</b>	<b>9,519</b>	<b>9,907</b>	<b>10,308</b>	<b>10,510</b>	<b>10,720</b>	<b>10,936</b>	<b>11,153</b>	<b>11,378</b>

## Appendix 13: Cost of Capital

### Cost of Equity (Ke)

The Cost of Equity is reached through Capital Asset Pricing Model (CAPM), using the formula:

$$Ke = RFR + (\beta \times MRP)$$

The Risk-Free Rate and the Market Risk Premium are obtained through the average of all the countries where Tesco operates. This data was extracted from the survey "Market Risk Premium and Risk-Free Rate used for 88 countries in 2021". Regarding Beta, based on Tesco's information, raw beta was 2.44, and after applying the Blume method is reached an adjusted beta of 1.96.

	Risk-Free Rate	Market Risk Premium
UK	1.30%	5.60%
Ireland	0.70%	5.90%
Slovakia	0.70%	5.90%
Hungary	3.30%	7.10%
Czech Republic	2.00%	5.80%
<b>Average</b>	<b>1.60%</b>	<b>6.06%</b>

Cost of Equity	
Risk Free	1.60%
D/(D+E)	27.62%
D/E	38.17%
Adjusted Beta	1.96
Tax	19.0%
Market Risk Premium	6.06%
<b>Ke</b>	<b>10.34%</b>

### Cost of Debt (Kd)

The Cost of Debt is calculated through the following formula:

$$Kd = \frac{\text{Interest Expense}}{\text{Debt}}$$

Cost of Debt	
Interest expense	-542
Debt	7,399
<b>Cost of Debt</b>	<b>7.33%</b>
<b>Cost of Debt after Tax</b>	<b>5.93%</b>

### WACC

In order to calculate the WACC, the following formula is used:

$$WACC = \frac{E}{V} \times Ke + \frac{D}{V} \times Kd \times (1 - t)$$

In conclusion, after all the calculations was estimated a 9.12% WACC.

### Sustainable growth rate

The sustainable growth rate or terminal growth rate (g) is estimated by taking into account the sales growth, with the adjustment of GDP per capita growth. Also, from year 2028F a constant sales growth was assumed, which is in line with the Reuters assumption. In conclusion, is reached a sustainable growth rate of 3.34%.

g	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Sales growth	5.66%	5.04%	4.54%	4.23%	3.94%	2.00%	2.00%	2.00%	2.00%	2.00%
<b>g</b>	<b>3.34%</b>									

## Appendix 14: Discounted Cash Flow (DCF)

With FCFF approach

$$FCFF = EBIT(1 - t) \pm \text{NonCash Charges} - CAPEX - \Delta NWC$$

$$EV = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)^t} + \frac{FCFF_{n+1}}{(WACC - g)} \frac{1}{(1 + WACC)^n}$$

	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
NOPAT	2073.60	1963.56	2062.53	2156.17	2247.37	2335.92	2382.64	2430.29	2478.89	2528.47	2579.04
D&A	1718.00	1744.01	1831.91	1915.08	1996.08	2074.73	2116.22	2158.55	2201.72	2245.75	2290.67
Capex	1101.00	1138.53	1195.91	1250.20	1303.09	1354.43	1381.52	1409.15	1437.33	1466.08	1495.40
Δ NWC	-512.00	-26.59	-255.38	-341.48	-183.76	-306.77	-111.80	-136.67	-146.06	-132.92	-151.64
<b>FCFF</b>	<b>3202.60</b>	<b>2595.63</b>	<b>2953.90</b>	<b>3162.52</b>	<b>3124.13</b>	<b>3362.99</b>	<b>3229.14</b>	<b>3316.36</b>	<b>3389.34</b>	<b>3441.07</b>	<b>3525.95</b>

PV FCFF Forecasted period	20108.00
PV FCFF Terminal Value	26314.84
<b>Enterprise value</b>	<b>46422.84</b>
Debt	8661.12
Provisions	466.00
Cash & Equivalents	7193.00
Non-controlling interests	-16.00
<b>Equity value</b>	<b>44504.72</b>
Shares outstanding (Bloomberg)	7505
<b>Price target in GBX</b>	<b>592.98</b>
Tesco 01/08/2022 in GBX	265.00

