



CFA Institute

CFA Institute Research Challenge hosted CFA Society Egypt

Egypt Japan University of Science and Technology

Team Members

Seif Marie

Menna Nassar

Farah Essam

Maraam Ashraf

Habia Yehia

Supervised By

Dr. Mahmoud Otaify, Faculty Advisor

Mr. Mohamed Arisha, CFA Society Volunteer

Mr. Ahmed Sultan, Industry Mentor

The CFA Institute Research Challenge is a global competition that tests the equity research and valuation, investment report writing, and presentation skills of university students. The following report was prepared in compliance with the Official Rules of the CFA Institute Research Challenge, is submitted by a team of university students as part of this annual educational initiative and should not be considered a professional report.

Disclosures:

Ownership and material conflicts of interest

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company.

The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation

Compensation of the author(s) of this report is not based on investment banking revenue.

Position as an officer or a director

The author(s), or a member of their household, does not serve as an officer, director, or advisory board member of the subject company.

Market making

The author(s) does not act as a market maker in the subject company's securities.

Disclaimer

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Society Egypt, CFA Institute, or the CFA Institute Research Challenge with regard to this company's stock.

Egypt-Japan University of Science and Technology

Investment Summary

We issue a buy recommendation on IDH's stock with a target price of EGP 37.33 and an upside potential of 80 % our valuation is based on the DCF Analysis, for the following Reasons: First, IDH is an industry leader with the lion's share of +50% of the private healthcare market. We could not find a competitor with the size and potential of IDH to use the multiples method. Second, we chose the DCF model as we could predict the financial relationship of IDH with its suppliers, demand on IDH's services regarding cash flows, IDH's risk, and growth factors. To illustrate, the company's business risk and the generated cash flows are reflected in the DCF. Third, IDH has healthy sustainable growth and sort of predictable cash flows. Finally, DCF shows us the reflection of IDH's strategic position in the long run regarding financial leverage, capital expenditure, and IDH's position in the market.

Senior growing population riddled by chronic disease

Egypt is one of the most populous countries ranking number 14 globally in terms of population according to CAPMAS with a 102 million citizens currently and forecasted to reach 120 million by 2030 with around 5.3 % being of the age group 65 + and growing at a rate of 0.5 % annually, all the previous factors present a large potential customer base for IDH with more than 60 % of healthcare expenditure being out of pocket, this puts IDH in a strategic position for growth.

Underpenetrated Healthcare Market Shows Tremendous Room for growth

The current insurance penetration rates are quite low when compared to peer countries with Egypt having one of the lowest insurance penetration rates in the middle east at 0.68%, not to mention Egypt's healthcare expenditure represents only about 5% of GDP, whilst having a relatively high out of pocket healthcare expenditure at 62%, feeding directly into the potential for the private healthcare market and with IDH being the largest fully integrated diagnostics service provider the company is placed in a great position to capitalize on the various opportunities present in Egypt and the MENA Region.

Reuters Ticker	IDHC.CA
Market Cap, EGP Bn	12.1
52W H-L, EGP/Share	22-3.94
Last Price, EGP/Share	20.24
Shares Outstanding, Mn	600

Figure 1: IDH Stock VS EGX 30

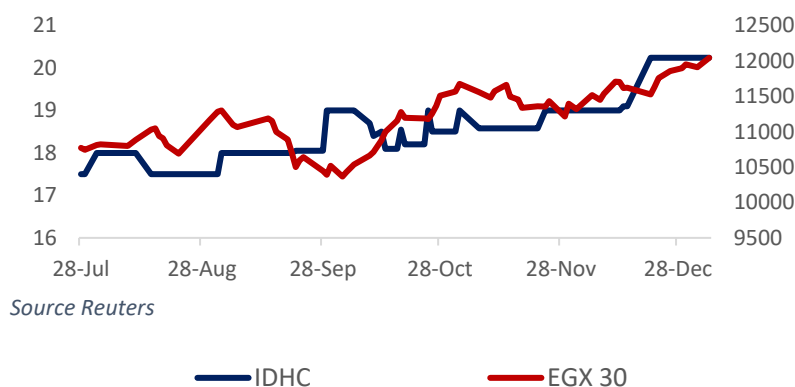


Figure 2: Key Metrics

Key Metrics	2021E	2022E	2023E	2024E	2025E
Revenue EGP MN	3998.01	4554.73	5188.98	5911.54	6734.72
Gross Profit EGP MN	1997.30	2554.03	3188.27	3910.84	4734.02
GPM (%)	50%	56%	61%	66%	70%
EBITDA, EGP MN	5995.81	7109.32	8377.86	9823.04	11469.45
EBITDA, Margin (%)	40%	48%	55%	61%	67%
Net Profit, EGP MN	940.10	1415.41	1956.05	2551.31	3229.14
Net Profit Growth Rate, (%)	77%	51%	38%	30%	27%
Net Profit Margin (%)	24%	31%	38%	43%	48%

Source: Company Data

Company Description

Introduction: IDH is one of the leading healthcare companies in Africa and the Middle East with experience of over 40 years. IDH started with a small lab in 1979, and now it is the private healthcare service leader in Egypt.

IDH is a woman-led company that offers diversified healthcare services, including more than 2,000 diagnostics tests. IDH provides premium medical diagnostic services that range from basic diagnostic tests to advanced molecular tests. IDH was listed in The Egyptian Exchange since May 2021 and on London Stock Exchange since May 2015, with a total of 600 Mn shares outstanding.

Shareholder Structure: IDH has 600 Mn shares issued and outstanding at a par value of 0.25 USD/share.

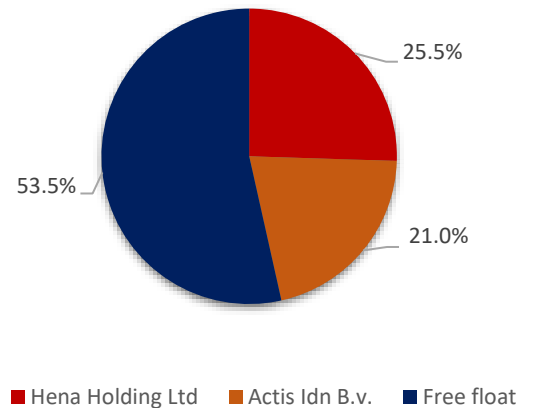
This results in total paid-in capital of USD 150 Mn. The highest shareholding percentage is attributed to the free float of 53.5%. Furthermore, Hena holdings have 25.5%, and Actis Idn has 21%. (Figure 3)

Geographic Locations: IDH has about 507 branches located in Egypt, Jordan, Sudan, and Nigeria. Egypt is the highest in terms of revenue percentage and number of branches. Egypt has 455 branches distributed among Cairo, Upper Egypt region, Alexandria, and the Delta-Region. (Figure 5)

Revenue contribution from Egypt is 82.9%. Furthermore, Jordan accounts for the second-highest revenue contribution of 15.7% and 21 branches. Nigeria comes in third place with a 1.1% revenue contribution and 12 branches. Finally, Sudan has only 0.3% and 19 branches due to the country's economic and political instability. (Figure 4)

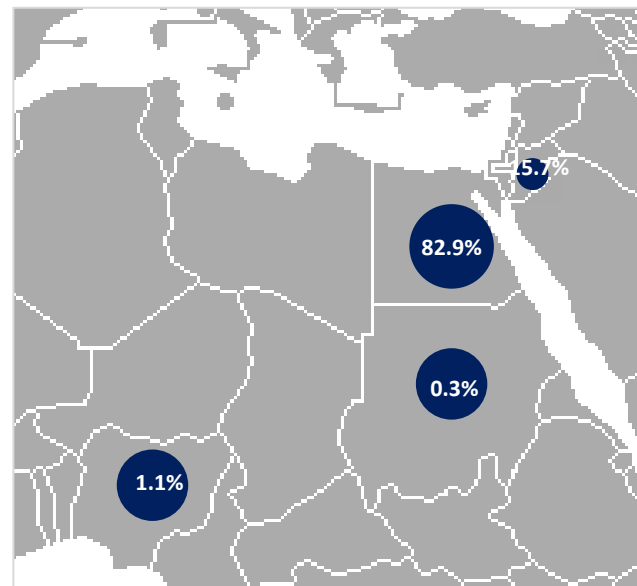
Business Description & Strategy: IDH provides high-quality medical diagnostic services that range from routine diagnostic tests to advanced molecular tests. Their service includes immunology, microbiology, hematology, endocrinology, clinical chemistry, molecular biology, cytogenetics, and histopathology. In 2018, IDH launched radiology services that include ultrasound, x-ray, mammograms, Cath lab facilities, magnetic resonance imaging (MRI), and computed tomography (CT). Egypt is the dominant contributor to the company's revenues by having 82.9% of revenues in 9m 2021. The company has 50%+ of the Egyptian private healthcare market. IDH has potential growth opportunities since it operates in growing markets. For instance, there are increasing populations with a high disease burden. Moreover, there is a widespread lifestyle regarding medical conditions, and elevated health consciousness; these constitute revenue growth drivers. The company's main expenses are derived from using the medical kits used in diagnostic (raw materials). The kits account for 18.3% of COGS for 9m 2021. IDH has solid financial performance, with a CAGR of 21% over five years (2014a - 19a), during which IDH's revenue rose considerably from EGP860 million in 2014 to EGP2.2 billion in 2020.

