Βι



Bittnet Systems

Initiation of coverage

Price: RON 0.650 Price target: RON 0.973

Acquire, integrate, educate

We initiate coverage of Bittnet Systems, a fast-growing Romanian technology company, with a BUY rating and a price target (PT) of RON 0.973/share, implying 49.6% upside. Bittnet was founded in 2007 by brothers Mihai and Cristian Logofatu, who are still the largest shareholders. The company was focused originally on providing IT training to companies, through its education division, and has since transitioned towards IT integration services, through its technology division. It is an active acquirer, and its transition towards IT integration and its fast growth have been driven by acquisitions executed over 2017-18. Bittnet listed on AeRO, Bucharest Stock Exchange's alternative trading system, in 2015, when it reported RON 10m in revenues; the company grew its revenues by 10x to RON 100m in 2019, and it was promoted to the main market this year. Going forward, we expect revenues to grow by 22.3% per year over 2020-25E, with net income increasing by 72.5% per year over the same period, albeit from a small base. Bittnet is trading currently at a 2021E EV/sales of 0.9x, a 45% discount vs. its peer group, on our numbers.

High growth story... In 2020E, we expect revenues to grow by 31% yoy, after increasing by 39% yoy in 1H20. Going forward, we believe that Bittnet can outgrow the market, due to its low penetration, its position within segments that are benefiting from the current environment, and its track record of growth, +39% yoy in 1H20, compared to the overall IT industry, which grew by 12.4%. We expect revenues to grow by 2.7x over 2020-25E.

...in a very supportive environment... Bittnet's verticals focus make the company a proxy for the broader technology development in the country. In our view, IT education benefits from Romania's IT workforce increasing, and becoming more specialised, while IT integration benefits from companies becoming more digitalised, and both these trends are occurring at an accelerated pace in Romania. McKinsey expects the digital economy in Romania to grow by 10.7-18.2% (low vs. high scenarios) per year until 2025E.

...with significant margin improvement potential. We expect the net income margin to grow from 1.9% in 2020, to a sustainable level of 10.3% in 2025E. This is driven by further efficiency gains, economies of scale as the company grows, and the contribution of new investments and deleveraging, given its high cost of financing. We expect the net income to grow by 15.3x over 2020-25E.

Peers comparison. Bittnet is trading currently at a 2021E EV/sales of 0.9x, a 45% discount vs. its peer group. We believe this is a more relevant metric, given that the company is in a high-growth (a 2019-22E sales CAGR of 28%, 4x higher than its peers), lower-profitability (a 2020-22E EBITDA margin of 9%, 48% lower than its peers) phase.

Main risks: i) M&A integration; ii) employee retention; iii) competitive landscape; iv) dilution; v) leverage; and vi) low liquidity.

Expected events

| M&A shareholder meeting 26 November | 13 November |
|-------------------------------------|---------------|
| Max shareholder meeting 20 November | g 26 November |

Key data

| Market Cap | USD 34m |
|--------------------|-----------------------|
| Free float | |
| | 62.3% |
| Shares outstanding | |
| 3M ADTV | USD 30k |
| | Mihai Logofatu 14.14% |
| ADTV | USD 30k |
| Bloomberg Code | BNET RO |
| BET Index | 8750.75 |

Price performance

| 52-w range | RON 0.345-0.879 |
|----------------------|-----------------|
| 52-w performance | 24.2% |
| Relative performance | 34.7% |

Bittnet 12M share price performance



| Year | Sales | EBITDA | Net profit | EPS | EPS | P/E | EV/EBITDA | EV/sales | ROE | DPS |
|-------|---------|---------|------------|-------|---------|------|-----------|----------|-------|-------|
| | (RON m) | (RON m) | (RON m) | (RON) | growth | (x) | (x) | (x) | (%) | (RON) |
| 2018 | 47.9 | 6.5 | 4.4 | 0.038 | 156.9% | 17.3 | 14.5 | 2.0 | 43.8% | 0.000 |
| 2019 | 99.8 | 2.1 | 0.1 | 0.001 | -97.4% | n.m. | 46.6 | 1.0 | 0.9% | 0.000 |
| 2020E | 130.6 | 10.2 | 2.4 | 0.011 | 1056.7% | 58.1 | 15.7 | 1.2 | 13.1% | 0.000 |
| 2021E | 168.6 | 16.6 | 9.7 | 0.045 | 301.4% | 14.5 | 9.5 | 0.9 | 32.8% | 0.000 |
| 2022E | 207.7 | 22.4 | 16.1 | 0.074 | 65.7% | 8.7 | 6.5 | 0.7 | 37.3% | 0.000 |

EQUITY RESEARCH

Analysts: Stefan Lungu, CFA; Piotr Raciborski, CFA E-mail: stefan.lungu@wood.com; piotr.raciborski@wood.com

Prague: +44 20 3530 0694 Website: www.wood.com

Contents

| Company snapshot – BUY, PT RON 0.9733 |
|---------------------------------------|
| nvestment case4 |
| Valuation7 |
| Peer multiples8 |
| Company description9 |
| The market13 |
| Financial forecasts15 |
| Risks18 |
| Financials19 |
| mportant disclosures |

Closing Prices as of 28 October 2020

© 2020 by WOOD & Company Financial Services, a.s.

All rights reserved. No part of this report may be reproduced or transmitted in any form or by any means electronic or mechanical without written permission from WOOD & Company Financial Services, a.s. This report may not be lent, resold, hired out or otherwise disposed of by way of trade in any form of binding or cover other than that in which it is published without written permission from WOOD & Company Financial Services, a.s.

Requests for permission to make copies of any part of this report should be mailed to:

WOOD & Company Financial Services a.s. Palladium, Namesti Republiky 1079/1a, 110 00 Prague 1 – Czech Republic tel.: +420 222 096 111 fax: +420 222 096 222 http://:www.wood.cz

Company snapshot – BUY, PT RON 0.973

| Komercijalna Banka | | | | | | | | | | | |
|--------------------------------------|--------------|-------------|---|-----------------------------|---|--|----------------------|--------------------------|---------------------------|---------------------|----------------------------|
| BUY | | SHAR | REPRICE | DEBEOBI | | COMPANY DESCRIPTION | | | | | |
| Bloomberg ticker | BNET RO | | | tO Equity | | Bittnet is the IT training market leader | r in Romani | a, and a | leading IT | integrato | or in the |
| Closing price (RON) | 0.650 | 1.000 | BET Ind | ex | | local market. Founded in 2007 by bro | | | | | |
| Price Target (RON) | 0.030 | 0.800 — | (rebase | | Le. | control 27% of the company, the com | | | | | |
| Upside to PT | 49.6% | 0.600 | | (` | howene | alternative venue (AeRO) in 2015. In 2 on the local stock exchange. What wa | | • | | | |
| Shares outstanding (m) | 216.3 | 0.400 | | John | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | has become an IT integrator as a res | | - | | | |
| MCAP (RON m) | 141 | | | * | | Crescendo, Elian and Equatorial. A fa | | | | | |
| Free float | 62.3% | 0.200 | | | | increase its revenues by 68% per anr and acquisitions-driven growth. | num over 2 | 017-20E, | as a resu | It of both | organic |
| ADTV (USDk) | 30 | 0.000 | 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - | | | | | | | | |
| 52 Week Range (RON) | 0.345 - 0.87 | ÷ | Nov-19 Dec-19 Jan-20 | Mar-20 Ap r-20 May-20 | Jun-20 Jul-20 Aug-20 Sep-20 | | | | | | |
| RATIOS | | | | | | | | | | | |
| | | | | | | | | | | | |
| PER SHARE RATIOS | 2018 | 2019 | 2020E | 2021E | 2022E | VALUATION RATIOS | 2018 | 2019 | 2020E | 2021E | 2022E |
| EPS | 0.038 | 0.001 | 0.011 | 0.045 | 0.074 | P/E | 17.3 | n.m. | 58.1 | 14.5 | 8.7 |
| BVPS | 0.120 | 0.097 | 0.113 | 0.161 | 0.238 | P/FCF | -4.5 | 11.3 | -9.0 | 42.0 | 10.2 |
| DPS | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | P/BV | 5.4 | 6.7 | 5.7 | 4.0 | 2.7 |
| | | | | | | EV/EBITDA | 14.5 | 46.6 | 15.7 | 9.5 | 6.5 |
| FINANCIAL RATIOS | 2018 | 2019 | 2020E | 2021E | 2022E | EV/Sales | 2.0 | 1.0 | 1.2 | 0.9 | 0.7 |
| Capex/depreciation | 4135% | 39% | 195% | 165% | 126% | EV/EBIT | 14.9 | -602.3 | 21.3 | 11.7 | 7.6 |
| Capex/net fixed asstes | 598% | 20% | 65% | 49% | 35% | Cash flow from ops, RON m | 3.4 | 8.5 | 2.1 | 8.4 | 17.9 |
| Op. cash flow/capex | 0.46 | 9.51 | 0.39 | 1.66 | 4.30 | EV, RON m | 94.4 | 98.8 | 160.5 | 157.7 | 144.7 |
| ROE | 43.8% | 0.9% | 13.1% | 32.8% | 37.3% | FCF, RON m | -16.8 | 7.3 | -15.7 | 3.3 | 13.7 |
| ROA | 9.7% | 0.2% | 2.5% | 8.4% | 12.1% | FCF yield | -22.3% | 8.8% | -11.1% | 2.4% | 9.8% |
| ROIC | 13.4% | 0.4% | 5.6% | 19.2% | 30.1% | Dividend yield | n.a. | n.a. | n.a. | n.a. | n.a. |
| Net debt/(cash) to equity+minorities | 133.4% | | 77.9% | 45.3% | 3.9% | Dividend payout | 0% | 0% | 0% | 0% | 0% |
| Net debt/adj. EBITDA | 2.9 | 7.4 | 1.9 | 1.0 | 0.1 | | | | | | |
| WC/Sales | 23% | 0% | 3% | 5% | 5% | | | | | | |
| COMPANY FNIANCIALS | | | | | | | | | | | |
| | | | | | | | | | | | |
| INCOME STATEMENT (RONm) | 2018 | 2019 | 2020E | 2021E | 2022E | BALANCE SHEET (RONm) | 2018 | 2019 | 2020E | 2021E | 2022E |
| Revenues | 47.9 | 99.8 | 130.6 | 168.6 | 207.7 | Fixed Assets | 22.6 | <u>33.3</u> | 44.6 | 46.6 | 47.5 |
| Education | 7.4 | 12.8 | 15.0 | 21.8 | 25.7 | Inventories | 0.6 | 2.0 | 2.5 | 3.2 | 4.0 |
| Technology | 40.5 | 86.9 | 115.6 | 146.8 | 182.1 | Trade and other receivables | 22.8 | 32.3 | 42.9 | 57.7 | 71.1 |
| <u>Gross margin</u> | 8.9 | <u>17.3</u> | 30.9 | <u>41.1</u> | <u>51.2</u> | Cash and bank balances | 13.0 | 20.8 | 17.5 | 15.8 | 19.6 |
| Education | 4.2 | 7.2 | 8.9 | 13.2 | 15.7 | Current Assets | 36.4 | <u>55.1</u> | 62.9 | 76.8 | 94.7 |
| Technology | 4.7 | 10.0 | 22.0 | 27.9 | 35.5 | Total Assets | <u>59.1</u> | 88.5 | <u>107.6</u> | 123.4 | 142.2 |
| Other income | -6.0 | -0.7 | -0.9 | -1.1 | -1.4 | | | | | | |
| Selling expenses | 2.5 | 6.4 | 9.8 | 12.1 | 14.5 | Equity | 14.0 | <u>12.4</u> | 24.5 | 34.8 | <u>51.5</u> |
| Depreciation | 0.2 | 2.3 | 2.7 | 3.1 | 3.3 | LT Bonds and Loans | 19.5 | 33.0 | 33.0 | 28.0 | 18.0 |
| G&A expenses | 5.8 | 9.4 | 11.8 | 13.5 | 15.6 | LT Liabilities | <u>19.7</u> | <u>36.8</u> | 36.8 | <u>31.8</u> | <u>21.8</u> |
| EBITDA | <u>6.5</u> | <u>2.1</u> | <u>10.2</u> | <u>16.6</u> | 22.4 | Trade and other payables | 12.6 | 34.1 | 41.2 | 51.7 | 63.7 |
| <u>EBIT</u> | <u>6.4</u> | <u>-0.2</u> | <u>7.5</u> | <u>13.5</u> | <u>19.1</u> | ST Bonds and Loans | 12.2 | 3.6 | 3.6 | 3.6 | 3.6 |
| Net financial income | -1.1 | -2.8 | -4.0 | -1.2 | 0.8 | ST Liabilities | <u>25.4</u> | <u>39.2</u> | <u>46.3</u> | <u>56.8</u> | <u>68.9</u> |
| Profit before tax | 5.3 | -3.0 | 3.5 | 12.2 | 19.9 | Total Equity and Liabilities | <u>59.1</u> | <u>88.5</u> | <u>107.6</u> | 123.4 | <u>142.2</u> |
| Profit for equity holders | 4.4 | <u>0.1</u> | <u>2.4</u> | <u>9.7</u> | <u>16.1</u> | | | | | | |
| | | | | | | Net debt | 18.7 | 15.7 | 19.1 | 15.7 | 2.0 |
| Operational ratios | 2018 | 2019 | 2020E | 2021E | 2022E | Net working capital | 10.8 | 0.2 | 4.3 | 9.2 | 11.4 |
| Growth | 700/ | 4000/ | 240/ | 200/ | 000/ | | 204.0 | 2010 | 20205 | 20245 | 20225 |
| Revenues | 73% | 108% | 31% | 29% | 23% | CASH FLOW STATEMENT (RONm) | 2018 | 2019 | 2020E | 2021E | 2022E |
| Education | 0% | 73% | 17% | 45% | 18% | Gross profit | 5.3 | 3.0 | 3.5 | 12.2 | 19.9 |
| Technology | 0% | 115% | 33% | 27% 62% | 24% 25% | Depreciation | 0.2 | 2.3 | 2.7 | 3.1 | 3.3 |
| EBITDA Not incomo | 123% | -68% | 382% | 62% | 35% 66% | Working capital change and others | -3.3 | 5.8 | -4.1 | -4.9 | -2.1 |
| Net income | 157% | -97% | 1866% | 301% | 66% | Other adjustments Operating Cash Flow | 1.3 | -2.5 | 0.0 | -2.0 | -3.2 |
| Margine | | | | | | Operating Cash Flow | <u>3.4</u> 20.2 | <u>8.5</u> | <u>2.1</u> <u>17.7</u> | <u>8.4</u> 5.1 | <u>17.9</u> |
| Margins Gross margin | 19% | 17% | 24% | 24% | 25% | Free Cash Flow | <u>-16.8</u> | <u>1.2</u> <u>7.3</u> | <u>-15.7</u> | <u>5.1</u> 3.3 | <u>4.2</u> <u>13.7</u> |
| Education | 56% | 56% | 24% 60% | 24% 61% | 23% 61% | Net change in debt | <u>-16.8</u> 17.3 | <u>7.5</u> 4.6 | 0.0 | <u>3.3</u> -5.0 | -10.0 |
| Technology | 56% 12% | 56% 12% | 60% 19% | 19% | 20% | Other adjustments | 17.3 | 4.6 -4.1 | 12.3 | -5.0 0.0 | 0.0 |
| EBITDA margin | 12% | 2% | 8% | 19% | 20% 11% | Financing Cash Flow | 18.8 | -4.1 <u>0.5</u> | 12.3 <u>12.3</u> | <u>-5.0</u> | -10.0 |
| EBIT margin | 14% | 2 % | 6% | 8% | 9% | Change in Cash balance | 2.0 | <u>0.5</u> 7.8 | -3.3 | <u>-3.0</u> -1.7 | <u>-10.0</u> <u>3.7</u> |
| - | 1070 | 070 | 070 | 0,0 | 0 /0 | | | | 0.0 | | 0.1 |
| Net income margin | 9% | 0% | 2% | 6% | 8% | | | | | | |