### With FCFE approach

$$FCFE = \text{Net Income} + \text{NonCash Charges} - \text{CAPEX} - \Delta\text{NWC} + \text{Net Borrowing}$$

$$EV = \sum_{t=1}^n \frac{FCFE_t}{(1 + Ke)^t} + \frac{FCFE_{n+1}}{(Ke - g)} \frac{1}{(1 + Ke)^n}$$

	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
Net income	1,523	1,449	1,505	1,558	1,606	1,650	1,652	1,648	1,643	1,636	1,625
D&A	1718	1744	1832	1915	1996	2075	2116	2159	2202	2246	2291
Capex	1101	1139	1196	1250	1303	1354	1382	1409	1437	1466	1495
Δ NWC	-512	-27	-255	-341	-184	-307	-112	-137	-146	-133	-152
Net Borrowings	1169	1585	1685	1672	1597	1542	1616	1622	1610	1597	1597
<b>FCFE</b>	<b>3,821</b>	<b>3,667</b>	<b>4,081</b>	<b>4,236</b>	<b>4,080</b>	<b>4,219</b>	<b>4,114</b>	<b>4,157</b>	<b>4,164</b>	<b>4,146</b>	<b>4,169</b>

PV FCFE Forecasted period	24688.77
PV FCFE Terminal Value	23004.85
<b>Equity value</b>	<b>47693.62</b>
Shares Outstanding	7505
<b>Price Target in GBp</b>	<b>635.47</b>
Tesco 01/08/2022 in GBX	265.00

### Appendix 15: Adjusted Present Value (APV)

$$APV = EBIT(1 - t) \pm \text{NonCash Charges} - \text{CAPEX} - \Delta\text{NWC} + \text{Interest Tax Shield}$$

	2022A	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
NOPAT	2073.60	1963.56	2062.53	2156.17	2247.37	2335.92	2382.64	2430.29	2478.89	2528.47	2579.04
D&A	1718.00	1744.01	1831.91	1915.08	1996.08	2074.73	2116.22	2158.55	2201.72	2245.75	2290.67
Capex	1101.00	1138.53	1195.91	1250.20	1303.09	1354.43	1381.52	1409.15	1437.33	1466.08	1495.40
Δ NWC	-512.00	-26.59	-255.38	-341.48	-183.76	-306.77	-111.80	-136.67	-146.06	-132.92	-151.64
<b>FCFF</b>	<b>3202.60</b>	<b>2595.63</b>	<b>2953.90</b>	<b>3162.52</b>	<b>3124.13</b>	<b>3362.99</b>	<b>3229.14</b>	<b>3316.36</b>	<b>3389.34</b>	<b>3441.07</b>	<b>3525.95</b>
Interest expense	542	564	615	663	713	766	822	885	951	1,022	1,098
<b>Interest tax shield</b>	<b>103</b>	<b>107</b>	<b>117</b>	<b>126</b>	<b>136</b>	<b>146</b>	<b>156</b>	<b>168</b>	<b>181</b>	<b>194</b>	<b>209</b>



PV FCFF Forecasted period	19880.02
PV FCFF Terminal Value	24659.07
<b>Unlevered Intrinsic EV</b>	<b>44539.09</b>
PV of Tax Shield	921.06
PV Tax Shield Terminal value	1459.62
<b>Intrinsic EV</b>	<b>46919.77</b>
Debt	8661.12
Provisions	466
Cash & Equivalents	7193
Non-controlling interests	-16
<b>Equity value</b>	<b>45001.66</b>
Shares outstanding (Bloomberg)	7505
<b>Price target in GBp</b>	<b>599.60</b>
Tesco 01/08/2022 in GBp	265.00

## Appendix 16: Dividend Discount Model (DDM)

In this model is used a two-stage model with a H-model for the Terminal Value. The short-term dividend growth rate is assumed to be the average of DPS growth rate and the long-term rate is assumed to be equal to the sustainable growth rate computed in appendix 13.