Figure 3: Shareholder Structure



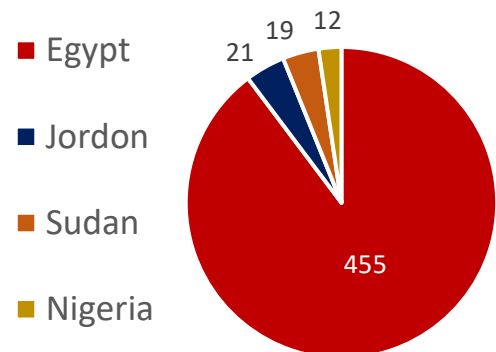
Source, Company disclosures

Figure 4: Revenue Contribution by Country as of 2020



Source: Company Data

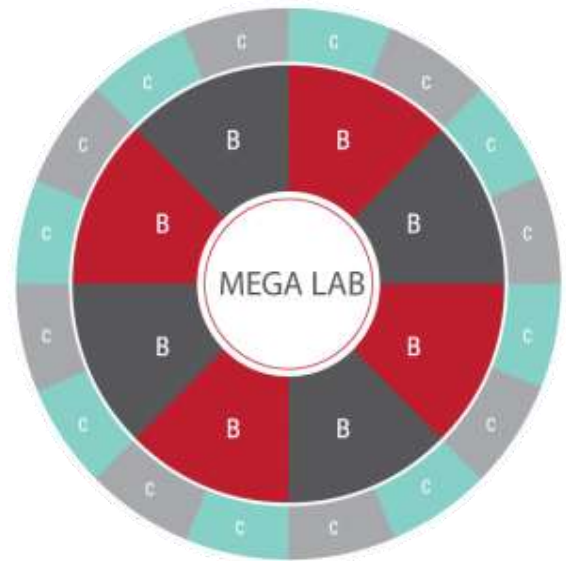
Figure 5: Lab Branches by Country



Source: Company Data

Strategy: IDH adopts an efficient growth strategy. There are two key reasons for the healthy expansion of IDH that compose the Asset-light Business Model. First, IDH operates through Hub, Spoke, and Spike business model to serve the growing number of branches effectively and efficiently. In addition to opening more branches and reaching a larger target market. To illustrate, the Mega Lab (Hub) is in Cairo, and it is the biggest automated lab in Egypt that is equipped with the latest technology. The Mega lab processes specialty tests from the four countries. B-Labs are smaller than Mega labs but larger than C-Labs regarding the capacity. Therefore, IDH could sustain the expansion and reach several geographic areas. Second, the company has a competitive advantage regarding its suppliers. For instance, IDH has supplier relationships that enable it to expand without purchasing costly medical diagnostic devices. IDH targets and serves the private healthcare market. The company is keen on keeping its well-established reputation by adhering to offering precise and timely diagnostic services. Therefore, they are accredited by the College of American Pathologists (CAP) and the International Organization for Standardization (ISO).

Figure 6: Asset light hub model



Source: IDH Website

Environmental, social and corporate governance

Environmental: Since IDH is not an industrial environment, it does not have a considerable impact on the environment. However, IDH is committed to making a positive impact on the environment. For example, IDH reduces its water and electricity consumption. Furthermore, IDH follows the Ministry of Health regulations governing waste treatment to keep its sustainable growth by following the Environmental Law and its Executive Regulations. Additionally, IDH deals with diversified suppliers concerned with the impact on the environment. For instance, during the last decade, Abbot company (one of IDH's major suppliers) cut carbon emissions in half, water usage was reduced by 33%., and reduced waste by 47%.

Corporate social responsibility:

IDH has a significant impact on the societies it operates in. One of the main CSR activities is The Moamena Kamel Foundation for Training and Skill Development. It was founded in 2006 to provide quality medical aid and services to enhance the community. IDH donates about 1% of the net after-tax profit from its primary subsidiaries (Al Borg and Al Mokhtabar) to the Moamena Kamel Foundation, which amounted to EGP 6.5 million in 2020. The foundation concentrates on improving the lives of Cairo's Al Duweiqa specifically, besides various villages across vision for its targeted communities regarding economic, social, and healthcare conditions. For example, it offers free healthcare clinics, loans for proactive women, educational programs at Al Duweiqa community, affording food for families in need, and finally, the foundation covers the costs for the Intensive Care Unit at Al Kasr El Aini Hospital. Moreover, they participated in 100 million healthy lives campaign of a total of 4.4 million test.

IDH has a variety of initiatives to help Egyptian societies. For instance, providing medical supplies to Kasr El Aini Hospital, Financial aid to Al Manial hospital, free medical tests for underprivileged children, financial assistance to impoverished citizens, especially during COVID-19, and free medical checks for Baheya hospital patients.

Employees: IDH takes all safety precaution measures incorporated under the Labor Law that guarantee the safety and well-being of IDH's employees at the workplace regarding biological, chemical, physical, and mechanical hazards. IDH is also keen on protecting its employees by providing them with suitable protective equipment during COVID-19; or whenever dealing with any infectious diseases. Besides training the employees on dealing with patients suspected of carrying any communicable diseases as COVID-19. Moreover, all employees receive regular notifications warning them that if they have symptoms of a Covid-19 infection, they should not report to work. Lastly, increasing the frequency of cleaning, disinfection, working from home, and virtual meeting to keep its employees safe.

Governance: IDH implements the best industry standards in governance as it believes that it will help the company to establish profitable and sustainable growth while also protecting shareholder interests. IDH complies with Anti-Bribery and

Anti-Corruption Policy (ABAC) which is concerned with applying the strictest ethical standards and anti-corruption regulations. In addition to the No Referral Fee Policy, Gift Policy, and voluntary compliance for the UK Corporate Governance Code to enhance its corporate governance.

Board of Directors structure:

IDH's BoD consists of five members, only one is an executive member, while four are independent non-executives (according to the IDH website) to sustain impersonal decision-making. The BoD has varieties in terms of specializations fields. For example, Dr. HEND EL SHERBINI and Mr. Dan Olsson are specialized in health care fields. On the other hand, Mr. Hussein Choucri is specialized in securities & investment. These diversified specializations create a balance in the company's operations. The company does not seem to have gender inequalities, clear evidence is that IDH is a woman-led company by Dr. Hend El Sherbini. However, only 20% of the BoD is a woman, and we suggest increasing this ratio to avoid any gender bias. Finally, we suggest diversifying the Bod nationalities to include nationalities from the countries IDH operates. In our opinion, if IDH accomplishes this, the BoD structure will enable IDH to achieve its goal toward sustainable and profitable growth while maintaining the shareholders' wealth. The CEO holds IDH shares, and we recommend that all BoD hold IDH shares; thus, they always act in the shareholders' best interest.

Integrated Diagnostics Holdings PLC ESG score (out of 100): 11

Industry Analysis

Global Scope: The healthcare industry is rather resilient to economic changes and has survived many economic down turns and most recently during the COVID-19 pandemic while most other industries were considerably damaged according to the MSCI world index the healthcare industry had the least percentage decrease at -10.8% between Jan-March 2020 (Appendix 5) Additionally the industry is forecasted to grow at CAGR 8.56%.

