Research Article

Suitability of Valuation Methods to E- Commerce Industry – A Case Study

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Abstract

Today's business world is witnessing a big revolution in doing business. Now the commerce has a prefix 'e' and the market is shifting onto the clouds. With introduction of e-commerce and government inclination towards digital economy, behavioral shift toward internet based transaction has gained momentum. E- Commerce or internet based business are now a part of main stream commerce. The changing way of doing business necessitates adaptation in the way a business is being valued. There are various valuation methods namely Asset based, Earning based and Cash flow based which were used and are also relevant to internet based business, however, consideration required towards new emerging operating indicators. Through this Case study we will try to evaluate the popular valuation methods for its suitability to E- Commerce based Industry where many newly introduced operating indicators such as Gross Merchandise Value (GMV), Customer monetization rate, customer base measuring units Mobile MAUs has impacts on business valuation.

Key Words: Valuation, Going concern, PE ratio, EPS, Dividend payout, Free cash flow, Online retail, Risk, GMV, Mobile MAUs.

Introduction

Strategic takeovers, acquisitions, sell-off and similar words are very common which forms part of any business daily. These words carry a price tag, the value of takeover, acquisition or sell off etc.

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termed as deal value. Value of anything is nothing but the future benefits an acquirer perceives to have and a compensation for forgoing present benefits by an acquiree. Generally, value of any deals is mutually acceptable by acquirer and acquiree. Now, the question arises "what should be the value and how it is calculated depends on the nature of the business and circumstances under which it is valued". Methods to be used depend on nature and mode of doing business. Business with the use of internet has evolved as a new mode of doing business. Internet based business are inevitable and important part of today's economy. The internet based industry in India has firmly entrenched its foundation. Today, digital India has gained considerable traction and is poised to become what the Boston Consulting group estimates to be a $250 billion economy by 2022.

A summary of various main functionaries of the E commerce Industry are as follows

Online travel	E-Retailing	Classifieds	Digital Media	Financial
Buying ticket, Booking Hotels	Online sale of products like apparel ,clothing ,Grocery etc	Selling old products	Movie, Music	Payment app, e-wallet
Yatra.com, Make my trip	Amazon, Myntra, Flipkart, Alibaba.com	OLX, Quikr	Netflix, Amazon	Paytm, PhonePe

E- commerce industry also follows various business models

- Business to Consumer(B2C)
- Consumer to Consumer(C2C)
- Business to Business (B2B)
- Consumer to Business(C2B)

Internet based company like other companies are required to be valued on the basis of methods which best suits with industry specific peculiarities. A lot has been read and written on the various valuation methods e.g. asset based, earning based and cash flow based methods. But these methods do not provide the desired value in isolation. Various other factors are also given due consideration while reaching at an acceptable value.

Below are few popular methods, which are used for business valuation:

Three basic methods of valuing a business are:

(i) Asset based; (ii) Earning based and (iii) Cash flow based.

Asset based valuation method: Assets of a business forms the basis for valuation. In this method an entity is viewed as being worth the sum of the value of its assets. This method has very limited relevance for entities which are going concern and has substantial intangible assets. It is useful when an entity is being wound-up. Since the method does not value the intangible assets correctly, it usually gives a low valuation figure. Asset valuations are therefore likely to be more useful for capital intensive businesses, than for service businesses, where many of the assets are intangible. The value of assets are calculated taking the assets either book value or replacement value or net realizable value.

Earnings based valuation method: The value of a business depends on its earnings potential. Under this method earnings of the business are forecasted and then an earnings multiple is applied. Price earnings (P/E) ratio is commonly used as earnings multiple. The value of a company is valued as:
Value of a company = Total post tax earnings × P/E ratio

Post tax earnings or Earnings per share (EPS) of a company can be found in recently published accounts. The P/E ratio of a listed company can be found dividing market price per share by its EPS. In case of unlisted company, P/E ratio of a proxy company is taken.

Cash flow based valuation method: This method of business valuation discounts the future cash flows by taking an appropriate discounting rate. There are two approaches of valuations:
- Dividend valuation model (DVM)
- Discounted Cash flow method

Dividend valuation model: According this model the value of a company is the present value of expected future dividends. This method can be applied considering constant dividend as well as dividend with growth.

Discounted cash flow method: According to this method the value of a company is future estimated annual after tax cash flows discounted by an appropriate cost of capital. Here the cash flows means free cash flows. The CIMA official terminology defines the free cash flow as 'cash flow from operations after deducting interest, tax, preference dividends and ongoing capital expenditure, but excluding capital expenditure associated with strategic acquisitions and/ or disposals and ordinary share dividends'.