	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F
DPS	0.11	0.11	0.12	0.13	0.16	0.17	0.19	0.21	0.24	0.27
YoY	1%	0%	9%	8%	23%	8%	10%	12%	12%	13%
Short-term growth	10%									
Long-term growth	3.34%									
r (Ke)	10.34%									
H	5									
PV Dividends	0.903									
PV TV	1.997									
<b>Price Target in GBp</b>	<b>290.08</b>									

## Appendix 17: Relative Valuation

Name	Country	Mkt Cap (GBP)	EV / EBITDA	EV/Sales	P/E	GM	Debt/Equity	EV/EBIT	P/B	P/S	P/CF
TESCO PLC	UK	19461246865	6.71	0.53	13.06	7.78	98.17	10.91	1.26	0.32	5.23
SONAE	Portugal	1923570306	8.2	0.67	9.12	31.72	82.57	18.94	0.86	0.31	3.18
SAINSBURY (J) PLC	UK	5088327733	5.05	0.41	7.29	7.88	87.64	11.02	0.6	0.16	4.83
KESKO OYJ	Finland	7668987460	8.86	1.05	15.42	14.2	90.73	14.39	3.5	0.81	8.65
JERONIMO MARTINS	Portugal	11168018905	9.09	0.72	26.52	21.53	109.99	16.61	5.61	0.6	8.5
DINO POLSKA SA	Poland	5824628891	25.27	2.41	38.63	24.87	48.05	31.26	10.05	2.27	33.71
COLRUYT SA	Belgium	3107729754	5.38	0.62	12.63	28.11	19.05	10.23	1.51	0.37	5.41
CASINO G. P.	France	1217090533	5.47	0.59	N.A.	23.29	243.22	9.56	1.02	0.05	1.82
CARREFOUR SA	France	10675550959	5.68	0.34	12.86	21.79	134.16	11.38	1.28	0.18	3.67
AXFOOD AB	Sweden	5192868961	14.32	1.18	26.74	15.45	154.64	26.94	15.77	1.04	14.72
AHOLD DELHAIZE	Netherlands	23211270261	6.67	0.58	11.94	27.36	124.55	12.9	1.82	0.35	5.14
Median		5824628891	6.71	0.61	12.86	23.29	117.27	12.14	1.66	0.32	5.14
<b>Average</b>		<b>8371092013</b>	<b>8.823</b>	<b>0.81</b>	<b>16.65</b>	<b>20.64</b>	<b>133.23</b>	<b>15.36</b>	<b>3.81</b>	<b>0.56</b>	<b>8.12</b>

### EV/EBITDA

EV/EBITDA Peer	8.83
Tesco 22F EBITDA	4,168.16
Tesco EV	36,784.03
Net Debt	2,978.00
Equity Value	33,806.03
Number of shares outstanding	7,505.30
<b>Price target in GBp</b>	<b>450.43</b>

### P/B

Tesco Book value per shares	208.4
Average peers	3.807
<b>Price target in GBp</b>	<b>793.46</b>

### EV/Sales

EV/Sales Peer	0.81
Tesco 22F Revenue	64,816.07
Tesco EV	52,609.04
Net Debt	2,978.00
Equity Value	49,631.04
Number of shares outstanding	7,505.30
<b>Price target in GBp</b>	<b>661.28</b>

### P/E

Tesco Book EPS	21.86
Average peers	16.648
<b>Price target in GBp</b>	<b>363.93</b>

### P/S

Tesco Sales per share	817.3
Average peers	0.558
<b>Price target in GBp</b>	<b>455.67</b>