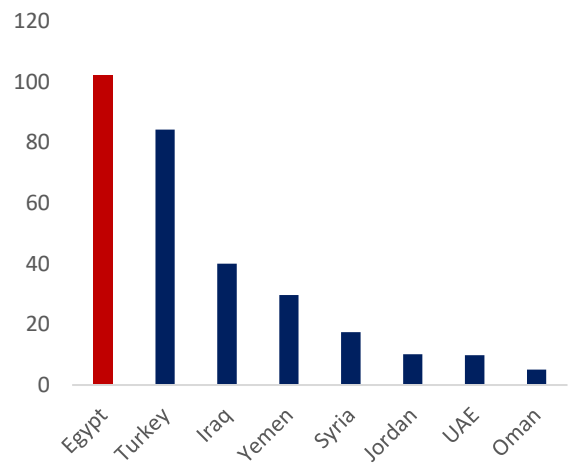
Domestic Scope: The Egyptian healthcare sector is characterized by a mix of public facilities with a subpar infrastuctur, and has been constantly strained by the rapid population growth and the general lack of governeemntal zspending hence most Egyptains tend to opt for private healthcare to garuntee healthcare resulting in a high level to entry and is driven by an aging population, increasing insurance penetration and a rise in chronic and lifestyle disease.

Drivers

Highly populated markets with underutilized potential.

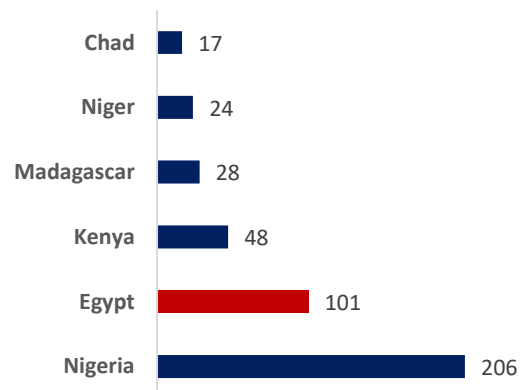
Egypt is amongst the most populous countries in Africa and has crossed the 100 million mark and is forecasted to reach 119.8 million by 2030, being the most populated country in the middle east, with a developing economy far from reaching maturity. This in turn places Egypt as one of the most attractive investment opportunities in the Region. (Figure 7-8)

Figure 7: Populations – Middle east



Source: CAPMAS

Figure 8: Populations – Africa



Source: Data World Bank

Underpenetrated healthcare market

Egypt one of the highest healthcare expenditures when compared to middle eastern peers with around 62 % of healthcare expenditure being out of pocket expenditure which directly fuels the private healthcare market. Furthermore, Egypt has one of the lowest healthcare expenditures as a percentage of GDP when compared with peer countries and developed countries which shows tremendous unutilized room for improvement (Figure 9-10)

Senior population growing at a considerable rate.

The healthcare sector is characterized by stable consistent demand, constant growth, and relatively high barriers to entry. Despite that the industry has come quite competitive in the recent years. One of the main drivers of the sector is the ageing of the population currently 5.22% of all Egyptian citizens are above 65 years of age, which is marginally higher than most other Middle eastern countries, and it's currently growing at an annual rate of 0.48%. (Figure 11)

Underpenetrated Insurance Market

Most healthcare expenditure in Egypt occurs as an out-of-pocket expenditure, and most diagnostic testing isn't covered by most prevailing life insurance schemes. Hence the Insurance market in Egypt and the MENA region in general is relatively underpenetrated. Egypt's Insurance penetration rate has seen consistent growth in the past 4 years and currently stands at 0.11%, but despite that the penetration rate is still significantly lower than peers which leaves immense room for growth (Figure 12)

Figure 9: Healthcare expenditure % of GDP

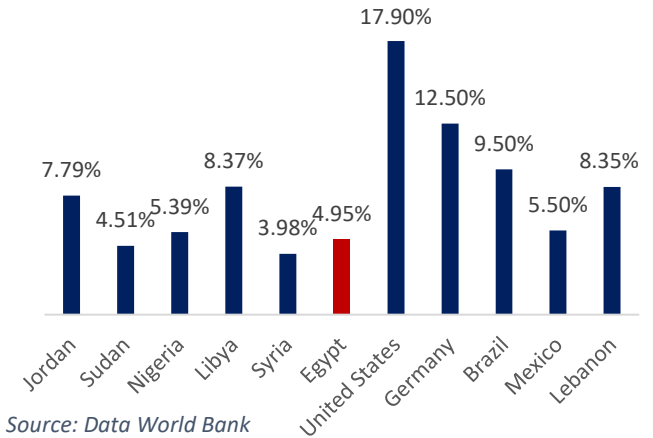


Figure 10: Out of Pocket Healthcare Expenditure

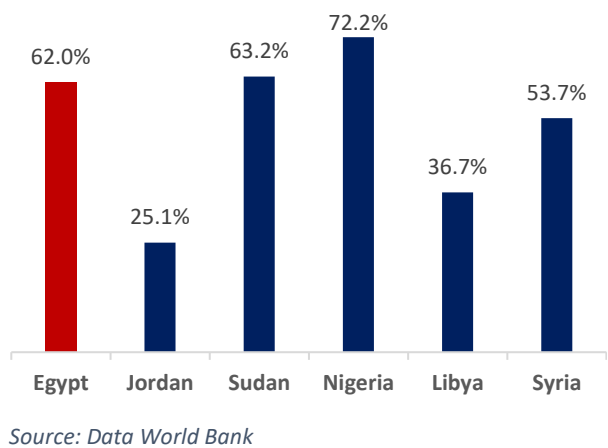


Figure 12: Penetration by Country - Middle East - 2017

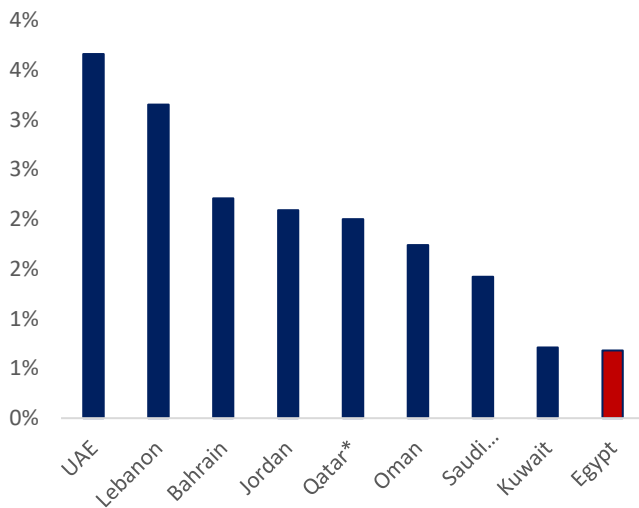
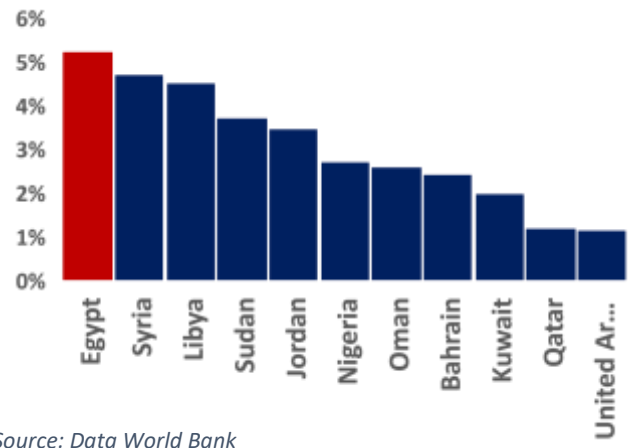


Figure 11: Percentage of Citizens 65+



Valuation

IDH Intrinsic valuation – DCF Model

We arrived at a target price of EGP 37.33 / share, with an 80% upside from IDH's closing price of EGP 20.7/ share on January 8, 2022, using a 5-years DCF model we arrived at our value using a terminal growth rate of 5% and WAAC of 15.75%

Revenues: We forecasted IDH Top-line growth of an average rate of 13.9% except for the year 2021, which was highly impacted by COVID19. According to our estimates, IDH volume growth is driven by a 5% growth rate in the number of patients, with the exception of a 32% growth rate in 2021 due to the rise in PCR tests.

Terminal growth rate: We used a terminal growth rate of 5% based on the average terminal growth rate of IDH main labs in Egypt, Jordan, Nigeria, and Sudan. Our assumptions are based on IDH 2020 earnings release and the expected GDP in Egypt

WACC: We used WACC as a discounting rate for IDH free cash flow to the firm. We arrived at a WACC of 15.75% with a cost of equity and cost of debt of 16% and 10.6% respectively. A detailed breakdown for the assumptions of the computation is shown below.

Cost of Debt: Assuming IDH will maintain the current capital structure, we used the company's current long-term debt and interest expense to arrive at an effective interest rate of 14%. The 14% cost of debt is adjusted to 22.5% tax rate to result in an after-tax cost of debt of 10.6%.