Investment case

We initiate coverage of Bittnet Systems, a fast-growing Romanian technology company, with a BUY rating and a price target (PT) of RON 0.973/share, implying 49.6% upside. Bittnet was founded in 2007 by brothers Mihai and Cristian Logofatu, who are still the largest shareholders. The company was focused originally on providing IT training to companies, through its education division, and has since transitioned towards IT integration services, through its technology division. It is an active acquirer, and its transition towards IT integration and its fast growth have been driven by acquisitions executed over 2017-18. Bittnet listed on AeRO, Bucharest Stock Exchange's alternative trading system in 2015, when it reported RON 10m in revenues; the company grew its revenues by 10x, to RON 100m, in 2019, and it was promoted to the main market this year.

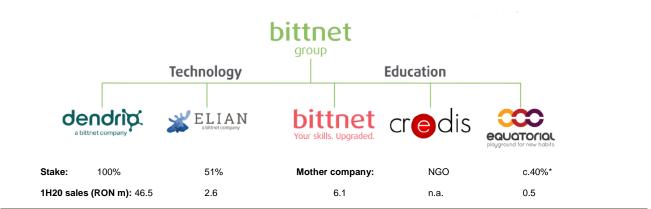
Bittnet's verticals focus make the company a proxy for the broader technology development in the country. In our view, IT education benefits from Romania's IT workforce increasing, and becoming more specialised, while IT integration benefits from companies becoming more digitalised, and both these trends are occurring at an accelerated pace in Romania. McKinsey expects the digital economy in Romania to grow by 10.7-18.2% (low vs. high scenarios) per year until 2025E. Bittnet is not only present in sectors that are COVID-19 proof, but it should be a beneficiary of the shift to a low-touch economy, in our view, as education is moving online, while companies are speeding up their digitisation to accommodate flexible working.

We expect Bittnet to increase its revenues by 2.7x over 2020-25E, at an annualised rate of 22.3%, to reach RON 358m by 2025E, from RON 131m in 2020E. We expect this growth to come with significant margin improvements, with the net income margin growing from 0.1% in 2019 to 10.3% in 2025E. Bittnet is trading currently at a 2021E EV/sales of 0.9x, a 45% discount vs. its peer group. We believe this is a more relevant metric, given that the company is in a high-growth (2019-22E sales CAGR of 28%, 4x higher than its peers), lower-profitability (a 2020-22E EBITDA margin of 9%, 48% lower than its peers) phase.

Bittnet is a good representative, and proxy, for entrepreneurial Romanian technology companies, in our view. The company was founded as an IT training provider in 2007 by brothers Mihai and Cristian Logofatu, aged 23 and 27 at the time, respectively, who remain the largest shareholders, with a combined 27% stake. Today, Bittnet is largely the result of the group pursuing expansion through acquisitions. The first acquisition happened in 2017, when Bittnet acquired GECAD Net, a loss-making business, which it has turned around successfully, marking the beginning of its aggressive expansion into IT integration. 2018 was an even busier year, when Bittnet acquired a majority stake in Elian, and a minority stake in Equatorial, which are still part of the group, with their original branding. However, in 2018, the company did its largest and most ambitious acquisition to date, acquiring Crescendo (later integrated into Dendrio), an IT integrator with 25 years of experience in Romania and abroad. Crescendo reported revenues of RON 79m in 2017 (average c.RON 50m in the five years prior), almost double Bittnet's 2018 revenues.

Bittnet listed in 2015 on AeRO, Bucharest Stock Exchange's alternative trading venue, and was promoted to the main market this year and made part of four different BET indices. To fuel its growth and acquisitions since its listing, it raised RON 13.7m in equity through four issuances, and RON 33.1m in debt in five issuances. It its first year of listing, 2015, the group reported RON 10m in revenues, and four years later, in 2019, that figure stood at RON 100m, a 10x increase, driven by both organic growth and acquisitions.

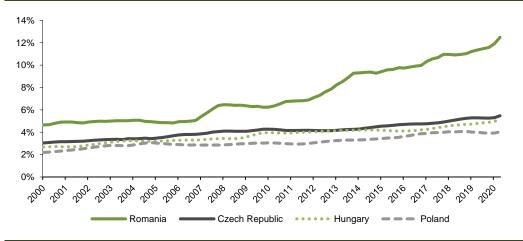
Bittnet splits its business into two divisions, education and technology. Education is where the company started, focused on IT training. Technology is an area that has become significantly more important in terms of sales and, a result of acquisitions, focused on IT integration, from the planning and assessment, through to the implementation and maintenance.



Source: Company data, WOOD Research; *shareholders will vote on 26 November 2020 to increase the stake in Equatorial to 99%

Bittnet is focused on the Romanian IT market, offering both education and integration services. Its verticals focus also expose Bittnet to the broader development of technology in the country, rather than a particular niche. In our view, IT education benefits from Romania's IT workforce increasing, and becoming more specialised, while IT integration benefits from companies becoming more digitalised, and both these trends are occurring at an accelerated pace in Romania. According to data from the National Institute of Statistics, the Romanian IT sector grew by 12.4% yoy in 1H20, compared to a 3.9% fall in GDP for the overall economy in the same period.

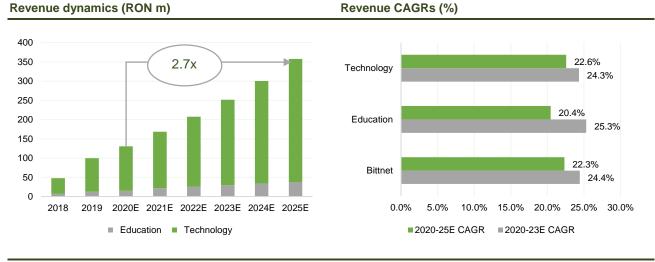
The IT industry has experienced significant growth in the recent decade in CEE, becoming an increasingly important industry. In a 2018 study (*The Rise of Digital Challengers – Perspective on Romania*), McKinsey identified two scenarios for the country, going forward. In a "business as usual" scenario, Romania's digital economy would grow by EUR 18bn over 2016-25E, increasing its weight from 7% to 12%, at a rate of 10.7% per annum, close to its historical rate. However, the gap to digital frontrunners like Sweden remains the same. In an "aspirational" scenario, the digital economy's growth could be a staggering EUR 42bn, increasing its weight to 20%, at a rate of 18.2% per year. We believe this highlights that even in a "do nothing", conservative scenario, the outlook is very positive for the IT industry in Romania, which creates a very supportive trend for Bittnet's story.



Information and communications sectors weights in real GDP, CEE (%)

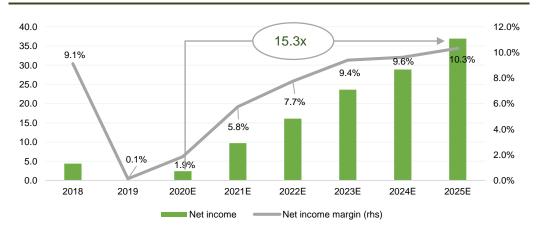
Source: Eurostat, National Institute of Statistics, Czech Statistical Office, Hungarian Central Statistical Office, WOOD Research

We view Bittnet as a growth story, in a very supportive market environment... After increasing its revenues more than 10x, to RON 100m, over 2014-19, we expect growth to continue at a rapid pace. In 2020E, we expect revenues to increase by 31% yoy, after they grew by 39% yoy in 1H20. Going forward, we believe that Bittnet can outgrow the market due to its low penetration, its position within segments that are benefiting from the current environment, and its track record of growth, having grown by 39% yoy in 1H20, compared to the overall IT industry, which grew by 12.4%. This implies an almost tripling of revenues, to RON 358m by 2025E, from RON 131m in 2020E. In our forecasts, we only include the full consolidation of Equatorial (proposal to be voted on at the 26 November 2020 shareholder meeting) as inorganic growth, but highlight that, as an active acquirer, there could be upside for our numbers fuelled by further acquisitions.