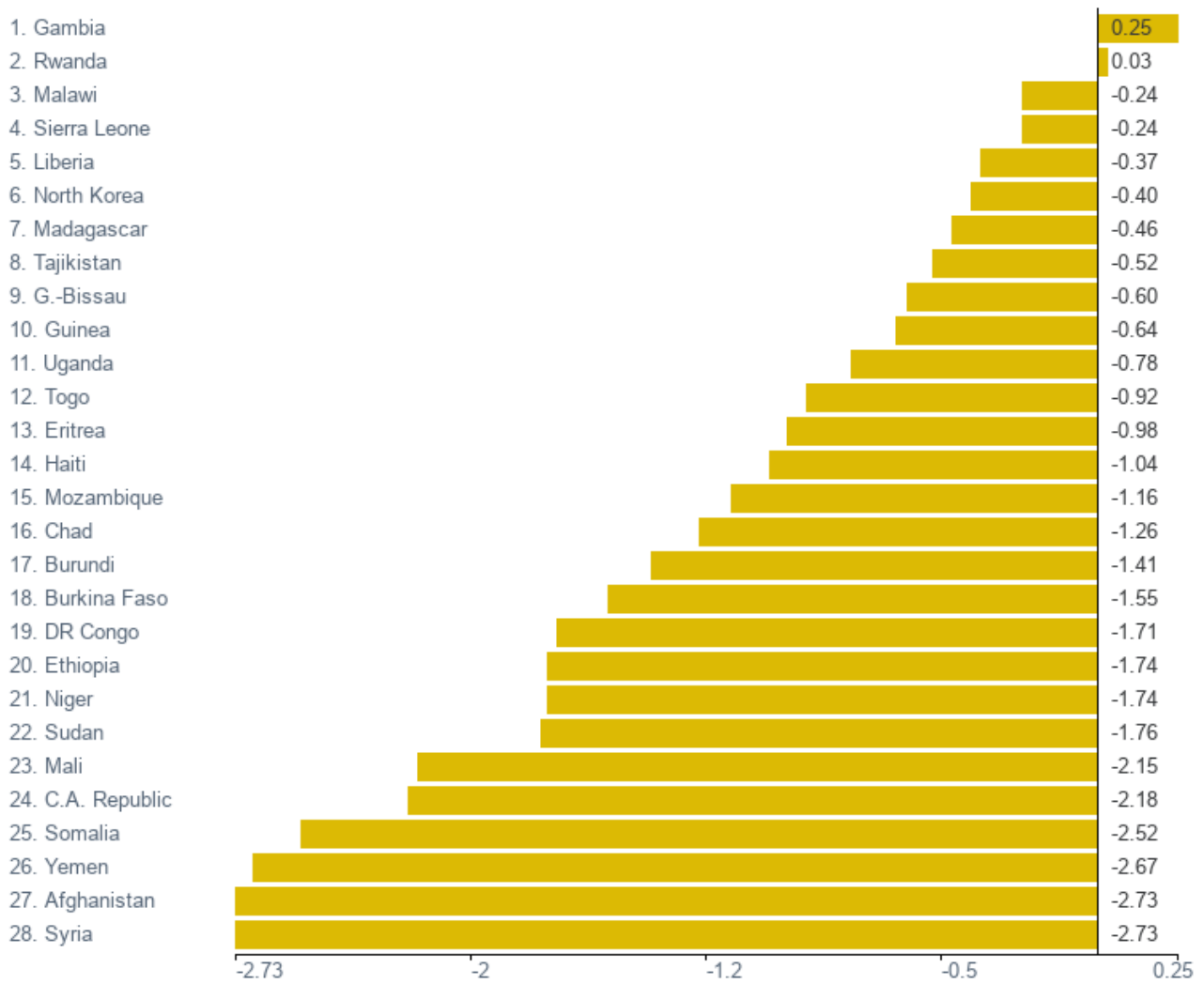
### EV/EBIT

EV/EBIT Peer	15.36
Tesco 22F EBIT	2,424.15
Tesco EV	37,226.89
Net Debt	2,978.00
Equity Value	34,248.89
Number of shares outstanding	7,505.30
<b>Price target in GBp</b>	<b>456.33</b>

