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ROMANIA

BUCHAREST STOCK EXCHANGE
Global Traded Value EUR 97.3 trillion

- Americas: 55%
- EMEA: 14%
- Asia Pacific: 31%

Source: World Federation of Exchanges
Traded value in 2018

Europe - EUR 11.9 trillion

Romania - EUR 2.4 billion

Source: World Federation of Exchanges
Global asset allocation

- 87% Developed markets
- 12% Emerging markets
- 1% Frontier markets

Source: MSCI classification
60% Trading

40% Listing Post-trading Registry

Revenues EUR 8.8 mln

Shares
Bonds
Fund units
Structured products

Source: BVB
Weak global positioning
Poorly developed local market
Unbalanced economic outlook
Low Cash Flow Generation

Investment Recommendation

Closing Price @ Dec 31, 2018
RON 21.4
- 12.4% downside
Target price RON 18.4

Source: BVB
BVB: A long way to a competitive position

BVB’s position in Europe

First Romanian privatizations

Source: Team analysis, Eurostat

Market Cap/GDP

Trading velocity

Frontier Market
Emerging Market
Developed Market

MEBO
BVB Listings

837 companies

227 companies
Weak global positioning
Poorly developed local market
Unbalanced economic outlook
Low Cash Flow Generation

GPW becomes Advanced Emerging Market

2008

32% Market cap/GDP
32 IPOs
432 Listed Companies – First Tier
694K Total Trading Accounts

2018

15% Market cap/GDP
4 IPOs
87 Listed Companies – First Tier
42K Total Trading Accounts

BVB aims to become Emerging Market

Upgrade to Emerging Market is unrealistic in 2019

Source: BVB, GPW, Investors’ Compensation Fund
Weak global positioning

Poorly developed local market

Unbalanced economic outlook

Low cash flow generation

Weak global positioning

Poorly developed local market

Unbalanced economic outlook

Low cash flow generation

EUR 2.47 billion
Trading value in 2018

EUR 5.14 million
Trading revenues in 2018

84% Shares and fund units

12% Bonds

4% Structured Products

87 companies

Source: BVB

Market concentrated in low growth sectors

EUR 2.47 billion

84% Shares and fund units

12% Bonds

4% Structured Products

EUR 5.14 million

87 companies

Source: BVB

Market concentrated in low growth sectors
Weak global positioning
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Potential new securities issuances in 2019
- **HIDROELECTRICA**
  - Puterea noastra este apa!
  - EUR 1-2 bn
  - but unlikely
- **AEROPORTURI BUCUREȘTI**
  - EUR 9 mln
- **IdeaBank**
- **bittnet**
- **elefant.ro**

Financing options for Romanian companies
- **BVB**
  - Bank loans
  - Private debt placement
  - Venture Capital
  - Private equity

BVB not among preferred financing options

Source: BVB, Team analysis
Weak global positioning
Poorly developed local market
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Opinion poll on the capital market evolution

- 29% decrease
- No change 51%

Evolution of retail trading accounts number

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>75K</td>
</tr>
<tr>
<td>2014</td>
<td>64K</td>
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<tr>
<td>2015</td>
<td>60K</td>
</tr>
<tr>
<td>2016</td>
<td>55K</td>
</tr>
<tr>
<td>2017</td>
<td>46K</td>
</tr>
<tr>
<td>2018</td>
<td>42K</td>
</tr>
</tbody>
</table>

Source: Investors Compensation Fund

BVB not appealing to retail investors

Main reasons for not investing:
- High volatility and risks
- High initial capital
- Few investment options
- High trading fees

Prefer to keep their savings in:
- Deposits
- Cash & Currency
- Investment units
- Real estate

Has a trading account on BVB
Weak global positioning
Poorly developed local market
Unbalanced economic outlook
Low cash flow generation

Decision-making factors
- Market liquidity
- Market infrastructure
- Developed local investors base
- Presence of global custodians
- Environmental, social & governance
- Government interference in business
- Macroeconomics

Investor classification
- Non-resident investors: 50%
- Investment funds: 31%
- Pension funds: 9%
- Retail: 10%

Source: Team Analysis

Demand concentrated around institutional investors
Economic growth by components

- Net export
- Investment
- Consumption
  - Households & Government Expenditure

Economic growth driven by consumption

Source: Eurostat, Team Analysis
Unfavorable demographics

Age structure of the Romanian population

- > 60 years: 4% of the population
- 40-60 years: 24% of the population
- 20-40 years: 53% of the population
- < 20 years: 18% of the population

Source: National Institute of Statistics
Weak global positioning
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Main BVB market index evolution
BET INDEX -11%
Emergency Ordinance 114/2018

Additional tax on energy
Additional tax on banks
Gas price capping

Banking Sector -18.26%
Energy Sector -17.52%

Unpredictable regulatory changes

Source: Bloomberg
Deteriorating twin deficits estimations

- Weak global positioning
- Poorly developed local market
- Unbalanced economic outlook
- Low cash flow generation

Budgetary deficit
- Restrictive fiscal measures
- Increase of the public debt
- Current account deficit
- National currency depreciation
- Decreasing economic activity

Source: AMECO
Launch of derivatives market & Short Selling

Derivatives are effective in liquid markets

Low income expected in the first 6 years of implementation

Lower revenues expected compared to region

Central Counterparty Project not feasible

Weak global positioning
Poorly developed local market
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Expensive project