Source: Company data, WOOD Research

...and we expect this growth to come with significant margin improvements, with the net income margin growing from 1.9% in 2020E to a sustainable level of 10.3% in 2025E. This is driven by: i) further synergies from the Crescendo acquisition; ii) the education segment becoming more efficient, with more students per class; iii) economies of scale increasing the company's negotiating power with suppliers for its technology business; iv) G&A dilution as the company grows in size; v) deleveraging to reduce its financial expenses significantly, given that its bonds are issued at a 9% fixed interest rate; vi) the consolidation Equatorial; vii) including the contributions from its recently-announced investments, Softbinator and The eLearning Company; and viii) the improvement in Elian's numbers in 1H20, after a minorities loss in 2019. Therefore, we expect net income to increase from RON 2.4m in 2020E to RON 36.9m in 2025E, at an annual pace 72.5%, albeit from a relatively small base.



Net income dynamics (rhs)

Valuation

Our valuation for Bittnet is based solely on our DCF calculations. As the company is not a traditional dividend payer, and we have not identified any close relevant peers, we believe a DCF is the most relevant method. We arrive at a 12-month valuation of RON 210m, resulting in a PT of RON 0.973/share, implying 49.6% upside. We rate Bittnet a BUY.

Valuation summary

| | Equity value (RON m) | Per share (RON) |
|------------------------|----------------------|-----------------|
| DCF 12-month valuation | 210 | 0.973 |
| Current price | | 0.650 |
| Upside | | 49.6% |
| Source: WOOD Research | | |

DCF

We base our DCF valuation on the following assumptions:

- ✓ A WACC of 12.8% over our forecast period, taking into account the company's 40.1% equity/59.9% debt capital structure. Our WACC inputs are:
 - a) A risk free rate (RFR) of 5%.
 - b) An equity risk premium (ERP) of 5%.
 - c) An unlevered beta of 1.4x based on Damodaran's emerging market beta average for IT and a levered beta of 3.1x.
 - d) A pre-tax cost of debt of 9% based on Bittnet's bonds and a tax rate of 16%.
- ✓ A terminal growth rate of 3.0%.

DCF valuation

| RON | 2020E | 2021E | 2022E | 2023E | 2024E | 2025E | 2026E | 2027E | 2028E | 2029E | 2030E |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| EBIT | 7.5 | 13.5 | 19.1 | 25.9 | 30.7 | 38.7 | 42.4 | 44.4 | 44.9 | 44.7 | 44.8 |
| Corporate Tax Rate [T] | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% | 16.0% |
| EBIT*(1-T)=NOPAT | 6.3 | 11.3 | 16.1 | 21.7 | 25.8 | 32.5 | 35.6 | 37.3 | 37.7 | 37.6 | 37.6 |
| Depreciation & amortisation | 2.7 | 3.1 | 3.3 | 3.3 | 3.6 | 4.0 | 4.6 | 5.9 | 7.9 | 9.6 | 11.2 |
| Cash from working capital | -4.1 | -4.9 | -2.1 | -2.4 | -2.7 | -3.2 | -2.0 | -1.5 | -1.2 | -0.7 | -0.7 |
| CAPEX [I] | -5.2 | -5.1 | -4.2 | -5.0 | -6.0 | -7.2 | -11.8 | -16.8 | -17.7 | -18.2 | -18.8 |
| Unleveraged free cash flow [FCF] | -0.3 | 4.4 | 13.1 | 17.6 | 20.7 | 26.2 | 26.4 | 24.8 | 26.7 | 28.3 | 29.3 |
| Present Value of FCFs [PV:FCF] | | 3.8 | 10.1 | 12.0 | 12.5 | 14.1 | 12.6 | 10.5 | 10.0 | 9.4 | 8.6 |
| Sum of [PV:FCF] | | 104 | | | | | | | | | |
| Long term FCF growth rate | | 3.0% | | | | | | | | | |
| Residual value at horizon | | 309 | | | | | | | | | |
| PV of residual value | | 91 | | | | | | | | | |
| Net debt | | 20 | | | | | | | | | |
| Equity value | | 175 | | | | | | | | | |
| 12M Equity Value | | 210 | | | | | | | | | |
| Number of shares | | 216.3 | | | | | | | | | |
| 12M Price Target | | 0.973 | | | | | | | | | |
| Source: WOOD Research | | | | | | | | | | | |

WACC calculations

| WACC | 2021-30E |
|------------------------|----------|
| Unlevered beta | 1.4 |
| Levered beta | 3.1 |
| Risk free rate | 5.0% |
| Market premium | 5.0% |
| Cost of equity | 20.6% |
| Cost of debt pre tax | 9.0% |
| Marg. tax rate | 16.0% |
| Cost of debt after tax | 7.6% |
| Weight k(e) | 40.1% |
| Weight k(d) | 59.9% |
| WACC % | 12.8% |
| Source: WOOD Research | |

Peer multiples

We have not identified any close peers for Bittnet in our region, with a mix of IT education and integration services. We use a global peers group for our comparison, and a weighted average median, based on Bittnet's gross margin contribution by division over 20-25E, 71% for IT integration and 29% for education.

Bittnet's average 2020-22E EBITDA margin of 9% trails its peer group significantly, by 48%. We believe that this is largely a factor of Bittnet still being in a high-growth, lower-profitability phase. Looking at growth, the company ranks third in the peer group, with a sales CAGR of 28% over 2019-22E, on our numbers, 4x higher than the peers' median. In our view, this makes the comparison on 2021E P/E, with a 13% discount, and EV/EBITDA, with an 11% premium less relevant. Looking at EV/sales, on the other hand, with a discount of 45% on our 0.9x multiple for 2021E, better reflects Bittnet's standing versus the peer group, in our view.

Peers comparison

| | | Country | Мсар | | P/E | | E | V/EBITD | Α | E, | V/Sales | | EBITDA | Sales CAGR |
|----------------|------------------------------|---------|--------|------|------|------|------|---------|------|------|---------|------|--------------------|---------------|
| Ticker | Company | | (EUR) | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | margin 2020-22E | 2019-22E |
| Integration ar | nd development focused | | | | | | | | | | | | | |
| INFY US | INFOSYS LTD-SP ADR | IN | 53,490 | 27.4 | 25.6 | 23.7 | 20.3 | 17.7 | 16.6 | 5.0 | 4.8 | 4.4 | 26% | 7% |
| CTSH US | COGNIZANT TECH SOLUTIONS-A | US | 33,653 | 20.8 | 18.5 | 16.6 | 12.3 | 11.2 | 10.3 | 2.3 | 2.2 | 2.1 | 19% | 3% |
| WPRO IN | WIPRO LTD | IN | 21,897 | 19.8 | 19.0 | 17.5 | 13.2 | 12.2 | 11.4 | 2.6 | 2.6 | 2.4 | 21% | 4% |
| CAP FP | CAPGEMINI SE | FR | 17,157 | 15.7 | 13.5 | 11.9 | 9.8 | 8.5 | 7.5 | 1.5 | 1.4 | 1.4 | 15% | 8% |
| 9613 JT | NTT DATA CORP | JN | 14,209 | 19.3 | 22.2 | 17.7 | 6.9 | 7.0 | 6.2 | 1.0 | 1.0 | 1.0 | 14% | 3% |
| TECHM IN | TECH MAHINDRA LTD | IN | 9,189 | 17.1 | 17.3 | 15.0 | 12.5 | 11.3 | 9.7 | 2.0 | 2.0 | 1.8 | 17% | 6% |
| ATO FP | ATOS SE | FR | 6,888 | 8.8 | 8.3 | 7.6 | 4.7 | 4.2 | 3.3 | 0.8 | 0.8 | 0.8 | 14% | 0% |
| CACI US | CACI INTERNATIONAL INC -CL A | US | 4,295 | 16.3 | 14.4 | 13.0 | 11.3 | 9.8 | 8.3 | 1.2 | 1.1 | 1.0 | 10% | 9% |
| DAVA US | ENDAVA PLC- SPON ADR | GB | 3,139 | 56.5 | 52.2 | 40.9 | 40.1 | 31.8 | 24.4 | 8.2 | 6.8 | 5.5 | 20% | 24% |
| CRAYON NO | CRAYON GROUP HOLDING AS | NO | 850 | 68.9 | 39.2 | 32.7 | 22.6 | 17.0 | 11.5 | 0.5 | 0.4 | 0.3 | 2% | 27% |
| ASE PW | ASSECO SOUTH EASTERN EUROPE | PD | 473 | 19.3 | 17.4 | 16.0 | 9.5 | 8.5 | 7.8 | 2.0 | 1.8 | 1.7 | 21% | 10% |
| ENEA SS | ENEA AB | SW | 355 | 20.7 | 17.3 | 14.0 | 12.9 | 10.1 | 8.5 | 4.1 | 3.6 | 3.3 | 36% | 4% |
| CMR PW | COMARCH SA | PD | 354 | 18.0 | 14.0 | 13.6 | 6.3 | 6.1 | 5.6 | 1.0 | 0.9 | 0.9 | 15% | 4% |
| CTS CN | CONVERGE TECHNOLOGY SOLUTION | I CA | 199 | 68.4 | 10.9 | 7.5 | 7.4 | 5.0 | 3.5 | 0.4 | 0.4 | 0.3 | 6% | 33% |
| TPX LN | PANOPLY HOLDINGS PLC/THE | GB | 88 | 37.9 | 24.0 | 21.0 | 24.6 | 16.4 | 14.1 | 2.6 | 1.9 | 1.5 | 11% | 35% |
| CMP PW | COMP SA | PD | 74 | 17.8 | 4.4 | 15.4 | 5.7 | 4.1 | 5.1 | 0.8 | 0.6 | 0.8 | 12% | 2% |
| MSABB SS | MICRO SYSTEMATION AB-B | SW | 71 | 27.1 | 19.5 | 15.0 | n.a. | n.a. | n.a. | 2.0 | 1.8 | 1.7 | 16% | 9% |
| ULS LN | ULS TECHNOLOGY PLC | GB | 38 | 9.4 | 35.8 | 11.0 | 7.6 | 23.3 | 8.0 | 1.4 | 1.8 | 1.4 | 14% | -2% |
| CYB IM | CYBEROO SPA | IT | 38 | 60.3 | 19.2 | 8.2 | 11.8 | 6.0 | 2.9 | 5.6 | 3.1 | 1.9 | 48% | n.a. |
| SGN PW | SYGNITY SA | PD | 35 | 6.3 | 5.7 | 5.6 | 4.2 | 3.6 | 3.1 | 0.8 | 0.8 | 0.7 | 22% | n.a. |
| Education for | cused | | | | | | | | | | | | | |
| LOPE US | GRAND CANYON EDUCATION INC | US | 3,278 | 15.0 | 13.4 | 12.5 | 12.6 | 11.4 | 8.3 | 4.6 | 4.2 | 3.9 | 38% | 9% |
| STRA US | STRATEGIC EDUCATION INC | US | 1,857 | 13.3 | 13.2 | 13.2 | 5.3 | 4.8 | n.a. | 1.8 | 1.7 | 1.7 | 25% | 1% |
| YDUQ3 BZ | YDUQS PARTICIPACOES SA | BZ | 1,152 | 16.2 | 12.4 | 9.5 | 7.8 | 6.4 | 5.6 | 2.7 | 2.5 | 2.3 | 34% | 9% |
| ATGE US | ADTALEM GLOBAL EDUCATION INC | US | 1,112 | 10.7 | 9.5 | 8.9 | 6.6 | 4.6 | 3.9 | 1.3 | 1.2 | 1.0 | 21% | 2% |
| APEI US | AMERICAN PUBLIC EDUCATION | US | 364 | 26.7 | 20.8 | n.a. | 5.4 | 3.9 | n.a. | 0.7 | 0.7 | n.a. | n.a. | n.a. |
| AVEN SS | AVENSIA AB | SW | 53 | 36.9 | 18.4 | 16.4 | 16.3 | 10.0 | 8.3 | 1.5 | 1.3 | 1.1 | 11% | 16% |
| Integration pe | eers median (71%) | | | 19.6 | 18.0 | 15.0 | 11.3 | 9.8 | 8.0 | 1.8 | 1.8 | 1.5 | 15% | 6% |
| Education pe | ers median (29%) | | | 15.6 | 13.3 | 12.5 | 7.2 | 5.6 | 7.0 | 1.7 | 1.5 | 1.7 | 25% | 9% |
| Weighted ave | erage peers median | | | 18.4 | 16.6 | 14.3 | 10.1 | 8.6 | 7.7 | 1.7 | 1.7 | 1.6 | 18% | 7% |
| BNET RO | Bittnet Systems | RO | 29 | 58.1 | 14.5 | 8.7 | 15.7 | 9.5 | 6.5 | 1.2 | 0.9 | 0.7 | 9% | 28% |
| Premium/Disc | count | | | 216% | -13% | -39% | 56% | 11% | -16% | -29% | -45% | -55% | -48% | 296% |