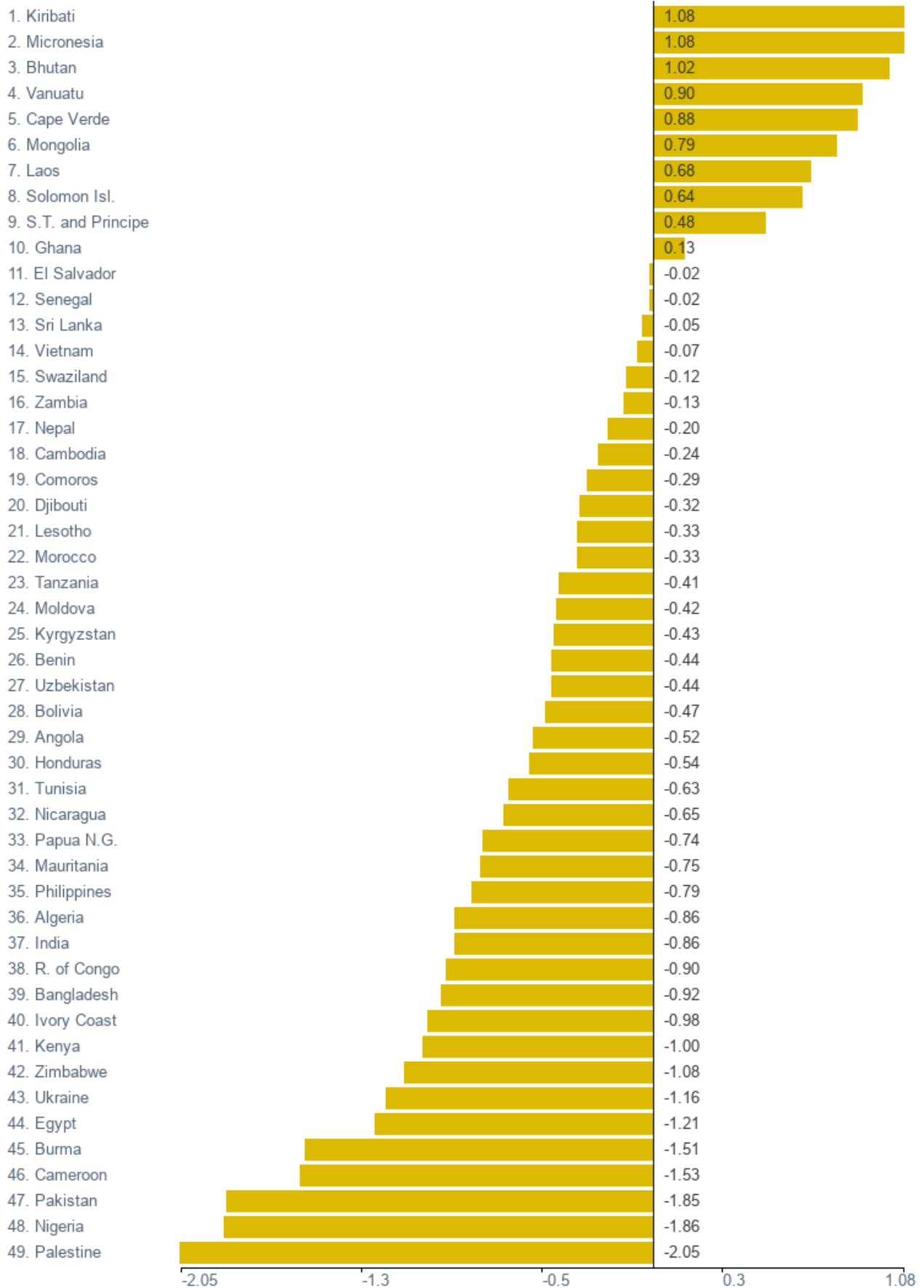
### P/CFO

Tesco CFO per share	50.01
Average peers	8.116
<b>Price target in GBp</b>	<b>405.83</b>