Which method is best and used depends on the situations and nature of business. Further, the methods are also used in conjunction with other industry specific factors.

Examining a case study of a company, we will try to find out the suitability and appropriateness of the methods to the company.

Case Study: NSG Group Holding Limited

A. About the Company

i) History and Development of the Company

NSG Group Holding Limited is a holding company established under the Companies Law of the Country C on June 28, 2004 and conducting its business through its subsidiaries and variable interest entities. Company is listed on the stock exchange; equity shares are quoted at Rs. 2670 (as on 31st March, 2019)

The company has demonstrated a track record of successful organic business creation. In addition to organic growth, it has made, or has entered into agreements to make strategic investments, acquisitions and alliances that are intended to increase its product and service offerings and expand its capabilities. It has made, and intends to make, strategic investments and acquisitions to increase user acquisition and engagement, improve customer experience. Some of its acquisitions and investments may not be successful as it has incurred impairment charges in the past and may incur impairment charges in the future.

ii) Business Overview

Mission: The mission is to make it easy to do business anywhere.

The company has been started to champion small businesses, in the belief that the Internet would level the playing field by enabling small enterprises to leverage innovation and technology to grow and compete more effectively in the domestic and global economies. It believes that concentrating on customer needs and solving their problems—whether those customers are consumers or merchants—ultimately will lead to the best outcome for the business. It has developed a large ecosystem for online and mobile commerce that enables participants to create and share value on its platforms.

Vision: It aims to build the future infrastructure of commerce. It envisions that the customers will meet, work and live at NSG, and that it will be a company that lasts at least 102 years.

iii) Company Overview

The company provides the fundamental technology infrastructure and marketing reach to help merchants, brands and other businesses to leverage the power of the Internet to engage with their users and customers. The businesses are comprised of core commerce, cloud computing, digital media and entertainment, and innovation initiatives and others. Through investee affiliates, it participates in the logistics and local services sectors. In addition, it has a profit sharing interest in financial services group that operates mainly through a leading third-party online payment platform in Country C.

Core Commerce

It is the largest retail commerce company in the world in terms of GMV in the twelve months ended March 31, 2019, on the basis of publicly available comparable transaction value data for the most recent fiscal year. In fiscal year 2018, it generated 72% of company's revenue from retail commerce business in Country-C. The revenue on retail marketplaces is generated from merchants through online marketing services, commissions on transactions and fees for other online services. In fiscal year 2018, it generated 80% of revenue through mobile devices.

Cloud Computing

The company operates NSG Cloud, Country C's largest provider of public cloud services in 2018 by revenue. The technologies that power NSG Cloud grew out of its own need to operate the massive scale and complexity of its core commerce business. These technologies are also available to third-party customers. NSG Cloud offers a complete suite of cloud services, including elastic computing, database, storage and content delivery network (CDN), large scale computing, security, management and application services, big data analytics and a machine learning platform.

Digital Media and Entertainment

Based on the strength of its relationship with consumers and its capability in leveraging commerce data that can be applied to serving the broader interests of consumers, it has established digital media and entertainment business, mainly through acquisitions. In 2016, it acquired WebRio, which operates Bro Browser, one of the top three mobile browsers in the world and the number one mobile browser in Asian countries by page view market share as of May 2019. WebRio also provides mobile value-added services to users including news feeds, mobile web navigation and mobile search. In April 2018, it acquired FunScript, a leading multi-screen entertainment and media company in Country C, enabling users to search, view and share high-quality video content quickly and easily across multiple devices. In March 2019, its digital media and entertainment businesses had over 500 million mobile MAUs, including overseas users.

Innovation Initiatives

The company continues to develop new service offerings to find new ways to meet the needs of its customers and expand the reach of its ecosystem. Its proprietary enterprise communication and collaboration platform, unifies the critical tasks of communication and collaboration in the work place, offering text, photo, voice and video communication, collaboration features and workflow management, such as convenient attendance recording and expense approval.

B. About the Industry

Internet based industry has firmly entrenched its foundation. According to an estimate of a consulting group, it will be a $250 billion economy by 2022. Online retail is estimated to grow over 1,200% to $200 billion by 2028, up from $15 billion in 2018, according to a recent report by a financial services firm. By then, online retail will account for 12% of overall retail market.