Source: Bloomberg, WOOD Research

Company description

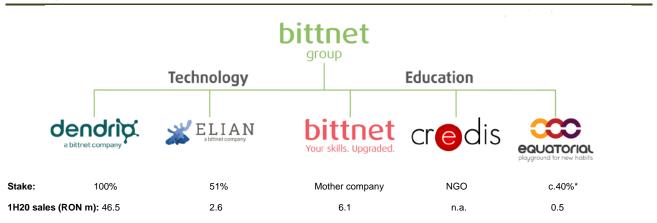
Bittnet is a good representative, and proxy, for entrepreneurial Romanian technology companies, in our view. The company was founded as an IT training provider in 2007 by brothers Mihai and Cristian Logofatu, aged 23 and 27 at the time, respectively, who remain the largest shareholders, with a combined 27% stake. Since its beginnings, it has changed significantly, mainly through acquisitions. Its education division represented only 13% of sales in 2019, while the rest is represented by its IT integration business. The latter is the result of acquisitions, starting with GECAD Net in 2017, and peaking with Crescendo in 2018, a much larger business. Bittnet listed in 2015 on AeRO, Bucharest Stock Exchange's alternative trading venue, and was promoted to the main market this year, and made part of four different BET indices. To fuel its growth and acquisitions since its listing, it raised RON 13.7m in equity through four issuances, and RON 33.1m in debt in five issuances. In its first year of listing, 2015, the group reported RON 10m in revenues; and, four years later, in 2019, that figure stood at RON 100m, a 10x increase, driven by both organic growth and acquisitions.

History

- ✓ 2007 Bittnet is founded by brothers Mihai and Cristian Logofatu, aged 23 and 27 at the time, respectively.
- ✓ 2008 large clients like IBM Romania, Metro Systems Romania, TNT Express or Porsche Romania added to the portfolio. Ends the year with EUR 170k in revenues.
- ✓ 2010 the company starts attracting large clients outside Bucharest for its training services. Ends the year with EUR 450k in revenues.
- ✓ 2012 Mr. Razvan Capatina become an investor in the company, following a 'Venture Connect' event. The company also establishes a three-member Advisory Board. Revenues of EUR 855k for the year.
- ✓ 2013 becomes a Cisco Silver Certified Partner, and obtains Microsoft Silver certifications. The co-founders are nominated for the IT Entrepreneurs of the Year prize, organised by Wall-street.ro. The company ends the year with EUR 1.5m in revenues.
- ✓ 2014 Bittnet is named part of Deloitte's Technology Fast Top 500 for EMEA. The company adds two new vendors in its training portfolio, Amazon Web Services and Oracle.
- ✓ 2015 Bittnet lists on Bucharest Stock Exchange's alternative trading venue (AeRO).
- ✓ 2016 the company becomes a Cisco Gold Partner, while issuing corporate bonds for EUR 1m on Bucharest Stock Exchange. It opens offices outside Bucharest in Sibiu and Brasov.
- ✓ 2017 acquires GECAD Net, which later becomes Dendrio. Revenues of RON 27.7m for the year.
- ✓ 2018 acquires the majority stake in Elian, and a significant minority stake in Equatorial, issuing corporate bonds to finance the transactions. Acquires the larger Crescendo, with revenues of RON 79m in 2017 (average c.RON 50m in the five years prior), in a transaction valued at RON 10.9m, financed by another corporate bond issuance.
- ✓ 2020 Bittnet is promoted to the main segment of the Bucharest Stock Exchange, and becomes part of a number of BET indices. The company proposes new investments, acquiring minority stakes in Softbinator and The e-Learning Company, while consolidating its stake in Equatorial.

Group structure

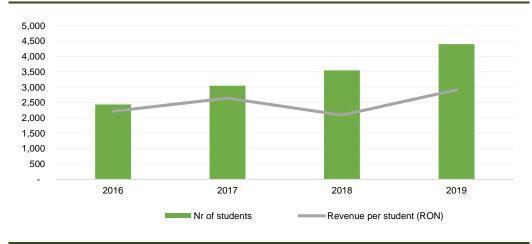
Bittnet: group structure



Source: Company data, WOOD Research; *shareholders will vote on 26 November 2020 on increasing the stake in Equatorial to 99%

Bittnet splits its business into two divisions, education and technology. Education is where the company started, focused on IT training. Technology is an area that has become significantly more important in terms of sales, and a result of acquisitions, focused on IT integration, from the planning and assessment, through to the implementation and maintenance.

Bittnet training (education, 11% of sales and 63% of EBIT 1H20). Bittnet Training is the IT training market leader in Romania, with approximately 20 years of experience and the largest team of trainers in Romania. Over the years, the company has delivered more than 50,000 hours of IT training and, currently, has one of the most comprehensive and updated curricula in the CEE region. Bittnet has a portfolio of more than 1,000 official courses, the largest training portfolio on the Romanian market, licensed by some of the world's largest technology players: Cisco, Microsoft, Amazon Web Services, Oracle, Citrix, etc. From 2.4k students in 2016, the company increased its numbers of students by 80% to 4.4k in 2019; and, as an indication of increasing efficiency, the revenue per student increased by 32% over the same period, to RON 2.9k. At the same time, in 1H20, Bittnet training had 12.1 students per class on average, from 11 at 1H19, a further sign of operational improvements, combined with the benefits of increasing virtual education.



Bittnet training: number of students

Source: Company data, WOOD Research

Equatorial gaming (education, 1% of sales and -44% of the EBIT in 1H20). Bittnet acquired a significant minority stake in Equatorial in 2018, and is planning to consolidate up to a 99% stake in 2020E. Equatorial, a game-based learning company, specialises in providing transformative training and consulting programmes at individual, team and organisational levels in Romania and abroad.

Dendrio (technology, 83% of sales and 63% of the EBIT in 1H20). Dendrio is the largest contributor to the company's sales. It is the result of rebranding the GECAD Net acquisition in 2017, and was consolidated further following the Crescendo acquisition in 2018. It acts as the main umbrella for the company's technology efforts. The IT solutions provided by Dendrio include general consultancy services, IT assessment services, implementation and migration services, maintenance and support services, infrastructure optimisation services and IT training services. The company is the only "multicloud" integrator in Romania, consolidating its position as a highly certified company by the world's

leading IT vendors, focusing on cloud and cybersecurity. 2019 was the year of integrating and consolidating the Crescendo acquisition, and the results are becoming visible from 2020, with the group's EBIT at RON 1.3m over 1H20, compared to the RON 4.2m operating loss in 1H19.

Elian (technology, 83% of sales and 63% of the EBIT in 1H20). Bittnet acquired a majority stake in Elian in 2018, as part of its efforts to expand further into the IT integration market. Elian Solutions is specialised in providing implementation services for the Enterprise Resource Planning (ERP) solution, Microsoft Dynamics NAV. Elian is the only Gold Certificate partner for this solution of Microsoft in Romania. The solution implemented by Elian allows companies to know the status of their inventory, assets and liabilities, and it helps to predict, *inter alia*, the cash flow and to trace the production processes.

"Corporate" DNA

Bittnet today is largely the result of the group pursuing expansion through acquisitions. What was once a small IT education focused player, with RON 8.2m in revenues in 2014, is now a noticeable player in both the IT education and IT integration markets in Romania, with revenues of RON 100m in 2019. The first acquisition happened in 2017, when Bittnet acquired GECAD Net, a loss-making business, which it turned around successfully, marking the beginning of its aggressive expansion into IT integration. 2018 was an even busier year, when Bittnet acquired a majority stake in Elian and a minority stake in Equatorial, which are still part of the group, with their original branding. However, in 2018, the company did its largest and most ambitious acquisition to date, acquiring Crescendo (later integrated into Dendrio), an IT integrator with 25 years of experience in Romania and abroad. Crescendo reported revenues of RON 79m in 2017 (c.RON 50m average for the previous five years), the year before the acquisition, almost triple Bittnet's revenues at the time.

To finance such acquisitions, Bittnet has been an active issuer on the capital markets. Since listing as a small company in 2015 on the alternative venue of the Bucharest Stock Exchange, AeRO, Bittnet has raised both equity and debt. Excluding its listing, it raised RON 13.7m in equity through four issuances, and RON 33.1m in debt in five issuances. Four of its debt issuances have been used to finance its M&A activity, particularly large deals such as Crescendo. Five years since its listing, Bittnet has been promoted to the main market on the Bucharest Stock Exchange, and became part of four of the main market indices (BET-XT, BET-XT-TR, BET-BK and BET-Plus).

Ambitious plans continuing, and the company has announced a series of new investments. Bittnet is constantly looking to invest in, and acquire, businesses that can generate synergies with its current business model, either vertically or horizontally. On 26 November, the shareholders will vote on the following:

- ✓ Softbinator to acquire a 25% stake for USD 2m, with a mix of cash and stock. Softbinator is a product design, development and launch for the fintech, medtech/healthtech and edtech industries in Europe, the US and Asia. The company has over 80 employees; and, in 2020E, it expects to generate revenues of RON 12m and RON 3.2m in profit. Synergies Bittnet delivers infrastructure and integration, while Softbinator can complement with tailored software development solutions.
- The eLearning Company to acquire a 23% stake for RON 1.75m, with a mix of cash and stock. The company delivers non-IT focused education; and, in 2020E, it expects to generate revenues of RON 1.6m, 60% higher yoy, and net income of RON 700k. Due to its e-learning capability, it is well-positioned to benefit from the wave of education digitalisation triggered by COVID-19. Synergies – it has a complementary education product portfolio for Bittnet, given that the latter is focused on IT training.
- ✓ Safetech acquired a 2.3% stake for RON 292k at IPO. Safetech is a cybersecurity firm, that listed on AeRO, the Bucharest Stock Exchange's alternative trading venue. Bittnet invested at the IPO. Synergies cybersecurity is a strategic area for Bittnet.
- ✓ IT prepared exploring an investment. IT prepared offers support for Romanian and foreign companies, and is preparing to launch a marketplace type platform for IT support currently. Discussions are still ongoing and Bittnet is exploring different ways to invest. Synergies IT prepared uses similar technologies as Dendrio, while its platform due to be launched can be used for Dendrio's engineers.
- ✓ Equatorial gaming consolidating its stake to 99%. Equatorial gaming is already part of the group, and Bittnet is looking to increase its stake to 99% from c.40% currently, in a RON 2.55m transaction.

Management and board

The company has a three-member board, with one independent non-executive director, and only the CEO as both a board member and part of its management team.

Mr. Mihai Logofatu, Chairman of the Board. Mr. Logofatu is one of the co-founders of the company. is currently the CEO, and has a 14.1% stake remaining, after several rounds of dilution. He started his career as an IT trainer, and set up Bittnet.

