CAPSTONE PROJECT PUBLIC SUMMARY

Fundamental Analysis and Valuation of a Hungarian Mid-Cap Firm

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Investment Case & Benefits of the project to the client

4iG of one of the leading companies in the information, communication, and technology market (ICT market) and knowledge-based digital economy in Hungary. It is headquartered in Budapest. Since its foundation in 1990 the company has been providing services in IT, telecom infrastructure development, telecommunications, and telecom satellites. With more than 5000 employees 4iG remains one of the largest companies in Hungarian ICT market and a broad-spectrum solution provider. The company has implemented an expansion strategy and has acquired several key companies in the local ICT market. This project aims to analyze the company's financials and operations and calculate fair value of 4iG shares. The client company of the project is interested in obtaining research results, the recommendations given after the analysis of 4iG can be used as basis for investment advice investment advisor organization.

Work done: DCF Valuation

For the valuation of 4iG Group, the Sum of the Parts methodology was used. As the company's strategy is mainly focused in developing in IT and Telecommunications segments, two separate DCF models were built for valuing these two core businesses of the firm.

Free Cash Flow to the Firm

Telecommunications segment: From 2020 till present, 4iG have been involved in several large acquisitions, which significantly affected its financial history, making revenue and earning margins of the recent years extremely high. Therefore, taking the average of historical revenues to make projections for the future revenues would not be a correct approach: acquisitions are one-time events that should not be used for future projections. To make revenue growth projections for telecommunications segment, we used revenues of DIGI Group, the company recently acquired by 4iG with 100% ownership. Net Capital Expenditure (Net CAPEX) and Non-Cash Working Capital were calculated as a proportion of the firm's total Net CAPEX and Non-Cash Working capital, where we used proportion of revenue coming from telecommunications segment as weights.

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IT segment: To make revenue growth projections for telecommunications segment, it is not possible to use revenue growth of any other companies because there are no similar companies that could reflect the holding's IT portfolio. Therefore, it was necessary to make some assumption based on information available on firm and taking into consideration general trend in the market. First, we looked at how the firm's revenue from IT sector has grown from 2020 to 2021, which shows 95.1%. This high increase in revenues cannot be explained by acquisitions because almost all of the last years acquisitions involved large telecommunications companies, but not IT firms. Therefore, we believe that organic growth in IT segment of the company is significantly high. We assume that this high growth will stay for two-three more years, and then decline gradually.

Terminal Value: Gordon growth model was used to calculate terminal value assuming that the company will reach the stable state in 5 years. Assumption about time is based on the objective of the company to become key technology company in Hungary, CEE and SEE regions by 2030.

WACC inputs:

Cost of equity: we use capital asset pricing model modified to accommodate country risk. We incorporated country risk premium for Hungary provided in Damodaran database to the CAPM model (Damodaran, 2022).

Risk free rate: we are taking current 10-year Hungarian bond yield as a risk-free rate. We assume 1% decrease every year due to high inflation rate.

Equity risk premium: using Damodaran database, we took average historical implied equity risk premium for the US for the last 30 years.

Beta: we are using industry beta provided for telecommunications and IT service segments in Damodaran database.

Cost of debt: yield to maturity on the firm's bond issued in March 2021.

Tax rate: we are assuming 10% tax rate for Hungary-based companies

Weight of Debt/Equity: most of the acquisitions were debt-funded, which increased proportion of debt in 2021 three times compared to the previous one. As it was one-time acquisition we look at the average debt weights before acquisitions, which was between 30-40%.

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Key Outcomes

IT Discounted Cash-flow	Y1 2022	Y2 2023	Y3 2024	Y4 2025	Y5 2026
FCFF	**1,958,626**	**3,622,385**	**6,092,199**	**7,442,363**	**8,710,200**
Terminal Value					**142,041,799**
WACC	9.91%	9.91%	9.91%	9.91%	9.91%
Period	1	2	3	4	5
Discount factor	**0.91**	**0.83**	**0.75**	**0.69**	**0.62**
IT Total PV of DCF	**1,782,034**	**2,998,634**	**4,588,464**	**5,099,980**	**93,990,763**
IT Segment Total Enterprise Value (HUF, thousand)		**108,459,874**			

Telecommunications Discounted Cash-flow	Y1 2022	Y2 2023	Y3 2024	Y4 2025	Y5 2026
FCFF	**3,659,891**	**4,517,331**	**5,622,823**	**7,086,285**	**8,912,981**
Terminal Value					**182,604,471**
WACC	9.16%	9.16%	9.16%	9.16%	9.16%
Period	1	2	3	4	5
Discount factor	**0.92**	**0.84**	**0.77**	**0.70**	**0.65**
Telecommunications Total PV of DCF	**3,352,772**	**3,790,999**	**4,322,770**	**4,990,710**	**123,562,852**
Telecommunications Total Enterprise Value (HUF, thousand)		**140,020,103**			

Total Enterprise Value	**248,479,977.28**
Cash, thousand	266,530,261.00
MV Debt, thousand	423,185,508.00
Equity Value, mln	**91,824,730.28**
Basic shares outstanding, thousand	103,207.92
DCF share price	**889.71**
Share Price as of June 1	**805.00**
180 Days Average Price	**802.77**
Difference	**10.83%**
Recommendation	**Hold**

This initiation report has valued 4iG shares at HUF 889.71, which is 10.83% higher compared to 180-day average price and our analysis recommends to hold the shares.

Lessons learnt

The project was helpful in implementing acquired theoretical knowledge about how to value a company in practice. All the information for used for calculation needs to be found, analyzed, integrated into the model and be checked if it is consistent, which is not an easy process.

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