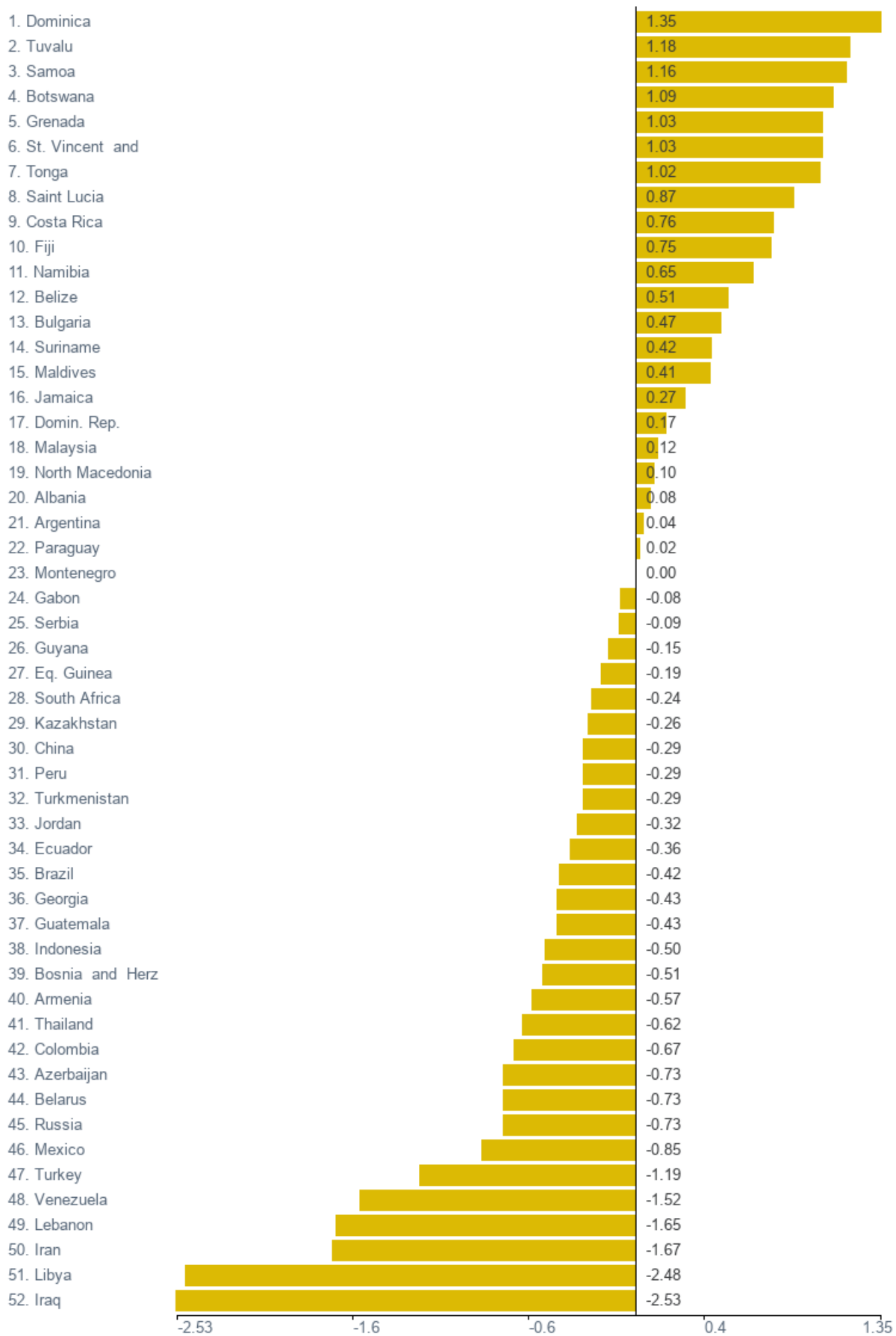
## Appendix 18: Global Political Stability Index