As per a study only around 14% of internet users of country-C shop online, compared with almost 64% in China. But there is a growth potential as people become more comfortable with web based transactions.

C. Financial Overview:

Exhibit-1
NSG GROUP HOLDING LIMITED
CONSOLIDATED INCOME STATEMENTS

(Rs. in millions, except per share data)

	Notes	Year ended March 31,		
		2017	**2018**	**2019**
Revenue		76,204	101,143	158,273
Cost of revenue		(23,834)	(34,355)	(59,483)
Product development expenses		(10,658)	(13,788)	(17,060)
Sales and marketing expenses		(8,513)	(11,307)	(16,314)
General and administrative expenses		(7,800)	(9,205)	(12,239)
Amortization of intangible assets		(2,089)	(2,931)	(5,122)
Impairment of goodwill		(175)	(455)	—
Income from operations		23,135	29,102	48,055
Interest and investment income, net		9,455	52,254	8,559
Interest expense		(2,750)	(1,946)	(2,671)
Other income, net		2,486	2,058	6,086
Income before income tax and share of results of equity Investees		32,326	81,468	60,029

(Rs. in millions, except per share data)

Income tax expenses		(6,416)	(8,449)	(13,776)
Share of results of equity investees		(1,590)	(1,730)	(5,027)
Net income attributable to ordinary shareholders		24,320	71,289	41,226
Weighted average number of shares used in computing earnings per share (million shares)				
Basic		2,337	2,458	2,493
Diluted		2,500	2,562	2,573
Earnings per share				
Basic		10.41	29.00	16.54
Diluted		9.73	27.83	16.02

Exhibit- 2
NSG GROUP HOLDING LIMITED
CONSOLIDATED BALANCE SHEETS

(Rs. in millions, except per share data)

	Notes	As of March, 31	
		2018	**2019**
Assets			
Current Assets:			
Cash and cash equivalents		106,818	143,736
Short-term investments		4,700	4,700
Restricted cash and escrow receivables		1,346	2,655
Investment securities		4,178	4,054
Prepayments, receivables and other assets		16,993	27,371
Total current assets		**134,035**	**182,516**
Investment securities		29,392	31,452
Prepayments, receivables and other assets		5,837	8,051
Investment in equity investees		91,461	120,368
Property and equipment, net		13,629	20,206
Land use rights, net		2,876	4,691
Intangible assets, net		5,370	14,108
Goodwill		81,645	125,420
Total assets		**364,245**	**506,812**
Liabilities and shareholders' equity			
Current liabilities:			
Current bank borrowings		4,304	5,948
Current unsecured loans		—	8,949
Income tax payable		2,790	6,125

Escrow money payable		—	2,322
Accrued expenses, accounts payable and other liabilities		27,334	47,186
Merchant deposits		7,314	8,189
Deferred revenue and customer advances		10,297	15,052
Total current liabilities		**52,039**	**93,771**
Deferred revenue		418	641
Deferred tax liabilities		6,471	10,154
Non-current bank borrowings		1,871	30,959
Non-current loans		51,391	45,876
Other liabilities		2,166	1,290
Total liabilities		**114,356**	**182,691**
Equity capital paid-up		233,700	245,800
Retained earnings		16,189	78,321
Total Liabilities and shareholders' equity		**364,245**	**506,812**

Dividend Policy of the company

Since the company's inception, it has not declared or paid any dividends on equity shares. It has no present plan to pay any dividends on its equity shares in the foreseeable future. It intends to retain most, if not all, of its available funds and any future earnings to operate and expand the business.

D. Risk Factors

i) Risks Related to the Business and Industry

Maintaining the trusted status of ecosystem is critical to success and future growth, and any failure to do so could severely damage reputation and brand, which would have a material adverse effect on the business, financial condition and results of operations.

There is an increasingly intense competition from established internet companies and their respective affiliates, global Internet companies, as well as certain offline retailers and e-commerce players, including those that specialize in a limited number of product categories, such as FMCG, global or regional cloud computing service providers and digital media and entertainment providers.

ii) Technological risk

The Internet industry is characterized by rapidly changing technology, evolving industry standards, new mobile apps, protocols and technologies, new service and product introductions, new media and entertainment content including user-generated content—and changing customer demands and trends.

iii) Infrastructural risk
The success of the internet based companies is dependent on functionality and effectiveness of software or platforms. Maintaining and constantly improvement in technology infrastructure to handle business needs is necessary to avoid adverse impact on business, financial condition and prospects, as well as reputation.

