EXECUTIVE SUMMARY

I am recommending a buy of Duolingo (DUOL) stock based on its potential growth opportunities, strong management incentive alignment, and attractive competitive position within the market through both its size and other competitive advantages. While it is difficult to pin down a particular price target for a high growth company like DUOL, my model shows potential upside well into the $400 price range with opportunities to go higher depending on growth and multiple assumptions. With the stock trading in the low 300s, I would set an estimated target of up 15-30% to ~370-$430 from its current price of $320 a share.

COMPANY AND INDUSTRY OVERVIEW

DUOL was founded in 2011 and subsequently launched its app in 2012. Since then, it has become the most popular app for language learning and sits at the top of the education category in the app store above competitors such as Babbel and Rosetta Stone. DUOL teaches over 40 languages with the most popular being English (~50%), Spanish (~20%), and French (~10%). Their remaining ~37 languages account for the last 25% of languages users learn. With English being the predominant language studied, they also offer what they call a “high stakes” English assessment test that is accepted by top Universities and employers as proof of proficiency in the language. In addition to languages, they also offer courses in Math and Music. Math is currently a smaller offering, only having courses between roughly 3rd and 5th grade levels.

Looking at the industry broadly, total consumer spending on combined offline and online language learning is expected to be about $123bn by 2027 according to HolonIQ. Within the space, there are hundreds of language learning apps and a multitude of different in-person businesses and institutions that are capable of teaching languages. According to BusinessofApps, language learning apps generated 1.08bn in 2023, with roughly half of that being made by Duolingo who made 531mm in revenue that year.

INVESTMENT THESIS

I am recommending a buy of DUOL for three main reasons. First, they have good opportunities to achieve strong growth through both expansion into new countries as well as through new product offerings. Second, the business is well positioned as a leader in the online learning space and can capitalize on its advantages to extend its market dominance. Third, management is well aligned with shareholder interest through stock-based compensation that is tied to the share price.

Looking first at their growth opportunities, DUOL can expand their market footprint through both geographic means as well as through offering new learning products on their app. In terms of geographic expansion, management notes that they are seeing “growth in every geography” but specify that Asian countries represent high potential for future growth (Japan, Korea, India, and China are all mentioned). In addition to adding users in countries that they are less established in, they also point out that some of their more mature geographies are their fastest growing which is an encouraging sign that they can still grow “in-house”.

The second portion of growth will come from additional product offerings. They currently offer courses in Language, Math, and Music. They expect their currently minimal Math offering to be expanded greatly to at least K-12, if not through college-level courses with the help of AI to automate away the most arduous task they face of developing exercises for each specific Math subject. As AI is currently weaker at Math this could take some time to develop, but AI’s improvement at the subject is promising. I also see no reason why they couldn’t expand into any other subject such as Sciences, History, or even Programming. With their strong brand recognition, I believe they could create a large online learning hub for a wide variety of subjects leading to a potential explosion in users.

Looking more now at their competitive advantages. As mentioned, they have very strong brand recognition as the top educational app in the space. This is evident in their financials through very low marketing costs. Management indicates that they focus more on social media and viral marketing tactics as opposed to paying for customers. Having already established a strong social media presence, this seems likely to continue as a competitive advantage for the foreseeable future. Along with marketing, they also have the benefit of having large amounts of data (that they refer to as a “data-moat”) thanks to their extensive user base. They run thousands of A/B tests each quarter in order to optimize their product for learning outcomes, engagement, and conversions to paid subscriptions. Despite so many competitors in the space, DUOL stands out as a result of the advantages it can capitalize on due to its size.

Lastly, management is also incentivized to focus on stock price improvement as a result of their “Founder Restricted Stock Units (FRSUs)”. The FRSUs are in 10 separate tranches, with 4 tranches left that need to hit target hurdles of the following stock prices (60-day trailing VWAP) in order to vest: $357, $408, $612, and $816. The $357 hurdle may have been reached in 1Q25, but $408 looks to still be on the table which is a good motivator at their current $320 price. At $408, 180,000 FRSUs will be vested for a total of ~$73mm paid to the founders if the share price remains at $408. While it is fair to say that management should always be working for the good of their shareholders, I would put these incentives in the “nice to have” bucket and would expect management to be working diligently to reach their targets given the payouts upon completion.

CATALYSTS

The catalysts are likely to be centered around quarterly earnings results. I would be focusing on a few different things. First, how their monthly and daily active user numbers come in (MAUs and DAUs) as well as how their subscription numbers look in relation to their total users. They focus on subscribers to generate most of their revenue, so seeing both increases to current subscribers as well as a larger base of potential future subscribers would signal a positive trend in their growth. Second, bookings (essentially unearned revenue) numbers coming in above expected targets would be something to watch for. For example, they are looking for 31% growth in bookings in 2025. If we see that trend back toward previous higher growth levels, then I would expect to see immediate stock price appreciation upon any upward guidance revision. Lastly, any material developments in expanding their Math offering to K-12 or any new learning products could improve the stock price as there is a wider net to capture more users.

BEAR VIEW

The bear view is fairly straight forward in this case. As they are a growth story, bears are looking for lower than expected growth, difficulties expanding into new geographies, slower than anticipated mature geography expansion, and a lack of product innovation and development. Additionally, if one of their top competitors starts to steal market share through innovation or other tactics, we could see a drop in the value of DUOL. If we see growth concerns for multiple quarters and potentially increasing competition, I could be convinced to close the position early.

VALUATION FACTORS

The valuation considers a variety of different scenarios. Numbers such as subscription revenue growth, other revenue growth, profit margins, and expense numbers are sensitized for downside, base, and upside cases. Given how drastic a change in some of these numbers can be to the valuation, it is hard to give a concrete target price. As a result, I am looking at a range of outcomes and will adjust that range as more data becomes available. The current target range is a 15-30% increase to a share price of ~$370-430 from the current price of ~$320. When 1Q numbers come out I will reevaluate my model and adjust assumptions accordingly but going into earnings that is what I believe to be the best range to target if we get a positive earnings surprise.

CONCLUSION

DUOL is a strong company that is the top performer in its sector of virtual education apps. The company has a variety of growth prospects, strong competitive advantages, and an aligned management team that should be able to lead the company through an important few coming quarters and years. While the exact price is hard to pin down, I believe the market is currently undervaluing the previously listed positives and we should see solid stock price appreciation as management delivers on their objectives of growth and increased profitability. Despite some valid concerns from the bear side, I think the current share price offers a strong enough risk/reward that justifies the long position and makes DUOL a strong pick up at this $320 price point.