Mr. Lucian Anghel, Independent Non-executive Director, Vice-Chairman of the Board. Mr. Anghel is the independent member of the board, having been the Chairman of the Bucharest Stock Exchange, and the CEO of Banca Romaneasca currently.

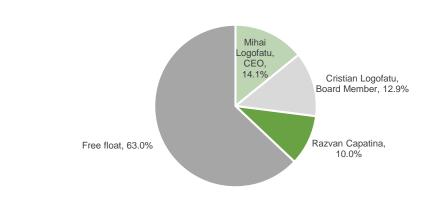
Mr. Cristian Logofatu, Member of the Board. Mr Logofatu co-founded the company in 2007, and owns a 12.9% stake currently. He was previously acting CFO with the company.

The company also has an advisory committee formed of leading local entrepreneurs, such as Mr. Sergiu Negut (Co-founder of FintechOS – a fintech solutions company that raised USD 14m recently), Mr. Andrei Pitis (Founder of Vector – a wearables company acquired by Fitbit), Mr. Dan Stefan (Founder of Autonom Rent a Car – the largest car rental company in Romania, with a fleet of over 1,500 cars), and Mr. Dan Berteanu (Founder of Equatorial – acquired by Bittnet).

Shareholder structure

Shareholders. Mr. Mihai Logofatu and Mr. Cristian Logofatu, the two founders of the company, and current CEO and Board Member, respectively, own 14.14% and 12.87% of the company. Mr. Razvan Capatina has been a shareholder since 2012. The free float stands at 63%.

Bittnet: shareholder structure

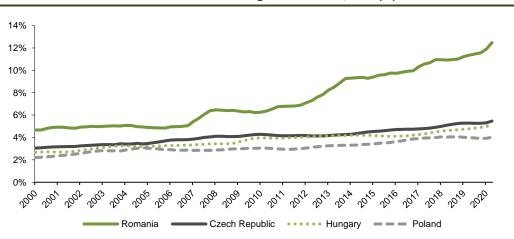


Source: Bucharest Stock Exchange, WOOD Research

The market

Bittnet is focused on the Romanian IT market, offering both education and integration services. While its vision is to consolidate a fragmented CEE region, we focus on Romania for the scope of this report, as we believe it is still where most of the company's efforts will focus, in the near term. Its verticals focus also expose Bittnet to the broader development of technology in the country, rather than a particular niche. In our view, IT education benefits from Romania's IT workforce increasing, and becoming more specialised, while IT integration benefits from companies becoming more digitalised, and both these trends are occurring at an accelerated pace in Romania. According to the data from the National Institute of Statistics, the Romanian IT sector grew by 12.4% yoy in 1H20, compared to a 3.9% fall in GDP for the overall economy in the same period.

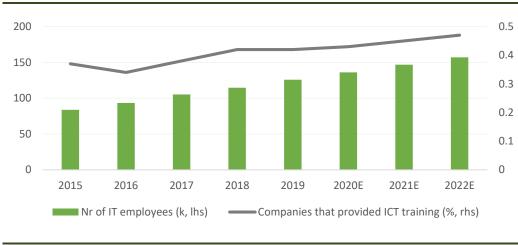
The IT industry has experienced significant growth in the recent decade in CEE, becoming an increasingly important industry. Using the gross value add of information and communication, as a weight of real GDP, Romania has experienced the fastest growth in the region, with the weight doubling in the past 10 years, as opposed to the 30-40% increase for its peers, the Czech Republic, Hungary, and Poland. What was largely an outsourcing industry 10-20 years ago, it has shifted towards creating technology successes locally. In Poland, the two largest listed companies are Allegro (e-commerce) and CD Projekt (gaming); while, in Romania, UiPath (robotics process automation) became the largest company, after receiving a USD 225m funding round, being valued at just above USD 10bn.In a 2018 study (The Rise of Digital Challengers - Perspective on Romania), McKinsey identified two scenarios for the country, going forward. In a "business as usual" scenario, Romania's digital economy would grow by EUR 18bn over 2016-25E, increasing its weight from 7% to 12%, at a rate of 10.7% per annum, close to its historical rate. However, the gap to digital frontrunners like Sweden remains the same. In an "aspirational" scenario, the digital economy's growth could be a staggering EUR 42bn, increasing its weight to 20%, at a rate of 18.2% per year. We believe this highlights that even in a "do nothing", conservative scenario, the outlook is very positive for the IT industry in Romania, which creates a very supportive trend for Bittnet's story.



Information and communications sectors weight in real GDP, CEE (%)

Source: Eurostat, National Institute of Statistics, Czech Statistical Office, Hungarian Central Statistical Office, WOOD Research

In a 2018 study, ANIS, the National Association for the Software Industry, estimated that Romania had 110k IT employees. The report expected that this number would increase to 400k by 2030E, an increase of almost 4x. The Ministry of Communications stated in a document published last year that Romania needs to produce 15k IT workers every year, to be able to sustain the current growth rates for the sector. In the McKinsey report mentioned above, the consultancy firm estimates that Romania had a 1.9% share of IT specialists in employment out of the employed population in 2016, compared to 4.8% for countries like Sweden, which are among the leaders in the level of economy digitisation. Beyond the growth in the number of IT employees, subsequently driving demand for IT training, the frequency of training is also an aspect worth noting. Given the pace of change in the technology industry, with new software and providers replacing established ones, combined with employees changing roles and requiring new training, the business of IT training has a recurring element to it. For a sense of scale, Bittnet, who is the IT training leader in the country, according to the company, had 4.4k students in its IT classes last year.

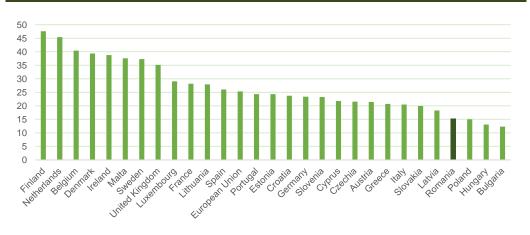


Number of IT employees

Source: ANIS

The European Commission, in its 2019 DESI report, placed Romania towards the bottom of the pack in terms of business digitisation. We believe that the level of business digitisation is the best proxy for the IT integration market. This highlights the gap that Romania has to close with more developed, and even emerging, but digitised markets. The same index places Romania last in the EU in terms of government digitisation, while the government announced last year that it is planning to spend more than EUR 200m per year for the next 10 years to transition to e-government, a pace that will most likely accelerate due to COVID-19 and further support from the EU.





Source: European Commission, WOOD Research

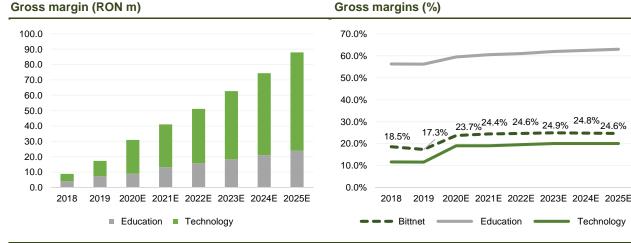
Financial forecasts

We view Bittnet as a growth story, in a very supportive market environment. After it increased its revenues more than 10x, to RON 100m, over 2014-19, we expect its growth to continue at a rapid pace. In 2020E, we expect revenues to grow by 31% yoy, after they increased by 39% yoy in 1H20. Going forward, we expect revenues to grow by 22.3% per year over 2020-25E. This implies an almost tripling of revenues to RON 358m by 2025E, from RON 131m in 2020E. In our forecasts, we only include the full consolidation of Equatorial (proposal to be voted on, on 26 November 2020) as inorganic growth, but highlight that, as an active acquirer, there could be upside for our numbers, fuelled by acquisitions. In the McKinsey report mentioned above, the digital economy in Romania should grow by 10.7-18.2% (low vs. high scenarios) per year. until 2025E. We believe that the company can outgrow the market due to: i) its positioning in verticals, which are better positioned for the transition to a low-touch economy; ii) the continued integration of past acquisitions, which helps to broaden the product portfolio and customer base; iii) the company's relatively low penetration in IT education and IT integration; and iv) its track record of growth, having increased by 39% yoy in 1H20, compared to the overall IT industry, which grew by 12.4%.

Revenue CAGRs (%) 400 350 22.6% 2.7x Technology 24.3% 300 250 20.4% 200 Education 25.3% 150 100 22.3% Bittnet 50 24.4% 0 2018 2019 2020E 2021E 2022E 2023E 2024E 2025E 10.0% 15.0% 20.0% 25.0% 30.0% 0.0% 5.0% Education Technology 2020-25E CAGR 2020-23E CAGR

Source: Company data, WOOD Research

We expect the high growth to bring some gross margin gains, with the biggest impact in 2020E. Bittnet acquired Crescendo in 2018, and started consolidating it from January 2019-onwards. Crescendo, at the time, was a business almost double Bittnet's size. The company's 2019 results are marked by this effort of integration, in our view. In 1H20, the benefits are becoming visible, with the group's overall gross margin increasing to 19.8%, compared to 9.7% in 1H19. We also highlight that the second half of the year is generally stronger for Bittnet's business, when 55-60% of revenues are recorded, while the fixed costs are largely similar to the first half. Therefore, we expect the 2020E gross margin at 23.7%, up from 17.3% in 2019. Broken down by segments, we expect 59.5% for its education division, and 19% for its technology division. In the medium term, we expect some more gains, up to a sustainable level of 24.6%, driven by: i) reaping further synergies from the Crescendo acquisition; ii) the education business becoming more efficient, particularly as a significant number of classes turn virtual; and iii) the economies of scale impact of becoming a larger player in the IT integration business, which allows for better negotiation terms with suppliers.



Source: Company data, WOOD Research

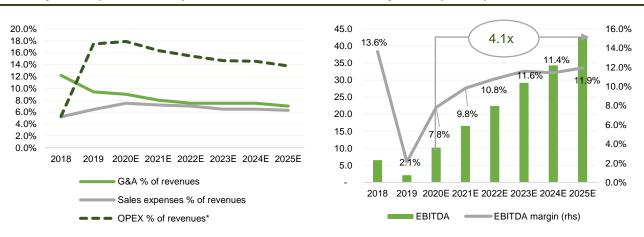
Revenue dynamics (RON m)

Technology

We pencil in further margin gains driven by opex dilution. At its current scale, Bittnet still has some central costs inefficiency, in our view. We expect G&A dilution as the business grows, with G&A as a percentage of sales declining from 9.4% in 2019 to 7% in the medium term. We take a conservative view of its sales expenses, as we believe there is increasing competition for talent in the sector, and operational efficiency might be mitigated by wage pressure. However, we do note that the company is moving away from a heavy people-dependant sales function, towards a more marketing, particularly digital marketing, approach, which could surprise our estimates to the upside, if executed well. Generally, low fixed-costs platform type businesses like Bittnet are the big winners from scale.

This drives our expectation for an increase of 4.1x in EBITDA over 2020-25E. Following a weak year, marked by Crescendo's integration, we expect the EBITDA growth to start accelerating, driven by gains at both the gross margin and opex levels, as explained above. Over 2020-25E, we expect the EBITDA to grow by 33.1% per annum, climbing to RON 42.7m, from RON 10.2m in 2020E. This is based on our forecast of an EBITDA margin improvement from 2.1% in 2019 to 7.8% in 2020E, and 11.9% in the medium term.