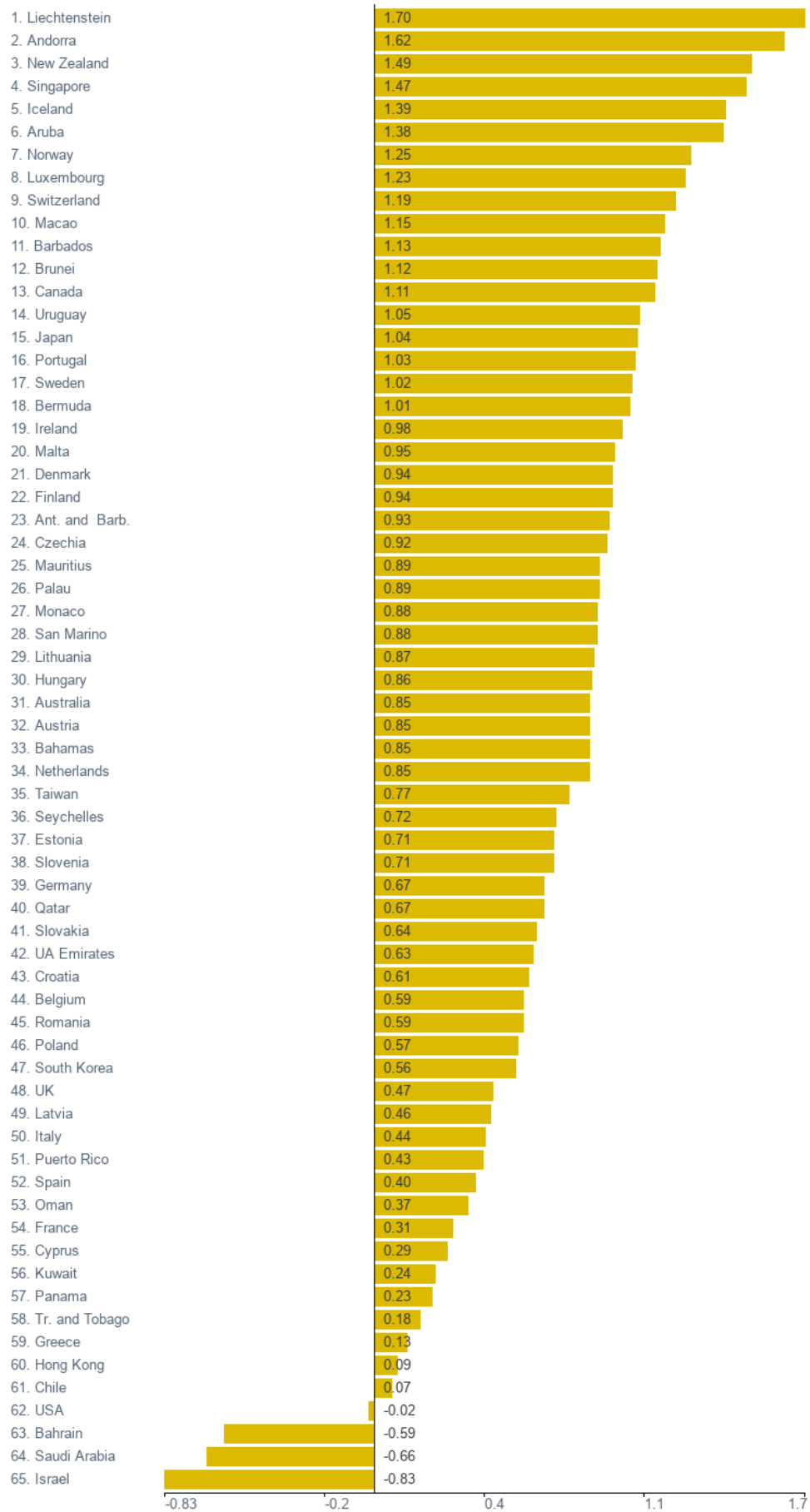
Global Political Stability Index: high-income countries, 2020  
 -2.5 → Weak; 2.5 → Strong  
 Source: The World Bank, TheGlobalEconomy.com



Global Political Stability Index: upper middle-income countries, 2020  
 -2.5 → Weak; 2.5 → Strong  
 Source: The World Bank, TheGlobalEconomy.com



Global Political Stability Index: upper middle-income countries, 2020  
 -2.5 → Weak; 2.5 → Strong  
 Source: The World Bank, TheGlobalEconomy.com



Global Political Stability Index: upper middle-income countries, 2020  
 -2.5 → Weak; 2.5 → Strong

Source: The World Bank, TheGlobalEconomy.com

The average of the 194 countries worldwide presented in these charts is -0.07 points, being -2.5 points a weak stability and 2.5 points a strong stability. Low-income countries, lower middle-income countries, upper middle-income countries, and high-income countries present indices of -1.22, -0.4, -0.14 and 0.73, respectively.

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## Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	$0\% \leq$	$>0\% \ \& \ \leq 10\%$	$>10\% \ \& \ \leq 20\%$	$>20\% \ \& \ \leq 45\%$	$>45\%$
Medium Risk	$-5\% \leq$	$>-5\% \ \& \ \leq 5\%$	$>5\% \ \& \ \leq 15\%$	$>15\% \ \& \ \leq 30\%$	$>30\%$
Low Risk	$-10\% \leq$	$>-10\% \ \& \ \leq 0\%$	$>0\% \ \& \ \leq 10\%$	$>10\% \ \& \ \leq 20\%$	$>20\%$

