

## **The challenge: Investment in Duolingo**

### **Context**

TDM Growth Partners is a long-only global investment firm with a mission to invest in and help scale businesses we are proud of. We invest in fast growing businesses for the long-term and have a concentrated portfolio – at any one time, we only hold investments in 10-15 companies. At the heart of every investment decision we make is the quality of the people and culture of the business. We are proud to have compounded capital at over 25% per annum since inception.

TDM is evaluating a potential investment in Duolingo (NASDAQ:DUOL). Duolingo is a leading mobile learning platform globally, offering language learning and literacy (and more recently, Maths). The company was perceived to be a 'COVID-19 winner' with user numbers surging as most of the world adhered to shelter-in-place orders. Duolingo has continued to execute coming out of the pandemic, growing both free and paid subscribers, and reaching EBITDA profitability. However, some investors have begun to fear that Duolingo's growth is slowing, reflected in the share price performance following 1Q24 earnings where the company's share price fell 25%.

**As members of the Investment Team at TDM, based on your research, would you make a recommendation to invest in Duolingo?**

To frame the investment thesis, your presentation is expected to include:

- An overview of Duolingo;
- An assessment of Duolingo's growth opportunity;
- An assessment of Duolingo's competitive advantage and market positioning;
- An assessment of Duolingo's management / people and culture;
- Valuation analysis;
- Key risks to the business and its valuation, and discussion of any mitigants.

### **Things to consider:**

- When assessing Duolingo's growth opportunity, things to consider could include:
  - What is the total addressable market?
  - What are the key macroeconomic drivers of the business?
  - Are there any favourable industry trends?
  - Are there any organic (new geographies, new products, pricing etc.) or inorganic growth opportunities?
  - What is the duration of growth? (i.e. do you believe these growth drivers could enable the business to grow at 20%+ for 5+ years?)
- When assessing Duolingo's competitive advantage and positioning, things to consider could include:

- What are the competitive advantages today and how do you expect them to trend over time? Consider using Hamilton Helmer's *7 Powers* framework to assess this.
- What are the barriers to entry?
- Who are the main competitors? Who is Duolingo gaining / losing market share from?
- When assessing Duolingo's management / people and culture, things to consider could include:
  - Extent of insider ownership.
  - Public commentary around the quality of the management team, culture etc.
  - Views based on interviews / podcasts held with key leaders.
- Valuation:
  - TDM is a long-term investor aiming to compound capital at north of 25% per annum. We suggest taking a 4-year view when assessing returns and considering whether the returns satisfy this aim based on the current share price.
  - Prepare a long-run model (5-years) including P&L, cash flow and balance sheet statements. Model financial drivers should reflect your view of Duolingo's growth opportunity, and competitive advantage and positioning. Please explain your rationale for the key assumptions made.
  - Calculate an expected 4-year IRR based on your model and assessment of an appropriate exit multiple (either EV / Revenue, EV / EBITDA or P / E on a next twelve months basis). This exit multiple should demonstrate an understanding of Duolingo's fundamentals and relative valuation compared to other relevant companies.
  - Outline low / base / high case scenarios (i.e. sensitivity analysis on key model drivers) and consider the relative probabilities of these scenarios eventuating.
- Other:
  - In your presentation, indicate whether you would be proud to invest in Duolingo, and reasons why / why not.

### **Information required to complete the challenge**

Information required to complete the challenge will be publicly available (SEC filings, press releases, presentations, the company's blog). For assessing Duolingo's people and culture, we recommend using tools like Glassdoor and podcasts.