Cost of Equity: Using the Capital Asset Pricing Model (CAPM) we arrived at a 16% cost of equity through the following inputs:

- **Risk-free Rate:** Average 10-year Egyptian Treasury Bond Yield of 15.24% pre-tax is adjusted to 22.5% tax rate to arrive at a final risk-free rate of 11.8%
- **Beta:** We used Damodaran's unlevered beta for emerging market Hospital/Healthcare Facilities adjusted for 18.03% industry debt to equity ratio (D/E) and 22.5% tax rate to arrive at a re-levered beta of 0.89
- **Market Risk Premium:** We used Damodaran's estimate for Egypt default spread which equals 4.68%

Figure: 13: Beta Calculation

Beta	
Unlevered Beta	0.78
D/E Ratio (industry)	18.03%
Tax Rate	22.50%
Re-levered Beta	0.89

Source: Team Computations

Figure: 14: Cost of Equity

Cost of Equity	
Risk-free Rate (10-year T-bonds)	15.24%
after tax	11.81%
Beta	0.89
Market Risk Premium	4.68%
Cost of Equity	16%

Source: Team Computations

Figure: 15: Cost of Debt

Cost of Debt	(EGP MN)
Interest Exp	71.527
Long-term Debt	523.348
Cost of Debt	14%
Tax Rate	22.5%
After-tax Cost of Debt	11%

Source: Team Computations

Financial Analysis

Strong market leadership fueled by solid growth

IDH proved once more its flexibility to adjust to changing market dynamics and deliver strong financial and operational results despite the challenges forced on the company by the pandemic. The Group is well insulated against economic and other instability across its geographic footprint, illustrated by its maintenance of double-digit rates of top-line growth with 19% year-on-year increase, hence improved gross profitability that has reached 50% of revenue.

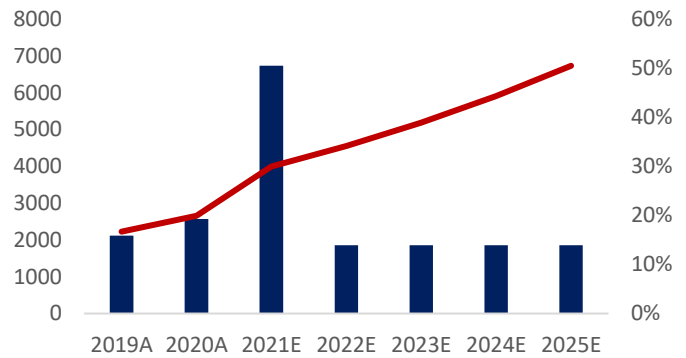
Strong growth for the year was a direct result of IDH's ability to swiftly adapt its service offering to rapidly changing environment by offering PCR and Covid-19-related testing and ramping up its house calls services in Egypt and Jordan. Topline growth for the year was partly supported by the generally higher-priced Covid-19-related tests combined with the annual price hikes rolled, average revenue per test, up 34% year-on-year.

EBITDA surpassed the EGP 1 billion benchmark for 2020, 44% of revenue, and maintaining healthy cash balances despite the prevalence of adverse macroeconomic and political complexities. Strong operating profit margin of 37% comes despite IDH taking into account the expected credit losses in accordance with IFRS 9. Bottom-line profitability was supported by solid revenue growth for the year combined with higher interest income in 2020, illustrated by 23% net profit margin. the income tax margin of 37% is attributable to the decision by the Egyptian Government in September 2020 to increase the Withholding Tax on profit distribution from 5% for ownership exceeding 25% to 10%. As a result, Earnings per share of 0.99 reflects the management's efforts to increase sales and cut down costs. (Figure 16-17-18)

Expanding customer reach to 507 branches

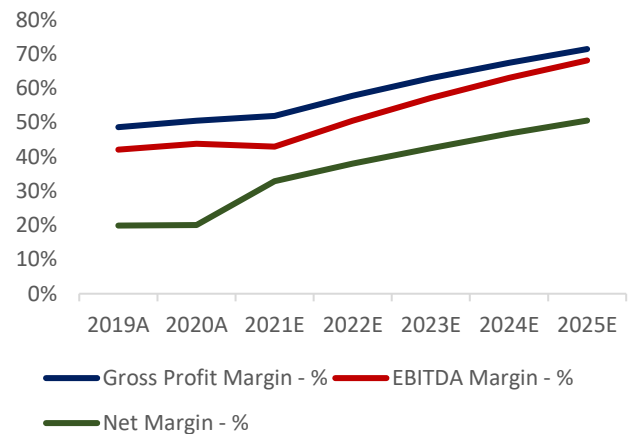
IDH's continued investment in expanding its branch network. The group holds a portfolio of 481 operational branches around its 4 countries. Despite the challenging operational environment, the group managed to support its growth by 30 new branches in Egypt and one new branch

Figure: 16 Forecasted Revenue, Mn



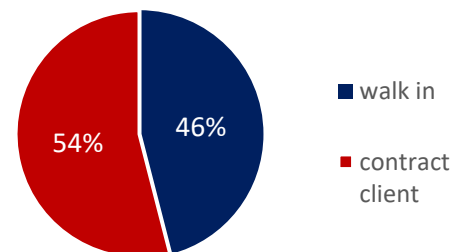
Source: Team Computations, Company data

Figure: 17 Forecasted Margins



Source: Team Computations, Company Data

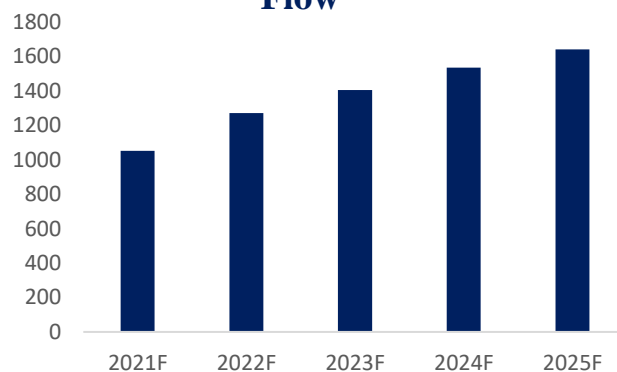
Figure: 18 Walk in vs Contract client's Revenue Contribution 2020



Source: Company Data

in Jordan, while closing down two underperforming branches in Nigeria and Sudan. So, the increase its walk-in clients share from 40% (2019) to 46% (2020) of total revenue can be as well attributed to the network expansion, while contract clients make up 54% of the Group's revenues. IDH is backed up with the fact that no single client contract accounts for more than 1% of the total revenues, except for pure health contract. **(Figure 3-14)**

Figure: 19 Present Value of Free Cash Flow



Source: Team Computations

Egypt

IDH is in a strong competitive position in the Egyptian diagnostic industry, having created formidable barriers to entry with its 40-year track record, trusted brands, scalable business model and network of 481 branches in 2020. IDH is the largest fully integrated private sector diagnostics service provider, with more than 50% share by revenue of the private chain market in Egypt. Egypt continues to be the top revenue provider for the group through its brands.

The increase in Egyptian segment revenue is reflected in Al Borg Scan operations with growing contribution to revenue and EBITDA. House call service in Egypt in turn growing its contribution to Egypt's revenue to 22% in 2020. The Group had been selected by Pure- Health UAE to be the first lab to conduct PCR testing to screen passengers travelling from Egypt. The 62 million contract represents (5% of Egypt's contract segment revenues), with PCR tests 35% of total PCR tests performed during the year.

Jordan

Jordanian market started to take steady steps in increasing its revenue contribution to the group. The country enjoys some of the most modern health care infrastructure in the Middle East and where strong fundamentals have allowed IDH to deliver growth despite strict price regulations on laboratories with a set price list that has not changed since its issuance by the Jordanian Ministry of Health in 2008. The company's plan to focus on driving volume growth in the market, deploying strategies to expand its services portfolio and packages that encourage increased testing per patient. Biolab was at the forefront of PCR testing for Covid-19 from the very start, supporting an impressive increase in the geography's top-line for the year. Jordan's top-line was further bolstered by the company's ramped up house call services

Sudan

IDH's plan to mitigate the economic and political conditions in the country yielded 2% year on year revenue increase that was driven mainly by higher pricing as management kept in step with the hyperinflationary environment and the salaries decrease after IDH replaced Egyptian expatriates with Sudanese employees. In 2020, the country regained its stability, and it was reflected on the test volume recovery in 2019.