IRR 4.80%
CoE 10.50%
Discount -5.70%

Terminal Value 66,067
Slow historical CAGR

Operating margin below peers

Financials below peers

Source: BVB, Team Analysis
Valuation

Closing Price 31 Dec. 2018: RON 21

Relative Valuation: RON 19.2

Dividend Discount Model: RON 18.4

Target Price: SELL with 12.4% downside

Weak global positioning
Poorly developed local market
Unbalanced economic outlook
Low Cash Flow Generation

Source: Team Analysis
Economic growth | Foreign direct investments | Emerging Market Status | Age Structure | Gross Average Salary | Investment Structure | Disposable Income | Inflation

Weak global positioning | Poorly developed local market | Unbalanced economic outlook | Low Cash Flow Generation

Non-residents
- 60.0%
- 45.0%
- 30.0%
- 15.0%
- 0.0%
- -15.0%

Investment Funds
- 12.0%
- 10.0%
- 8.0%
- 6.0%
- 4.0%
- 2.0%
- 0.0%

Pension funds
- 25.0%
- 20.0%
- 15.0%
- 10.0%
- 5.0%
- 0.0%
- -5.0%

Retail
- 14.0%
- 12.0%
- 10.0%
- 8.0%
- 6.0%
- 4.0%
- 2.0%
- 0.0%

Main DDM Assumption: Investor’s demand growth

Source: FSA, Team Analysis
<table>
<thead>
<tr>
<th>Milestones</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>TY</th>
</tr>
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<tbody>
<tr>
<td>CCP Launch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade to EM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Major IPO</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Net income/loss</td>
<td>11,597</td>
<td>11,673</td>
<td>11,225</td>
<td>15,905</td>
<td>16,855</td>
<td>17,192</td>
</tr>
<tr>
<td>Net income (CCP)</td>
<td>-</td>
<td>(5,398)</td>
<td>(2,698)</td>
<td>409</td>
<td>891</td>
<td>1,525</td>
</tr>
<tr>
<td>Synergies from CCP</td>
<td>-</td>
<td>-</td>
<td>(1,975)</td>
<td>(1,318)</td>
<td>606</td>
<td>3,293</td>
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<tr>
<td>Outflow to finance CCP</td>
<td>-</td>
<td>(47,021)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Projected Dividends/</td>
<td>11,227</td>
<td>(40,597)</td>
<td>5,934</td>
<td>13,415</td>
<td>16,863</td>
<td>19,634</td>
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<tr>
<td>Capital injection</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PV of dividends</td>
<td>572</td>
<td></td>
<td></td>
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<tr>
<td>PV of terminal value</td>
<td>147,390</td>
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<td>Equity value</td>
<td>147,962</td>
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</tr>
</tbody>
</table>

- Cost of Equity: 10.5%
- Growth rate in perpetuity: 2%
- Dividend Payout ratio: 90%

Large cash outflows vs. insufficient business growth

DDM TARGET PRICE
RON 18.4

Source: Team Analysis
Sensitivity Analysis

Weak global positioning

Poorly developed local market

Unbalanced economic outlook

Low Cash Flow Generation

Transactions growth from IPOs
TY growth
Cost of Equity
Payout ratio
Trading value growth from EM status
TY NI and Synergies from CCP
Market velocity
Trading value growth, no EM status
Average commission

Source: Team Analysis

<table>
<thead>
<tr>
<th></th>
<th>RON 18.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.3</td>
<td>19.5</td>
</tr>
<tr>
<td>17.3</td>
<td>19.6</td>
</tr>
<tr>
<td>17.3</td>
<td>19.6</td>
</tr>
<tr>
<td>17.1</td>
<td>19.6</td>
</tr>
<tr>
<td>16.9</td>
<td>19.8</td>
</tr>
<tr>
<td>16.8</td>
<td>20</td>
</tr>
<tr>
<td>16.5</td>
<td>20.2</td>
</tr>
<tr>
<td>15.8</td>
<td>21.1</td>
</tr>
<tr>
<td>15.3</td>
<td>21.5</td>
</tr>
</tbody>
</table>
Average commission
Market velocity
Transactions growth from EM status
Trading value growth, no EM status
TY NI and Synergies from CCP

Source: Team Analysis

Monte Carlo Simulation
Relative Valuation

- Weak global positioning
- Poorly developed local market
- Unbalanced economic outlook
- Low Cash Flow Generation

**Peer Group**

- Implied price
  - P/E: 50%
  - P/S: 30%
  - P/B: 20%
  - Implied price: RON 19.2

Source: Reuters, Team Analysis
Corporate Governance Assessment

Commitment to Corporate Governance
Structure and Functioning of the Board of Directors
Control of processes
Transparency and disclosure
Rights of minority shareholders

Experienced management team

BVB financial education initiatives

Source: Team Analysis

Risks not mitigated by good governance
Weak global positioning
Poorly developed local market
Unbalanced economic outlook
Low Cash Flow Generation

Investment Recommendation

Closing Price @ Dec 31, 2018
RON 21.4
- 12.4% downside
Target price
RON 18.4

Source: BVB

Jan '16 Jun '16 Nov '16 Apr '17 Sep '17 Feb '18 Jul '18 Dec '18
Thank You!

Q & A