EBITDA dynamics (RON m)

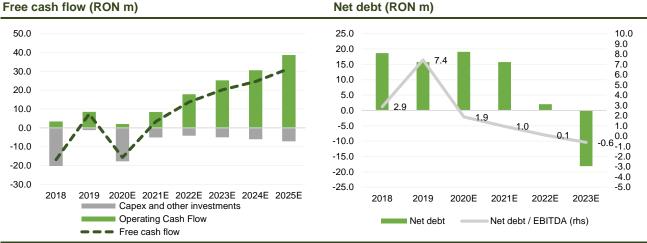


OPEX dynamics (% of revenues)

Source: Company data, WOOD Research; *including depreciation and other income

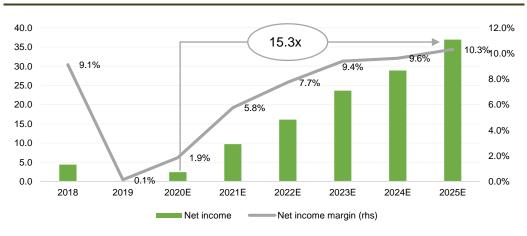
... and a W-shaped free cash flow recovery... In our numbers for 2020E, we include the company's recently-announced investments, which are due to be voted on at the shareholder meeting on 26 November. We include minority investments of RON 8.25m for Softbinator, RON 1.75m for The eLearning Company, and the consolidation of the Equatorial stake for RON 2.5m. In the short- to medium-term, we pencil in a capex/sales ratio of 2%, given that IT firms without a focus on proprietary R&D generally have higher employee costs and low capex needs. However, in the long term, we believe that Bittnet will, naturally, gravitate towards including more proprietary products, with higher capitalised R&D expenditure. Steps in this direction are already being made by developing its own training courses, or investing in Softbinator, a software development firm. In the long term, we expect a capex/sales ratio of 4%. In terms of working capital, we expect an increase from 0% working capital/sales in 2019, to 5% in the medium term. Overall, we expect free cash flow to turn positive in 2021E, at RON 3.3m, after a year of high investments, and climb towards RON 20-30m in 2023-25E. We also highlight that Bittnet has traditionally acquired companies using a mix of cash and stock, and it is planning to do so with its recently-announced investments. In our free cash flow estimates, we pencil in the investments as cash, given the uncertainty in terms of the mix of cash and stock, as well as the stock price levels at the acquisition date.

Driving leverage down. Bittnet reached a high leverage level of 7.4x net debt/EBITDA at the end of 2019, following the acquisition of Crescendo. We expect the ratio to fall to 1.9x in 2020E, and the company to turn cash positive in 2023E. However, we note that, in our numbers, we do not pencil in further large investments or acquisitions following what has been announced already for the end of 2020E.



Source: Company data, WOOD Research

And these effects compound to an increase of 15.3x in net income over 2020-25E. Beyond the gains at the EBITDA level, we expect further gains on the bottom line, driven by three aspects: i) deleveraging, which should reduce the company's finance costs, with a particularly large impact, given that the company's bonds are issued at a 9% fixed interest rate, and the company recorded RON 3.2m in financial expenses in 2019; ii) the consolidation of Equatorial; iii) the improvement in Elian's numbers in 1H20, after a minorities loss in 2019; and iv) the new investments in Softbinator and The eLearning Company to contribute roughly RON 1.6m in 2021E, based on the company's projections. Therefore, we expect the net income to increase from RON 2.4m in 2020E, to RON 36.9m in 2025E, at an annual pace 72.5%, albeit from a relatively low base. We expect the margin to reach a sustainable level of c.10% in the medium term, from 1.9% in 2020E.



Net income dynamics (RON m)

Risks

M&A integration. Bittnet is an active acquirer and, using its 2018 acquisition of Crescendo as an example, sometimes its targets are larger than the company itself. In the past, the group has proven successful at turning around loss-making acquisitions (GECAD Net) and integrating large acquisitions (Crescendo). In the future, as the company grows bigger and more diverse, with management's focus more dispersed, integration could prove more challenging and expected synergies might not be achieved.

Employee retention. One of the core differentiators for technology companies in general and Bittnet in particular are its people, the ability to attract and retain top talent. Bittnet, as one of the few listed IT companies in Romania, has an extensive stock options programme for its employees, aligning interests and providing access to upside. However, the IT sector in Romania is becoming more and more competitive, putting pressure on salaries, and making it more difficult to recruit and keep staff.

Competition and distinguishable competitive advantages. In the verticals, where Bittnet is most active, IT education and integration, we believe that employees are the key competitive advantage, while the focus is not proprietary products. As detailed above, the increasing competition for IT talent could result in Bittnet's competitive advantages being reduced, weakening the company's pricing power and ability to consolidate the market further. This is amplified further by the company operating in industries with low barriers to entry, high fragmentation and high competition.

Dilution. Bittnet has an aggressive growth agenda and this is funded partly by capital raises. Since listing in 2015, Bittnet has raised c.RON 13.7m in fresh equity, through four issuances. As detailed above, the company's option plan is a critical component of attracting and retaining its employees and key personnel. With M&A at its core, we believe that new investors are faced with dilution down the line: annually, through its option plans; and, opportunistically, due to the company's pursuit of acquisitions and deleveraging.

Leverage. At the end of 2019, the company had a net debt/EBITDA ratio of 7.4x. While it broke no covenants, given that most of its debt is in BVB-issued corporate bonds with tailored covenants, Bittnet is at the more aggressive end of the leverage spectrum, particularly in the Romanian context. Net debt to EBITDA dropped to 1.3x in 1H20 and, without large acquisitions in sight, we expect it to decline further. However, we do not rule out reaching higher than sustainable levels again, particularly in pursuit of acquisitions.

Low market liquidity. Its average traded volumes over the past 12 months have been as low as USD 31k/day, which creates the risk of higher price fluctuations.

Financials

Income statement

| RON m | 2018 | 2019 | 2020E | 2021E | 2022E | 2023E |
|-----------------------------|--------|--------|---------|---------|---------|---------|
| Revenues | 47.891 | 99.750 | 130.615 | 168.583 | 207.736 | 251.640 |
| Education | 7.408 | 12.831 | 15.012 | 21.768 | 25.686 | 29.539 |
| Technology | 40.483 | 86.919 | 115.602 | 146.815 | 182.050 | 222.102 |
| COGS | 39.013 | 82.495 | 99.718 | 127.518 | 156.568 | 188.906 |
| Education | 3.239 | 5.619 | 6.080 | 8.598 | 10.018 | 11.225 |
| Technology | 35.774 | 76.876 | 93.638 | 118.920 | 146.551 | 177.681 |
| Gross margin | 8.878 | 17.255 | 30.897 | 41.064 | 51.168 | 62.734 |
| Education | 4.169 | 7.212 | 8.932 | 13.170 | 15.668 | 18.314 |
| Technology | 4.709 | 10.043 | 21.964 | 27.895 | 35.500 | 44.420 |
| Other income | -5.968 | -0.658 | -0.862 | -1.112 | -1.370 | -1.660 |
| Selling expenses | 2.486 | 6.418 | 9.796 | 12.138 | 14.542 | 16.357 |
| Depreciation | 0.179 | 2.283 | 2.684 | 3.065 | 3.290 | 3.272 |
| G&A expenses | 5.828 | 9.376 | 11.755 | 13.487 | 15.580 | 18.873 |
| Opex | 2.525 | 17.419 | 23.374 | 27.577 | 32.041 | 36.842 |
| EBITDA | 6.532 | 2.119 | 10.207 | 16.552 | 22.417 | 29.165 |
| EBIT | 6.353 | -0.164 | 7.523 | 13.487 | 19.127 | 25.892 |
| Investment gains | 0.180 | 0.006 | 0.000 | 1.613 | 2.362 | 3.141 |
| Net interest expense | -1.244 | -2.805 | -4.048 | -2.861 | -1.573 | -0.060 |
| Net financial income | -1.064 | -2.799 | -4.048 | -1.248 | 0.789 | 3.081 |
| Gross profit | 5.289 | -2.963 | 3.475 | 12.239 | 19.916 | 28.973 |
| Income tax | 0.882 | -0.332 | 0.556 | 1.958 | 3.187 | 4.636 |
| Net profit | 4.407 | -2.631 | 2.919 | 10.281 | 16.729 | 24.338 |
| Minorities | 0.037 | -2.754 | 0.500 | 0.573 | 0.639 | 0.707 |
| Net profit for shareholders | 4.370 | 0.123 | 2.419 | 9.708 | 16.090 | 23.631 |

Source: Company data, WOOD Research

Operational data

| RON m | 2018 | 2019 | 2020E | 2021E | 2022E | 2023E |
|-----------------------|--------|--------|---------|--------|-------|-------|
| Growth | | | | | | |
| Revenues | 73.0% | 108.3% | 30.9% | 29.1% | 23.2% | 21.1% |
| Education | 0.0% | 73.2% | 17.0% | 45.0% | 18.0% | 15.0% |
| Technology | 0.0% | 114.7% | 33.0% | 27.0% | 24.0% | 22.0% |
| EBITDA | 122.5% | -67.6% | 381.6% | 62.2% | 35.4% | 30.1% |
| Net income | 156.9% | -97.2% | 1866.4% | 301.4% | 65.7% | 46.9% |
| Margins | | | | | | |
| Gross margin | 18.5% | 17.3% | 23.7% | 24.4% | 24.6% | 24.9% |
| Education | 56.3% | 56.2% | 59.5% | 60.5% | 61.0% | 62.0% |
| Technology | 11.6% | 11.6% | 19.0% | 19.0% | 19.5% | 20.0% |
| EBITDA margin | 13.6% | 2.1% | 7.8% | 9.8% | 10.8% | 11.6% |
| EBIT margin | 13.3% | -0.2% | 5.8% | 8.0% | 9.2% | 10.3% |
| Net income margin | 9.1% | 0.1% | 1.9% | 5.8% | 7.7% | 9.4% |
| Net debt / EBITDA (x) | 2.9 | 7.4 | 1.9 | 1.0 | 0.1 | -0.6 |
| WC / Sales | 22.6% | 0.2% | 3.3% | 5.5% | 5.5% | 5.5% |

Balance sheet

| RON m | 2018 | 2019 | 2020E | 2021E | 2022E | 2023E |
|------------------------------|--------|--------|---------|---------|---------|---------|
| Goodwill | 12.241 | 17.702 | 17.702 | 17.702 | 17.702 | 17.702 |
| Other intangibles | 6.099 | 6.040 | 6.040 | 6.040 | 6.040 | 6.040 |
| Tangibles | 2.004 | 6.743 | 9.283 | 11.276 | 12.140 | 13.901 |
| Investments | 1.230 | 1.237 | 10.000 | 10.000 | 10.000 | 10.000 |
| Other fixed assets | 1.057 | 1.619 | 1.619 | 1.619 | 1.619 | 1.619 |
| Total Fixed Assets | 22.631 | 33.340 | 44.643 | 46.636 | 47.501 | 49.261 |
| Inventory | 0.618 | 1.997 | 2.505 | 3.233 | 3.984 | 4.826 |
| Receivables | 22.772 | 32.300 | 42.942 | 57.734 | 71.143 | 86.178 |
| Cash and equivalents | 13.048 | 20.824 | 17.491 | 15.836 | 19.555 | 26.531 |
| Total Current Assets | 36.437 | 55.122 | 62.938 | 76.803 | 94.682 | 117.535 |
| Total Assets | 59.069 | 88.462 | 107.581 | 123.439 | 142.183 | 166.796 |
| Subscribed capital | 5.176 | 11.620 | 22.905 | 22.905 | 22.905 | 22.905 |
| Retained Earnings | 4.723 | -1.045 | -0.731 | 8.977 | 25.067 | 48.698 |
| Other equity | 3.900 | 1.471 | 1.471 | 1.471 | 1.471 | 1.471 |
| Non-controlling interests | 0.202 | 0.325 | 0.825 | 1.397 | 2.037 | 2.743 |
| Total shareholder equity | 14.001 | 12.372 | 24.470 | 34.750 | 51.480 | 75.817 |
| Bonds | 18.380 | 28.196 | 28.196 | 23.196 | 13.196 | 0.000 |
| Bank loans | 1.164 | 4.808 | 4.808 | 4.808 | 4.808 | 4.808 |
| Other long-term debt | 0.122 | 3.843 | 3.843 | 3.843 | 3.843 | 3.843 |
| Total Long-term debt | 19.666 | 36.846 | 36.846 | 31.846 | 21.846 | 8.650 |
| Bonds | 4.165 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Bank loans | 8.018 | 3.560 | 3.560 | 3.560 | 3.560 | 3.560 |
| Payables | 12.570 | 34.131 | 41.153 | 51.729 | 63.744 | 77.216 |
| Other short-term debt | 0.649 | 1.553 | 1.553 | 1.553 | 1.553 | 1.553 |
| Total Short-term liabilities | 25.402 | 39.244 | 46.265 | 56.842 | 68.857 | 82.329 |
| Total Liabilities | 45.068 | 76.090 | 83.112 | 88.689 | 90.703 | 90.979 |
| Total Equity and Liabilities | 59.069 | 88.462 | 107.581 | 123.439 | 142.183 | 166.796 |