Nigeria

The benefits of the marketing and business development activities to drive higher volumes, with a key focus on engaging with corporate clients as well as targeting doctor forums to build referral networks showed in a 20% year on year revenue growth remarkable feat considering Echo-Lab not offering Covid-19-related testing. As part of the value-building program, IDH's direct salaries and wages as a percent of sales declined from 17% in 2019 to 15% in 2020.

Playing safe with Asset light model and low-debt exposure.

IDH's sustainable business model is reflected through return on invested capital's steady increase reaching 22%, we can

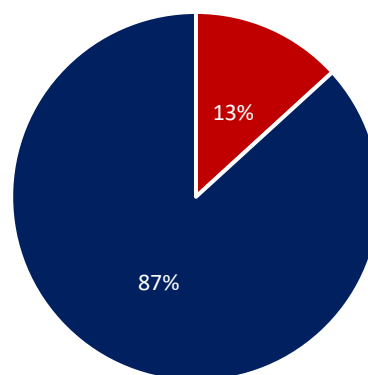
tell that the company is efficiently allocating its capital toward the most possible profitable investments, this in turn allows the company to be traded at a premium. Utilizing the Spoke and spike model allows the company's return on average assets of 15% to guarantee the efficient use of the company's capital and assets in the best interest of shareholders. IDH mastered in keeping the investors satisfied with its financial performance through accelerating the return on average common equity in the past few years, outreaching 26%, with a 4% year-on-year increase. An asset-light business model allows IDH to maintain a low-debt exposure, offering significant strategic flexibility. The Group's objectives when it comes to managing capital are to make sure the adopted strategies and plans are in accordance with the shareholder's benefits and taking into consideration the other stakeholders by reducing cost of capital to reach the optimal capital structure. The company's debt to equity has doubled since 2018, the group's debt reliance increased representing 18.5% of the total capital to finance 13% of its assets. IDH has been playing safe with its debt reliance strategy, this is acceptable as when the group needs financing, they will be meeting the bank benchmark. CAPEX outlays nearly hit the 5% of consolidated revenues in 2020. This percentage changed dramatically throughout the past few years because of the investments in Nigeria and the Al Borg scan in Egypt. We recommend starting to expand more in Jordanian market as it's a very potential contributor for the group. Financing those expansions shall not be limited to only equity, rather the company's debt to coverage ratio allows it to pay its interest expenses 14.5 times. The group's dividend policy usually depends on the surroundings of the political and economic environment, for instance they decided not to pay dividends in 2019, to make sure they are well prepared for any surprising events during the pandemic.

Ratio Analysis

The current ratio has been gradually decreasing since 2016. The current ratio decreased from 2.03 in 2016 to 1.35 in 2020 due to the short-term financial obligations account in 2018. This account includes the Put Option liabilities for Al Makhbaryoun Al Arab Group in Jordan. ROE increased significantly by 47.5% from in 12.6% 2016 to 26.5% in 2020. This can be attributed to the healthy increase in net income and the stable shareholder's equity over the past five years. For the same reason, the Pre-tax ROE also changed from 18.5% in 2016 to 40.5% in 2020. We believe that this sustainable growth will satisfy the shareholders and support our buy decision.

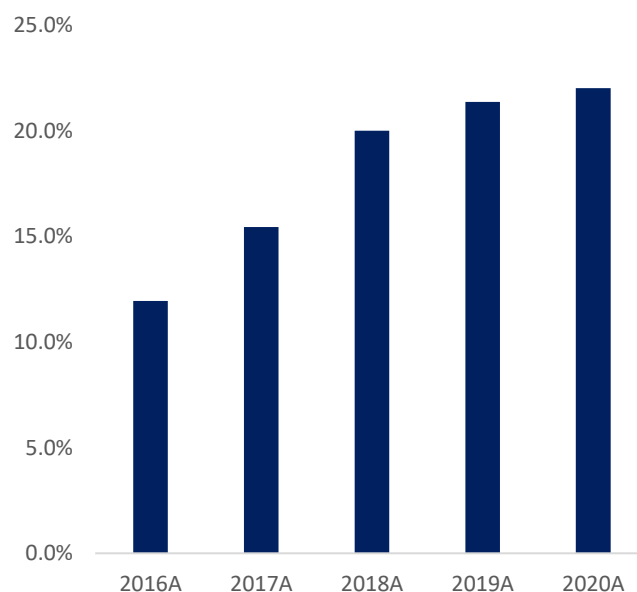
Figure: 20 Equity vs Debt Financing

- Total Debt Percentage of Total Assets
- Total Equity Percentage of Total Assets



Source: Company Data

Figure: 21 Return on Invested Capita



Source: Team Computations, Company Data

Investment Risks

IDH's performance can be highly affected by the risks in its operating environment. The mitigation of such risks depends mainly on the type and influencers of the risk itself likewise political, economic and legal risks can't be mitigated by any corporation. However, IDH came prepared with procedures and plans to try to survive the rapidly changing environment in which it operates.

Political country level risk (impact: medium, probability: High)

Egypt has been politically unstable for a few years and then returned to somehow stable environment in terms of political volatility. The pandemic proved the resilience of the Egyptian government ensuring the safety of future expansions in the Egyptian market. On the other hand, Sudan, and Nigeria both represents the most part of the political risk for IDH. The Sudanese situation remains unresolved since the removal of its former president. IDH's plan to offset the potential loss by raising its prices, achieving 2% year-on-year increase in revenue. The power-sharing agreement in 2019 has led US to remove Sudan from its States sponsors of Terrorism list, hoping for a very soon political conditions recovery. The ethnic tension and protests in Nigeria were followed by an effective governmental response in late 2020. IDH implemented strict standards trying to counteract the political situation effect on the corporation's profits.

Economic country level risk (impact: high, probability: Medium)

Egypt accounts for 82% OF IDH revenues in 2020 with a 14% year-on-year increase in revenue, thereby its economic growth and conditions play a huge role in determining the corporation's profitability. The defensive nature of the healthcare industry, guaranteed by the grow year on year during the extremely difficult operating conditions permits the year-on-year growth. The high inflation rate following the Egyptian pound devaluation as part of the economic restructuring policy diversified the geographical map of IDH's operations. INFLATION RATE TREND. The Egyptian economy is staying strong and resilient even during the pandemic, it's one of the very few African countries to record positive GDP growth in 2020, Egyptian government is targeting another positive GDP growth. The Group is trying to minimize its interest rate exposure, especially in Egypt region, characterized by decreasing interest rate environment. This is achieved partially by entering fixed-rate instrument and partly by borrowing at the floating rate. The continuous inflation rate rises in Sudan since 2018 threatens the Sudanese subsidiary performance. IDH went along with the economic conditions by deliberate price increases, and cost-cutting the expatriate salaries and foreign currency spending. The Nigerian economy likewise is suffering from local currency reformers followed by raw material prices increase. IDH is trying to mitigate the effects by its strong supplier relationships

Covid-19 risk (impact: High, probability: Low)

The pandemic resulted in many operation disruptions such as supply chain, curfews and lockdown limiting working hours. The threat of sudden lockdown is continuous if Covid-19 cases are being recorded. The restrictions resulted in lower consumption, material shortage, and deteriorating growth. At the end of 31 December 2020 all IDH's branches were fully operating, in addition to home services. The strong relationships that IDH maintained with its suppliers helped contain the situation. The protective measures and equipment used by IDH staff and test kits inventory resulted in positive net profit and administering PCR testing for Covid-19 in Egypt and Jordan

Foreign currency and financial regulations (impact: medium, probability: medium)

The cost side of the business is exposed to the foreign currency risk as most of the supplies are imported and priced in foreign currency, the exchange rate between the Egyptian pound and the foreign currency is crucial, other suppliers are paid in foreign currency. The percentage of US dollar payable accounts for only 12% of the total supplies cost, this one way or another minimizes the risk exposure. In 2020 IDH recorded 12.6 exchange loss/gain. Sudanese hyperinflation was gauged by raising prices.

Supplier Risk (impact: medium, probability: low)

The inflation and currency devaluation put IDH at a supplier risk in which prices negotiations were hard to deal with. The strong position of IDH as a huge regional client to suppliers allowed the negotiations to positively impact the financial performance by maintaining the price increase at a rate slower than the inflation rate. This resulted in a slight decrease in raw material costs as a percentage of sales in 2020, with a strong supplier relationship surviving the high inflation rates and covid-19 disruptions.