Dependency on third-party service providers like logistics service can prove disastrous if merchants fail to provide reliable logistics services, or the logistics data platform.

Security breaches and attacks on systems and network, and any potentially resulting breach or failure to protect confidential and proprietary information, could damage reputation and negatively impact the business.

iv) Regulatory risk
Tightening of tax compliances are affecting the merchants. Moreover, allegations and lawsuits claim piracy, counterfeit or illegal of marketplaces contents and websites, increasingly complaints to regulatory agencies, negative media coverage, including social media and malicious reports, all of which could severely damage reputation and materially and adversely affect our business and prospects.

Appropriateness valuation methods to NSG Group Holding Limited:

Asset based valuation method and NSG Group

Asset based valuation method is appropriate for an entity which is operating in a saturated market with limited growth rate. Contrary to this the NSG Group is of a long term vision of survival for at least for 102 years supported by bullish operating results. The company has become the largest retail commerce company in the world in terms of Gross Merchandise Value (GMV) in the twelve months ended March 31, 2019. The retail segment of the company has generated 72% of company's revenue in Country-C. The online retail industry is estimated to grow at 1200% to reach $200 billion by 2028.

Further, asset based valuation does not justify the valuation of intangible assets rather it is highly dependent on tangible assets. Intangible assets are inevitable part of internet-based business like NSG Group is having. The NSG group is having approx 28% of intangible assets as of 31st March, 2019 of total assets.

Earning based valuation method and NSG Group

Earning based valuation method reflects or discounts the future earning potential and industry prospects. Current market value of shares indicates the real worth of the company taking the present operating and future prospects. The quoted price of shares on stock exchange on 31st March, 2019 is Rs. 2670 whereas EPS is Rs.16.54. The P/E ratio is 161 (approx) shows strong investors' sentiments towards the company's stock; however, industry average P/E ratio is also to be checked to see magnitude.

Appropriateness of cash flow based valuation method to NSG Group-

The company since its inception did not pay dividends to its investors. In future also it does not intend to pay dividend. The dividend valuation method is irrelevant for business valuation here till the company changes its plan on dividend payout.

Three factors required for valuation using discounted cash flow method. These are free cash flows to equity holders, cost of capital to discount the cash flows and terminal value at the end of the projected period.

Period of cash flows are taken considering future outlook for the company as well as the industry. The company and industry are in growing phase, benefits of early mover and innovation is critical for the success. There will be a surge in the online marketing industry as per the study, so a horizon period of 10-15 years may be appropriate. So far as costs of capital for discounting of these cash flows are concerned, the weighted average cost of capital can be taken for this purpose.

Risk factors that the company and the industry are prone to is require essential consideration. The company is operating in an increasingly intense competition from established internet companies and their respective affiliates, global Internet companies, as well as certain offline retailers and e-commerce players. Moreover, rapidly changing technology, evolving industry standards, dependency on third-party service providers, tightening regulatory framework are the major risks which can be an impediment for future survival and it will impact the cash flow projection period and overall valuation.

Other indicators to value an internet based company

The other indicators which are peculiar and important to value an internet based company may include Gross Merchant Value (GMV) as well as other uncertain valuation techniques.

Gross Merchandise Value (GMV), represents the value of confirmed orders of products and services. It indicates market share and volume of transaction done through online platform. For an e-commerce company, GMV is an important factor which impacts the overall valuation of business in fact GMV itself considered as the real value of a company. GMV, real or bubble has been a subject of debate, however, an important factor. GMV is further analyzed as Mobile GMV and others. A high mobile GMV expressed in Mobile MAUs (number of unique mobile devices used for marketing app) indicates the reach of the online market place to users (customer base).

Another important term used by e-commerce companies is monetization rate. Monetization rate indicates the percentage of successful buying by customers using and visiting the company's platform either website or mobile app. A higher monetization rate somewhere indicates the customer reliability and need satisfaction and is an important factor for business valuation.

For this purpose internet based companies are more concern about the operating data related with annual active buyers, revenue per active buyer and mobile revenue per mobile MAU.

"Topline is Vanity, Bottom Line is Sanity, Cash flow is reality"

Disclaimer Note: The article is aim to provide an academic learning on suitability of valuation methods to in an internet based company. The authors of the article nowhere express or provide any analysis on the functioning of any company. The views expressed herein are the personal views of the authors and nothing to do with their organisation.

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