Cash flow

| RON m | 2018 | 2019 | 2020E | 2021E | 2022E | 2023E |
|---------------------------------------|---------|--------|---------|---------|---------|---------|
| Gross Profit | 5.290 | 2.962 | 3.475 | 12.239 | 19.916 | 28.973 |
| Amortisation | 0.179 | 2.283 | 2.684 | 3.065 | 3.290 | 3.272 |
| Other adjustments | 1.772 | -1.924 | 0.581 | 0.000 | 0.000 | 0.000 |
| Operational Profit before WC | 7.241 | 3.322 | 6.740 | 15.303 | 23.206 | 32.246 |
| Receivables change | -6.124 | -9.647 | -10.642 | -14.792 | -13.409 | -15.036 |
| Inventory change | -0.219 | -1.379 | -0.508 | -0.728 | -0.751 | -0.842 |
| Payables change | 3.014 | 16.811 | 7.022 | 10.577 | 12.014 | 13.472 |
| Operational cash flow | 3.912 | 9.106 | 2.612 | 10.360 | 21.060 | 29.840 |
| Paid income tax | 0.515 | 0.604 | 0.556 | 1.958 | 3.187 | 4.636 |
| Net Operational cash flow | 3.397 | 8.502 | 2.057 | 8.402 | 17.874 | 25.204 |
| Investments (non-capex) | 0.000 | 0.000 | 10.000 | 0.000 | 0.000 | 0.000 |
| Payments for acquiring subsidiaries | 1.392 | 0.710 | 2.500 | 0.000 | 0.000 | 0.000 |
| Payments for no-controlling interests | 1.050 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Capex | 7.414 | 0.894 | 5.225 | 5.057 | 4.155 | 5.033 |
| Others | 10.378 | -0.405 | 0.000 | 0.000 | 0.000 | 0.000 |
| Net cash flow from investments | 20.233 | 1.198 | 17.725 | 5.057 | 4.155 | 5.033 |
| Free cash flow | -16.836 | 7.304 | -15.668 | 3.345 | 13.719 | 20.172 |
| Organic free cash flow* | -4.016 | 7.608 | -3.168 | 3.345 | 13.719 | 20.172 |
| Equity raising | 2.899 | 0.000 | 9.175 | 0.000 | 0.000 | 0.000 |
| Net change in bank loans | 3.182 | -0.814 | 0.000 | 0.000 | 0.000 | 0.000 |
| Net change in bonds | 14.072 | 5.414 | 0.000 | -5.000 | -10.000 | -13.196 |
| Dividends paid | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Other financing adjustments | -1.330 | -4.128 | 3.160 | 0.000 | 0.000 | 0.000 |
| Net cash flow from financing | 18.824 | 0.472 | 12.335 | -5.000 | -10.000 | -13.196 |
| Cash at the beginning of the year | 11.060 | 13.048 | 20.824 | 17.491 | 15.835 | 19.554 |
| Cash increase | 1.988 | 7.776 | -3.333 | -1.655 | 3.719 | 6.976 |
| Cash at the end of the year | 13.048 | 20.824 | 17.491 | 15.835 | 19.554 | 26.530 |

Source: Company data, WOOD Research; *excluding non-capex investments

Ratios

| | 2018 | 2019 | 2020E | 2021E | 2022E | 2023E |
|---------------------------|--------|--------|---------|--------|-------|---------|
| Number of shares (m, eop) | 116.2 | 127.2 | 216.3 | 216.3 | 216.3 | 216.3 |
| Price | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 |
| Net debt | 18.679 | 15.740 | 19.072 | 15.728 | 2.009 | -18.163 |
| Net debt / EBITDA (x) | 2.9 | 7.4 | 1.9 | 1.0 | 0.1 | -0.6 |
| EPS (RON) | 0.038 | 0.001 | 0.011 | 0.045 | 0.074 | 0.109 |
| - EPS growth | 156.9% | -97.4% | 1056.7% | 301.4% | 65.7% | 46.9% |
| Dividend (RON m) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| DPS (RON) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| - Payout Ratio | 0% | 0% | 0% | 0% | 0% | 0% |
| Dividend yield | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| FCF per share | -0.145 | 0.057 | -0.072 | 0.015 | 0.063 | 0.093 |
| FCF yield | -22.3% | 8.8% | -11.1% | 2.4% | 9.8% | 14.3% |
| BVPS (RON) | 0.120 | 0.097 | 0.113 | 0.161 | 0.238 | 0.350 |
| ROA | 9.7% | 0.2% | 2.5% | 8.4% | 12.1% | 15.3% |
| ROE | 43.8% | 0.9% | 13.1% | 32.8% | 37.3% | 37.1% |
| ROIC | 13.4% | 0.4% | 5.6% | 19.2% | 30.1% | 41.0% |
| EV/Sales (x) | 2.0 | 1.0 | 1.2 | 0.9 | 0.7 | 0.5 |
| PE (x) | 17.3 | 672.5 | 58.1 | 14.5 | 8.7 | 6.0 |
| EV/EBITDA (x) | 14.5 | 46.6 | 15.7 | 9.5 | 6.5 | 4.3 |

Important disclosures

This investment research is published by WOOD & Company Financial Services, a.s. ("WOOD&Co") and/or one of its branches who are authorised and regulated by the Czech National Bank (CNB) as Home State regulator and in Poland by the Polish Financial Supervision Authority (KNF), in Slovakia by the National Bank of Slovakia (NBS), in Italy by the Companies and Stock Exchange Commission (CONSOB) and in the UK by the Financial Conduct Authority (FCA) as Host State regulators.

This investment research was prepared by WOOD&Co with financial assistance from Taipei China through the TaiwanBusiness EBRD Technical Cooperation Fund managed by the European Bank for Reconstruction and Development ("EBRD"). Neither EBRD nor Taipei China has had any editorial rights or other influence on the content of this investment research. Neither EBRD nor Taipei China makes any representation or warranty or assumes any responsibility or liability in relation to the contents of this investment research or reliance thereon. The views expressed in this investment research are those of WOOD&Co and can in no way be taken to reflect the official opinion of EBRD or of Taipei China. EBRD may, as of the date hereof or in the future, have an investment in, provide other advice or services to, or otherwise have a financial interest in, certain of the companies and parties contained or named in this investment research or in their affiliates.

This investment research was completed on 29/10/2020 at 20:30 CET and disseminated on 30/10/2020 at 07:55 CET.

| WOOD&Co's rating and price target history for Bittnet Systems in the preceding 12-month period: | | | | | |
|---|------------------------------|------------|-----------|--|--|
| Date | Rating | Date | PT | | |
| 30/10/2020 | BUY – initiation of coverage | 30/10/2020 | RON 0.973 | | |

A history of all WOOD&Co's investment research disseminated during the preceeding 12-month period can be accessed via our website at https://research.wood.com.

The meanings of recommendations made in WOOD&Co's investment research are as follows:

BUY: The stock is expected to generate total returns of over 15% during the next 12 months as measured by the price target.

HOLD: The stock is expected to generate total returns of 0-15% during the next 12 months as measured by the price target.

SELL: The stock is expected to generate a negative total return during the next 12 months as measured by the price target.

RESTRICTED: Financial forecasts, and/or a rating and/or a price target is restricted from disclosure owing to Compliance or other regulatory/legal considerations such as a blackout period or a conflict of interest.

NOT RATED: Suspension of rating after 30 consecutive weekdays where the current price vis-à-vis the price target has been out of the range dictated by the current BUY/HOLD/SELL rating.

COVERAGE IN TRANSITION: Due to changes in the Research team, the disclosure of a stock's rating and/or price target and/or financial information are temporarily suspended.

As of the end of the last calendar quarter, the proportion of all WOOD&Co's investment research vis-à-vis the proportion of subject companies that were investment banking clients over the previous 12 months is as follows:

| | BUY | HOLD | SELL | Restricted | NOT RATED | Coverage in transition |
|--------------------------|-----|------|------|------------|-----------|------------------------|
| Equity Research Coverage | 55% | 37% | 8% | 1% | n.a. | 1% |
| IB Clients | 1% | 1% | n.a. | 1% | n.a. | n.a. |

Any prices of financial instruments quoted in this investment research are taken as of the previous day's market close on the home market unless otherwise stated.

Details of the methodologies used to determine WOOD&Co's price targets and risk assessment related to the achievement of the targets are outlined throughout the most recent substantive report/note on the subject company.

It should be assumed that the risks and valuation methodology presented in daily news or flash notes, and not changing WOOD&Co's estimates or ratings, are as set out in the most recent substantive research report/note on the subject company and can be found on our website at https://research.wood.com.

WOOD&Co's policy is to update investment research as it deems appropriate, based on developments in the subject company, sector or market that may have a material impact on the views or opinions stated in the investment research.

WOOD Research Disclosures (as of 30 October 2020)

| Company | Disclosures |
|-----------------------------------|---------------|
| Alior Bank | 5 |
| AmRest | 5 |
| ANY Security Printing Company PLC | 5 |
| Banca Transilvania | 5 |
| Bank of Cyprus | 4 |
| BRD | 5 |
| Bucharest Stock Exchange | 5 |
| Santander Bank Polska | 5 |
| CCC | 5 |
| CD Projekt | 5 |
| CEZ | 5 |
| CME | 5 |
| Dino | 5 |
| DO&CO | 5 |
| Electrica | 5 |
| Erste Group Bank | 5 |
| Eurobank | 4 |
| Eurocash | 4, 5 |
| Fortuna | 5 |
| Fondul Proprietatea | 1, 2, 3, 4, 5 |
| Graphisoft Park | 5 |
| ING BSK | 5 |
| Kazatomprom | 5 |
| Kernel | 5 |
| Kety | 5 |
| KGHM | 5 |
| Kofola CS | 5 |
| Komercni | 4, 5 |
| Kruk | 5 |
| Lotos | 5 |
| MedLife | 4 |
| MONETA Money Bank | 5 |
| O2 Czech Republic | 1, 4, 5 |
| OMV Petrom | 5 |
| Orange PL | 5 |
| Pekao | 4, 5 |
| PGE | 5 |
| PGNiG | 5 |
| Philip Morris CR | 5 |
| PKN Orlen | 5 |
| PKO BP | 4, 5 |

| Purcari Wineries | 1,2, 3, 4 | |
|-----------------------|-----------|--|
| PZU | 4, 5 | |
| Romgaz | 5 | |
| Santander Bank Polska | 5 | |
| Siauliu Bankas | 1, 2, 4 | |
| Tauron | 5 | |
| Transelectrica | 5 | |
| Transgaz | 5 | |
| Warsaw Stock Exchange | 5 | |

Description

The company currently is, or in the past 12 months was, a client of WOOD&Co or any of its affiliates for the provision of corporate finance/investment banking services.

2 In the past 12 months, WOOD&Co or any of its affiliates have received compensation for corporate finance/investment banking services from the company.

3 In the past 12 months, WOOD&Co or any of its affiliates have been lead manager or co-lead manager of a publicly disclosed offer of the company's financial instruments.

4 In the past 12 months, WOOD&Co or any of its affilates have acted as broker to the company

5 WOOD&Co or any of its affiliates are market maker(s) or liquidity provider(s) in relation to financial instruments of the company.