Contract clients (impact: low, probability: low)

Contract clients contributes to a huge percentage of IDH's revenues, 54% of 2020 revenue. The pricing strategy and negotiations between IDH and its key contract clients is highly supported by the strong relationships and regular visits by sales staff. IDH is backed up with the fact that no single client contract accounts for more than 1% of the total revenues or 1.4% of the contract revenues, except for the 62 million revenue contract with Pure-Health in 2020.

Appendix 1 Income statement

Income Statement	2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E
Revenue	1170.62 1	1514.25 7	1,921.4 5	2,226.50	2,656.26	3,998.01	4,554.73	5,188.98	5,911.54	6,734.72
Cost of sales	(542.68 7)	(784.70 1)	(973.07)	(1,142.6 8)	(1,313.6 9)	(2,000.7 1)	(2,000.7 1)	(2,000.7 1)	(2,000.7 1)	(2,000.7 1)
Gross profit	627.934	729.556	948.38	1,083.81	1,342.58	1,997.30	2,554.03	3,188.27	3,910.84	4,734.02
SG&A	(158.57 7)	(186.36 0)	(254.94)	(305.23)	(329.09)	(541.86)	(541.86)	(541.86)	(541.86)	(541.86)
Other Income	41.565	54.323	72.13	167.52	193.24	199.90	227.74	259.45	295.58	336.74
Impairment Loss on Trade and Other Receivable			(9.64)	(8.65)	(42.13)	(42.13)	(42.13)	(42.13)	(42.13)	(42.13)
EBITDA	510.922	597.519	755.93	937.46	1,164.59	1,613.21	2,197.77	2,863.73	3,622.43	4,486.77
Amortization					(5.93)	(5.90)	(5.90)	(5.90)	(5.90)	(5.90)
Leased Assets Depreciation						(60.80)	(60.80)	(60.80)	(60.80)	(60.80)
Depreciation	(44.730)	(57.148)	(70.99)	(146.62)	(179.05)	(131.86)	(146.54)	(162.87)	(181.02)	(201.18)
EBIT	466.192	540.371	684.94	790.84	979.62	1,414.66	1,984.53	2,634.16	3,374.71	4,218.88
Interest Expenses		(10.391)	(11.86)	(61.00)	(71.53)	(133.51)	(98.00)	(58.83)	(41.10)	(21.55)
Lease Interest Expense						(51.64)	(43.73)	(34.92)	(25.13)	(14.23)
Total Finance Costs	(99.072)	(33.005)	(31.02)	(80.11)	(84.11)	(84.11)	(84.11)	(84.11)	(84.11)	(84.11)
Finance Income	21.418	51.064	63.43	47.41	67.64	67.64	67.64	67.64	67.64	67.64
EBT	388.538	548.039	705.50	697.15	891.63	1,213.04	1,826.34	2,523.94	3,292.01	4,166.64
Income Tax Expense	(121.62 0)	(174.70 1)	(220.44)	(253.61)	(359.60)	(272.93)	(410.93)	(567.89)	(740.70)	(937.49)
Net Profit	266.918	373.338	485.06	443.54	532.03	940.10	1,415.41	1,956.05	2,551.31	3,229.14

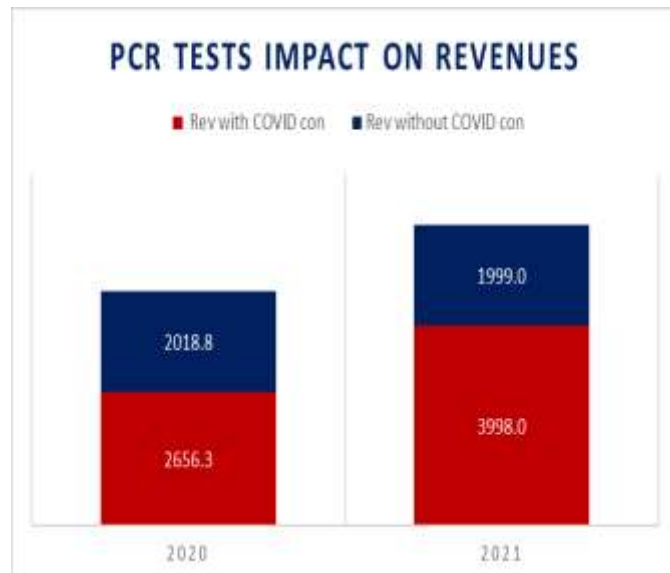
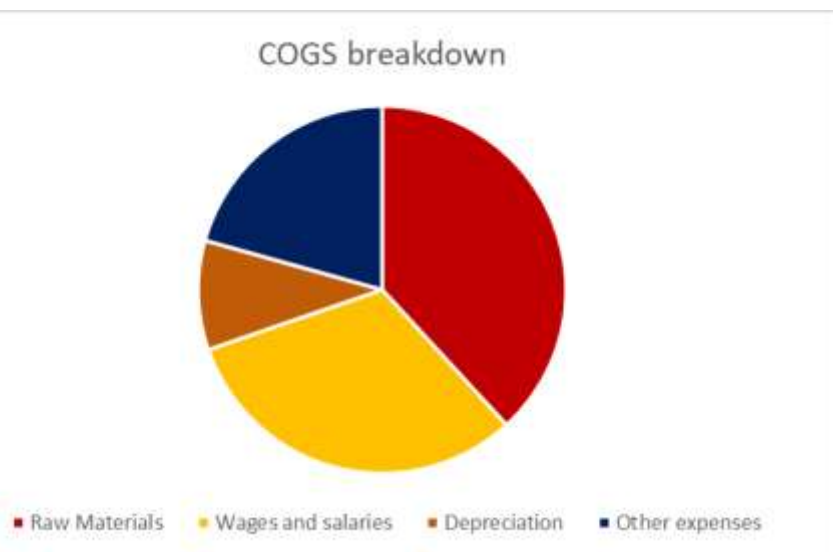
Appendix 2 Balance sheet

Balance Sheet	2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E
PPE	391.14	473.79	705.78	785.55	793.01	795.50	804.03	813.51	824.04	835.75
Intangible assets and goodwill	1643.60	1658.25	1672.46	1660.84	1659.76	1651.03	1645.13	1639.23	1633.33	1627.43
Right-of-use asset	0.00	0.00	0.00	264.76	354.69	293.89	233.08	172.28	111.48	50.67
Restricted cash	13.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other investments	0.00			6.39	9.60	9.60	9.60	9.60	9.60	9.60
Deferred Tax Assets	18.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total non-Current Assets	2066.30	2132.04	2378.24	2717.54	2817.06	2750.02	2691.84	2634.62	2578.45	2523.46
Current Assets										
Inventories	51.72	69.94	91.08	84.34	100.12	161.06	183.49	209.04	238.14	271.31
Trade and other receivables	148.38	202.26	299.99	322.81	383.48	538.55	613.54	698.97	796.31	907.19
Restricted cash	0.00	13.23	11.97	0.25	0.00	0.00	0.00	0.00	0.00	0.00
other investments	95.58	9.15	239.91	221.62	276.63	315.50	359.43	409.48	466.50	531.46
Cash and cash equivalents	683.72	685.21	412.61	408.89	600.13	716.02	841.62	1067.10	1402.19	1836.15
Total Current Assets	979.39	979.78	1055.55	1037.90	1360.35	1731.12	1998.07	2384.59	2903.14	3546.11
Total Assets	3045.68	3111.81	3433.79	3755.44	4177.41	4481.14	4689.92	5019.21	5481.59	6069.56