6 In the past 12 months, WOOD&Co or any of its affiliates have provided to the company any services set out in Sections A and B or Annex I to the Directive 2014/65/EU of the European Parliament and of the Council, other than services listed under points 1, 3, 4 or 5 above, or received compensation for such services from the company.

7 The authoring analyst or any individual involved in the preparation of this investment research have purchased/received shares in the company prior to a public offering of those shares; and the price at which they were acquired along with the date of acquisition are disclosed above.

8 The authoring analyst or any individual involved in the preparation of this investment research has a direct ownership position in securities issued by the company.

- 9 A partner, director, officer, employee or agent of WOOD&Co and its affiliates, or a member of his/her household, is an officer, or director, or serves as an advisor or board member of the company.
- 10 WOOD&Co or its affiliates hold a net long or short position exceeding the threshold of 0,5% of the total issued share capital of the company, calculated in accordance with Artcle3 of Regulation (EU) No 236/2012 and with Chapters III and IV of Commission Delegated Regulation (EU) No 918/2012.
- 11 The company owns more than 5% of the total issued share capital in WOOD&Co or any of its affiliates.

The authoring analysts who are responsible for the preparation of this investment research have received (or will receive) compensation based upon (among other factors) the overall profits of WOOD&Co, which includes corporate finance/investment banking, sales and trading and principal trading revenues. However, such authoring analysts have not received, and will not receive, compensation that is directly based upon or linked to one or more specific activities, or to recommendations contained in the investment research. One factor in equity research analyst compensation is arranging corporate access events/meetings between institutional clients and the management teams of covered companies (with the company management being more likely to participate when the analyst has a positive view of the company).

WOOD&Co and its affiliates may have a corporate finance/investment banking or other relationship with the company that is the subject of this investment research and may trade in any of the designated investments mentioned herein either for their own account or the accounts of their clients, in good faith or in the normal course of market making. Accordingly, WOOD&Co or their affiliates, principals or employees (other than the authoring analyst(s) who prepared this investment research) may at any time have a long or short position in any such designated investments, related designated investments or in options, futures or other derivative instruments based thereon.

WOOD&Co manages conflicts of interest arising as a result of preparation and publication of research through its use of internal databases, notifications by the relevant employees and Chinese Walls as monitored by Compliance. For further details, please see our website at https://www.wood.cz/mifid-information/.

The information contained in this investment research has been compiled by WOOD&Co from sources believed to be reliable, but (with the exception of the information about WOOD&Co) no representation or warranty, express or implied, is made by WOOD&Co, its affiliates or any other person as to its fairness, accuracy, completeness or correctness. WOOD&Co has not independently verified the facts, assumptions, and estimates contained herein. All estimates, opinions and other information contained in this investment research constitute WOOD&Co' judgement as of the date of this investment research, are subject to change without notice and are provided in good faith but without legal responsibility or liability.

WOOD&Co salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desk that reflect opinions that are contrary to the opinions expressed in this investment research. WOOD&Co's affiliates, proprietary trading desk and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this investment research.

This investment research is provided for information purposes only and does not constitute or form part of an offer or invitation or solicitation to engage in investment activity or to buy or sell any designated investments discussed herein in any jurisdiction. As a result, the designated investments discussed in this investment research may not be eligible for offer or sale in some jurisdictions. This investment research is not, and under no circumstances should be construed as, a solicitation to act as a securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction.

This investment research does not have regard to the investment objectives, financial situation or particular needs of any particular person. Investors should consider this report as only a single factor in making their investment decision and obtain advice based on their own individual circumstances before making an investment decision. To the fullest extent permitted by law, none of WOOD&Co, its affiliates or any other person accepts any liability whatsoever for any direct or consequential loss arising from or in connection with the use of this investment research.

For United Kingdom or EU Residents:

This investment research is for persons who are eligible counterparties or professional clients within the meaning of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU and is exempt from the general restrictions in section 21 of the Financial Services and Markets Act 2000 (or any analogous legislation) on the communication of invitations or inducements to engage in investment activity on the grounds that it is being distributed in the United Kingdom only to persons of a kind described in Article 19(5) (Investment Professionals) and 49(2) (High Net Worth companies, unincorporated associations etc) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended).

For United States Residents:

This investment research distributed in the United States by WOOD&Co, and in certain instances by Brasil Plural Securities LLC ("Brasil Plural"), a U.S. registered broker dealer, only to "major U.S. institutional investors", as defined under Rule 15a-6 promulgated under the U.S. Securities Exchange Act of 1934, as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC"). This investment research is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research and are not a major U.S. institutional investor, you are instructed not to read, rely on or reproduce the contents hereof, and to destroy this research or return it to WOOD&Co or to Brasil Plural. Analyst(s) preparing this report are employees of WOOD&Co who are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore the analyst(s) are not be subject to Rule 2711 of the Financial Industry Regulatory Authority ("FINRA") or to Regulation AC adopted by SEC which, among other things, restrict communications with a subject company, public appearances and personal trading in securities by a research analyst. Any major U.S. Institutional investor wishing to effect transactions in any securities referred to herein or options thereon should do so by contacting a representative of Brasil Plural. Brasil Plural is a broker-dealer registered with the SEC and a member of FINRA and the Securities Investor Protection Corporation. Its address is 545 Madison Avenue, 8th Floor, New York, NY 10022 and its telephone number is 212-388-5613. WOOD&Co is not affiliated with Brasil Plural or any other U.S. registered broker-dealer.

The views and sentiments expressed in this investment research and any findings thereof accurately reflect the analyst's truthful views about the subject securities and or issuers discussed herein.

This page has been left blank intentionally

This page has been left blank intentionally

This page has been left blank intentionally



CONTACTS

Czech Republic

namesti Republiky 1079/1a Palladium 110 00 Praha 1 Czech Republic Tel +420 222 096 111 Fax +420 222 096 222

Romania

Metropolis Center 89-97 Grigore Alexandrescu St. 010624 Bucharest 1 Tel.: +40 316 30 11 81

Research

Co-Head of Research/ Head of Research Poland

Marta Jezewska-Wasilewska +48 22 222 1548 marta.iezewska-wasilewska@wood.com

Utilities/Mining/Pharma Bram Buring +420 222 096 250 bram.buring@wood.com

Energy Jonathan Lamb +44 20 3530 0621 jonathan.lamb@wood.com

Enerav/Utilities Ondrej Slama +420 222 096 484 ondrej.slama@wood.com

Greece Fani Tzioukalia +30 211 106 9449 fani.tzioukalia@wood.com

Sales

Head of Sales Kristen Andrasko +420 222 096 253 kristen.andrasko@wood.cz

Grzegorz Skowronski +48 22 222 1559 grzegorz.skowronski@wood.com Poland Skylight Zlote Tarasy Zlota 59

00 120 Warszawa Poland Tel +48 22 222 1530 Fax +48 22 222 1531

UK

City Point, 11th Floor 1 Ropemaker Street London EC2Y 9HT

Tel +44 20 3530 0691

Italv Via Luigi Settembrini, 35 Head of Equities 20124 Milan Italy

Tel +39 02 36692 500

Kristen Andrasko +420 222 096 253 kristen.andrasko@wood.com

Bloomberg page WUCO

www.wood.com

Co-Head of Research/Head of Greek Research

Alex Boulougouris +30 211 106 9447 alex.boulougouris@wood.com

Head of Turkey Research Atinc Ozkan +90 542 202 3632 atinc.ozkan@wood.com

Head of Financials Can Demir +44 20 3530 0623

can.demir@wood.com

Poland Pawel Wieprzowski +48 22 222 1549 pawel.wieprzowski@wood.com

Financials David Lojkasek +420 222 096 256 david.lojkasek@wood.com

Head of Consumer/Industrials Lukasz Wachelko +48 22 222 1560 lukasz.wachelko@wood.com

Head of Russia Research Ildar Davletshin

+44 203 530 0631 ildar.davletshin@wood.com

Head of TMT Piotr Raciborski +48 22 222 1551 piotr.raciborski@wood.com

Consumer Jakub Mician +420 222 096 320 jakub.mician@wood.com

Russia **Dmitry Vlasov** +44 750 714 6702 dmitry.vlasov@wood.com

Piotr Kopec +48 22 222 1615 piotr.kopec@wood.com

Kostas Tsigkourakos +30 694 082 5810 kostas.tsigkourakos@wood.com Macroeconomics

Raffaella Tenconi +44 20 3530 0685 raffaella.tenconi@wood.com

Macroeconomics

Alessio Chiesa +44 75177 06102 alessio.chiesa@wood.com

Consumer/Real Estate Jakub Caithaml +420 222 096 481 jakub.caithaml @wood.com

Romania Stefan Lungu +44 203 530 0694 stefan.lungu@wood.com

Ioana Pop +44 20 3530 0693 ioana.pop@wood.com

Tatiana Sarandinaki Brasil Plural in association with WOOD&Co. 1 212 388 5613 tsarandinaki@wood-brasilplural.com

Zuzana Mora

+420 222 096 283 zuzana mora@wood.com Ermir Shkurti +420 222 096 847 ermir.shkurti@wood.com Vladimir Vavra +420 222 096 397 vladimir.vavra@wood.com

| Date | Company/Sector | Title | Analyst |
|----------|------------------------------------|--|--|
| 28/10/20 | Ilirija d.d. | Adriatic tourism, by land and by sea | Bram Buring, Alex Boulougouris |
| 27/10/20 | Fourlis | Are we there yet? | Fani Tzioukalia, Lukasz Wachelko |
| 23/10/20 | CE3 Banks | 3Q20E – too soon to say | Marta Jezewska-Wasilewska, David Lojkasek |
| 22/10/20 | Zagreb Stock Exchange | A pricey bet on the Balkan markets consolidation | David Lojkasek, Pawel Wieprzowski |
| 16/10/20 | Ulker | Money needs to be put to work | Jakub Mician, Atinc Ozkan, Lukasz Wachelko |
| 15/10/20 | Turk Telekom | More resilient to FX headwinds, reiterate BUY | Atinc Ozkan, Piotr Raciborski |
| 14/10/20 | Aygaz | Still complicated, but worth it | Ondrej Slama, Jonathan Lamb |
| 07/10/20 | Georgian Banks | Relying on a smooth ride | Can Demir, Alex Boulougouris |
| 06/10/20 | Polish Financials | Will they finally take the plunge? | Marta Jezewska-Wasilewska, David Lojkasek |
| 02/10/20 | The Rear-View Mirror – EME markets | Turkish ISE30 rebounds, advances 2.9% in EUR terms | Research Team |
| 02/10/20 | EME Macro/Strategy | Shift of focus – from cycle to trend | Alessio Chiesa, Raffaella Tenconi |
| 02/10/20 | Petrol Group | Slovenia's fuel deregulation is here | Ondrej Slama, Jonathan Lamb |
| 29/09/20 | LiveChat Software | Growth deceleration ahead | Piotr Raciborski, Pawel Wieprzowski |
| 24/09/20 | Polish Oil & Gas | Holding out for a Hero | Jonathan Lamb, Ondrej Slama |
| 24/09/20 | Titan Cement | Too cheap to ignore | Alex Boulougouris, Fani Tzioukalia |
| 23/09/20 | TeraPlast | Leaner, stronger, and with a large cash pile | Stefan Lungu, Alex Boulougouris |
| 23/09/20 | Bucharest Stock Exchange | Central counterparty front and centre | David Lojkasek, Pawel Wieprzowski |

Although the information contained in this report comes from sources WOOD & Company believes to be reliable, we do not guarantee its accuracy, and such information may be incomplete or condensed. All opinions and estimates included in this report constitute our judgment as of this date and are subject to change without notice. This report is for information purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security

RECENTLY PUBLISHED REPORTS

Sales Trading and Execution Services

Jan Koch

+48 22 222 1616

jan.koch@wood.com

Jarek Tomczvnski

+44 203 530 0688

jarek.tomczynski@wood.com