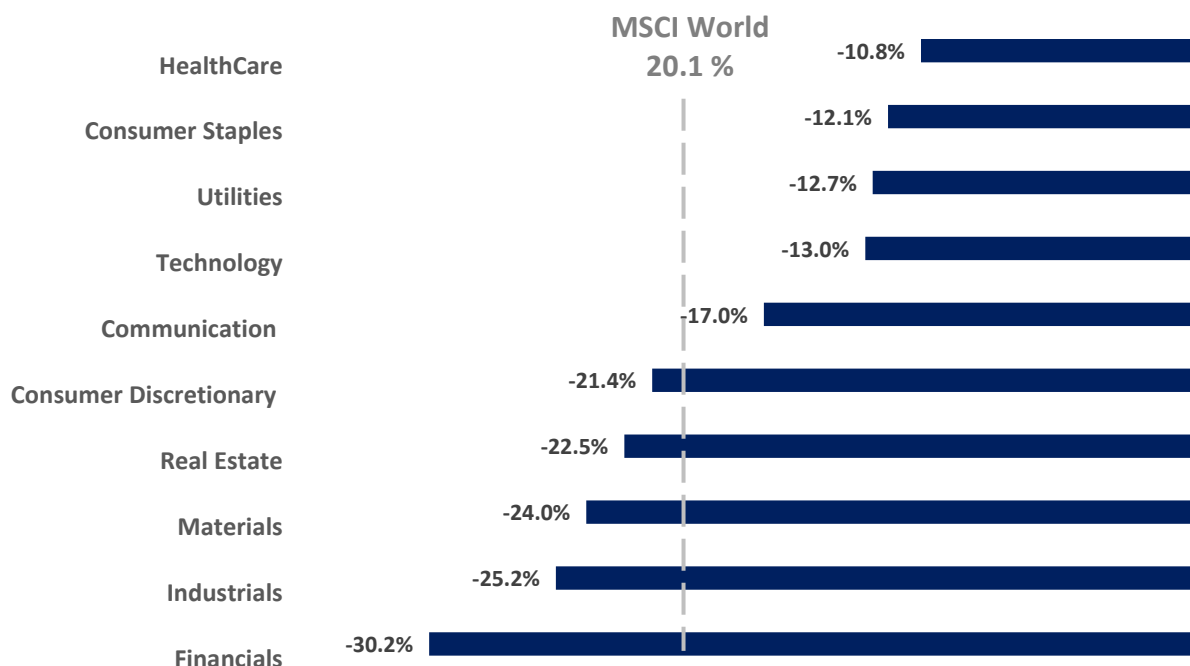
Share Capital	1072.50	1072.50	1072.50	1072.50	1072.50	1072.50	1072.50	1072.50	1072.50	1072.50
Share Premium Reserve	1027.71	1027.71	1027.71	1027.71	1027.71	1027.71	1027.71	1027.71	1027.71	1027.71
Capital Reserves	-314.31	-314.31	-314.31	-314.31	-314.31	-314.31	-314.31	-314.31	-314.31	-314.31
Legal Reserve	30.25	33.38	37.96	46.33	49.22	49.22	49.22	49.22	49.22	49.22
Put option Reserve	-102.08	-93.26	-145.28	-229.16	-314.06	-314.06	-314.06	-314.06	-314.06	-314.06
Translation Reserve	207.72	203.71	194.76	155.82	145.62	145.62	145.62	145.62	145.62	145.62
Retained Earnings	315.52	315.86	396.71	456.66	603.32	611.22	865.85	1217.73	1676.71	2257.62
Share based payment reserve										
Shareholders' Equity	2237.30	2245.59	2270.05	2215.55	2269.99	2277.89	2532.52	2884.41	3343.38	3924.29
Non-Controlling Interest	62.16	68.50	130.59	144.71	156.38	156.38	156.38	156.38	156.38	156.38
Total Equity	2299.46	2314.09	2400.64	2360.26	2426.37	2434.28	2688.90	3040.79	3499.76	4080.68
Deferred Tax Liabilities	132.63	158.71	168.36	174.00	240.33	240.33	240.33	240.33	240.33	240.33
Other Provision	12.20	14.70	14.84	5.27	3.41	3.41	3.41	3.41	3.41	3.41
Loans and Borrowings		38.43	101.44	81.31	67.62	133.51	98.00	58.83	41.10	21.55
Long-term Financial Obligations	119.64	100.48	79.19	306.38	430.32	388.69	310.41	223.33	126.46	18.69
Total Non-Current Liabilities	264.47	312.31	363.83	566.96	741.67	765.94	652.15	525.91	411.30	283.98
Current Liabilities:										
Trade and other Payables	345.78	333.43	287.37	320.08	383.62	642.93	732.46	834.45	950.65	1083.03
Short-Term Financial Obligations			156.67	260.85	342.78	342.78	342.78	342.78	342.78	342.78
Loans and Borrowings		14.58	25.42	25.42	25.42	37.66	16.08	17.73	19.55	21.55
Current Tax Liabilities	135.98	137.40	199.87	221.87	257.54	257.54	257.54	257.54	257.54	257.54
Total Current Liabilities	481.75	485.41	669.32	828.22	1009.36	1280.92	1348.87	1452.51	1570.52	1704.91
Total Liabilities	746.22	797.72	1033.15	1395.18	1751.04	2046.86	2001.01	1978.42	1981.83	1988.89
Total Equity and Liabilities	3045.68	3111.81	3433.79	3755.44	4177.41	4481.14	4689.92	5019.21	5481.59	6069.56

Appendix 3 Cogs Break Down

Appendix 4 PCR Tests Impact on Revenues



Appendix 5 Economic Effect of covid on various Industries



Appendix 6 Board of Directors as of November 2021

Name and Position	Background
Prof. Dr. Hend El Sherbini Chief Executive Officer	<ul style="list-style-type: none"> • Dr. Hend has been holding the CEO position of IDH Group since 2012, after serving as the CEO of Al Mokhtabar from 2004 to 2012. • Dr. Hend graduated from Cairo University with an MBChB and a master's degree in Clinical and Chemical Pathology during the 1990s. • She has a master's degree in Public Health from Emory University in Atlanta, USA. • In 2000, Dr. Hend earned her Ph.D. in Immunology from Cairo University. Not only this, but she is now also a clinical pathology professor at the Cairo university's Faculty of Medicine. • She is a member of the American Society of Clinical Pathology's (Egypt) Board of Directors and consults on the American Society of Clinical Pathology's (Egypt) Board of Directors. • Dr. Hend finished his Executive MBA program. In 2015, she received her MBA from the London Business School. • During the period between 2016 and 2021, Dr. Hend was recognized as one of the top women business leaders in the world according to Forbes. • Dr. Hend is Dr. Moamena Kamel's daughter, the founder of MK lab, from where the whole group's story started. Together, they hold a considerable percent of IDH's shares, which we believe is a supporting reason that Dr. Hend will act in shareholders' best interests.
Lord St John of Bletso Independent Non-Executive	<ul style="list-style-type: none"> • Lord St John graduated from Cape Town University with a BA in Law and BSocSc in Psychology, an LLM from the London School of Economics, and a BProc in Law from South Africa University. • Since 1978, "Lord St John has served as a crossbencher in the House of Lords and is an Extra Lord-in-Waiting to HM Queen Elizabeth II." (IDH's presentation, 2021) • Lord St John is now the non-executive chairman of Strand Hanson Ltd and GRIT, as well as a director of Falcon Group and Albion Enterprise VCT. • He is also a member of the Impala Energy, Betway Group, ECO Capacity Exchange, and 10Sat advisory boards.

<p>Mr. Hussein Choucri</p> <p>Independent Non-Executive Director and Chairman of the Remuneration Committee</p>	<ul style="list-style-type: none"> • In 1978, Mr. Choucri graduated from the American University in Cairo with a Management Diploma. • Now, he is the Chairman and Managing Director of HC Securities & Investment, which he founded in May 1996. • Mr. Choucri functions on the boards of "Edita Food Industries, Six of October Development and Investment Co. (SODIC), the Holding Company for Tourism, Hotels, and Cinema, and the Egyptian British Business Council." (IDH's results presentation, 2021) • Mr. Choucri worked with Morgan Stanley as a Managing Director from 1987 to 1993. Additionally, he worked as an Advisory Director from 1993 until 2007.
<p>Mr. Dan Olsson</p> <p>Independent Non-Executive Director</p>	<ul style="list-style-type: none"> • Mr. Olsson earned his bachelor's degree in economics from the University of Lund in Sweden. • Team Olivia is a prestigious Swedish healthcare conglomerate ruled by Mr. Olsson, the group's CEO. • Mr. Olsson has substantial worldwide expertise in the diagnostics industry, having held a variety of senior positions, including CEO of Unilabs Group in Geneva, Switzerland, from 2007 to 2009. • Mr. Olsson has been working in the healthcare sector since 1999.
<p>Mr. Richard Henry Phillips</p> <p>Non-Executive Director</p>	<ul style="list-style-type: none"> • Mr. Phillips graduated from the University of Exeter with a degree in Economics. • Mr. Phillips is one of the founders of Actis LLP, a private equity firm that focuses on emerging markets. • Mr. Phillips is not considered independent by the Board because Actis LLP is one of the Company's largest owners (holds 21% of IDH's shares). • He founded Actis' Global Consumer Sector team and served as its Head of Consumer for four years before joining the Actis Investment Committee. • Mr. Phillips was in charge of Actis' investment activity in North Africa and later in Asia. • Mr. Phillips holds positions on the BoD of Emerging Markets Knowledge Holdings Ltd., Edita Food Industries SAE, and other firms.

Appendix 7 Historical Revenue Breakdown

Revenue Breakdown	2016A	2017A	2018A	2019A	2020A	2021F	2022F	2023F	2024F	2025F
No. of patients	5816	6367	7048	7481	7113	9400	9870	10364	10882	11426
Test/patient	4	4	4	4	4	4	4	4	4	4
Total tests	24070	25664	28766	30471	27073	37600	39480	41454	43527	45703
rev/test	49	59	67	73	98	106	115	125	136	147
Total rev	1171	1514	1921	2226	2656	3998	4555	5189	5912	6735

Appendix Cash flow Statement

Cash Flow Statement	2021E	2022E	2023E	2024E	2025E
Net Income	940.1	1415.4	1956.1	2551.3	3229.1
Fixed Assets Depreciation	131.9	146.5	162.9	181.0	201.2
Leased Assets Depreciation	60.8	60.8	60.8	60.8	60.8
Amortization	5.9	5.9	5.9	5.9	5.9
Disposals	-153.2	0.0	0.0	0.0	0.0
Cashflow from Operations					
Inventories	-60.9	-22.4	-25.6	-29.1	-33.2
Trade and other receivables	-155.1	-75.0	-85.4	-97.3	-110.9
Restricted cash	0.0	0.0	0.0	0.0	0.0
other investments	-38.9	-43.9	-50.1	-57.0	-65.0
Trade and other Payables	259.3	89.5	102.0	116.2	132.4
Short-Term Financial Obligations	0.0	0.0	0.0	0.0	0.0
Loans and Borrowings	12.2	-21.6	1.6	1.8	2.0
Current Tax Liabilities	0.0	0.0	0.0	0.0	0.0
Change in CFO	16.7	-73.4	-57.4	-65.4	-74.6
Cashflow from Investing					
Capex	-139.5	-155.1	-172.3	-191.6	-212.9
Addition to Leased Assets	0.0	0.0	0.0	0.0	0.0
Change in CFI	-139.5	-155.1	-172.3	-191.6	-212.9
Cashflow from Financing					
Deferred Tax Liabilities	0.0	0.0	0.0	0.0	0.0
Other Provision	0.0	0.0	0.0	0.0	0.0
Loans and Borrowings	65.9	-35.5	-39.2	-17.7	-19.5
Paid up capital	0.0	0.0	0.0	0.0	0.0
Dividends	-771.0	-1160.8	-1604.2	-2092.3	-2648.2
Additions to Lease Liability	0.0	0.0	0.0	0.0	0.0
Lease Repayment	-41.6	-78.3	-87.1	-96.9	-107.8
Change in CFF	-746.7	-1274.6	-1730.4	-2206.9	-2775.6
Beginning Cash	600.1	716.0	841.6	1067.1	1402.2
Change in Cash During The Year	115.9	125.6	225.5	335.1	434.0
Ending Balance	716.0	841.6	1067.1	1402.2	1836.1

Appendix 8 Projected Free Cash Flow

FCF	2021	2022	2023	2024	2025
EBIT	1415	1985	2634	3375	4219
(+) D&A	199	213	230	248	268
(-) Capex	140	155	172	192	213
(-) Taxes	-273	-411	-568	-741	-937
(-) Change in NWC	17	-73	-57	-65	-75
Present Value of FCF	1052	1273	1406	1535	1642

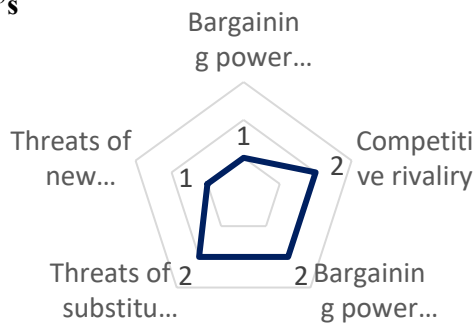
Appendix 9 DCF Analysis

DCF analysis	
Sum Present Value of FCF	6907
Present Value of Terminal Value	16031
Enterprise Value	22939
(-) Net Debt	-539
Equity Value	22400
Diluted Shares Outstanding	600000000
Equity Value Per Share	EGP 37.33
Upside / Downside	80%

Appendix 10 Risk Assessment Matrix

Estimated probability	High		Political	
	Medium		FX	Economic COVID
	Low	Contract Client	Supplier	
		Low	Medium	High
Estimated impact				

Appendix 11 Porter's Competitive Forces



Bargaining Power of Suppliers

We opted for a higher score due to the nature of the Capex expenditure of IDH and the general niche expenses incurred. Additionally, IDH stated that test kits suppliers are all certified by the US Food and Drug Administration hence not many suppliers will meet their criteria causing a high bargaining power of suppliers

Bargaining Power of Buyers

We've given a low Bargaining power score since IDH is single handedly the largest diagnostic tests provider in Egypt and controls a major market share. Additionally consumers don't tend to have much choice when it comes to healthcare options specifically diagnostics. Furthermore, consumers don't differentiate much between the various diagnostic service provider but rather follow whatever their physician or organization referred them to.

Competitive Rivalry

IDH is currently the largest integrated diagnostics service provider in Egypt and controls a significant market share there isn't currently any large provider of diagnostics services but there are various fragmented centers which pose a low threat to IDH, additionally the public sector may add some pressure in terms of competitive rivalry

Threats of New Entrants

The Diagnostics market poses a significantly high barrier to entry it requires significant capital expenditure, and a large geographical coverage is needed due to market fragmentation, it is to be noted that there isn't much product differentiation in the market hence a generally low brand loyalty, however a quality relationship with hospitals and key suppliers is needed to sustain business which is why we don't believe there will be any new entrants

Threat of Substitutes

We gave the threat of substitutes a higher score since products provided in the healthcare industry are generally essential products hence, in terms of diagnostics patients tend to follow directions and go to whomever the physician / organization directs them to, despite IDH being the largest organized provider of diagnostics, consumers don't tend to differentiate much when it comes to essential healthcare products

Appendix 12 Profitability Ratios- Historical

Profitability Metrics - Historical	2016	2017	2018	2019	2020
Gross Profit Margin - %	53.6%	48.2%	49.4%	48.7%	50.5%
EBITDA Margin - %	43.7%	39.8%	39.7%	42.4%	44.1%
Operating Margin - %	39.8%	35.7%	35.7%	35.5%	37.1%
Income before Tax Margin - %	33.2%	36.9%	37.3%	34.1%	36.5%
Income Tax Rate - %	31.3%	31.3%	30.7%	33.5%	37.1%
Net Margin - %	22.8%	25.3%	25.9%	22.7%	23.0%
Free Cash Flow	359.6	272.3	287.5	464.1	734.0
Return on Average Common Equity - % (Income available to Common excluding Extraordinary Items)	12.6%	16.7%	22.2%	22.8%	26.5%
Return on Average Total Assets - % (Income before Discontinued Operations & Extraordinary Items)	9.7%	12.5%	15.2%	14.0%	15.4%
Return on Invested Capital - %	11.9%	15.4%	20.0%	21.4%	22.0%

Appendix 13 Leverage ratios

Financial Strength / Leverage	2016	2017	2018	2019	2020
Total Debt Percentage of Total Assets	5.0%	5.5%	6.3%	11.8%	13.2%
Total Debt Percentage of Total Capital	6.2%	6.9%	8.3%	15.9%	18.5%
Total Debt Percentage of Total Equity	6.6%	7.4%	9.1%	18.9%	22.8%
Debt Service	11.1%	-8.7%	-6.3%	127.7%	101.3%
Debt Service Percentage of Normalized after Tax Profit	4.1%			25.3%	16.6%
Interest Coverage Ratio	50.3%	52.0%	57.8%	7.7%	14.5%
Dividend Coverage - %	70.0	88.3	113.6		65.6
Earnings Retention Rate	-0.4%	-0.1%	0.1%	1.0%	-0.5%
Dividend Payout Ratio - %	142.8%	113.2%	88.1%	0.0%	152.5%

Appendix 14 Sensitivity Analysis

WACC	Terminal Growth				
	3%	4%	5%	6%	7%
13.75%	39.883	43.123	47.103	52.110	58.602
14.75%	35.988	38.584	41.712	45.556	50.391
15.75%	32.718	34.832	37.339	40.361	44.073
16.75%	29.935	31.680	33.723	36.145	39.065
17.75%	27.540	28.998	30.685	32.659	35.000

This page is left blank intentionally