

FUNDAMENTAL ANALYSIS DEPARTMENT TELECOMMUNICATIONS INDUSTRY REPORT



**NUS
INVESTMENT
SOCIETY**

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Introduction

A telephone company, also known as a telecommunications operator or telco, is a kind of communications services provider that provides telecommunication services such as telephony and data communications access. In Singapore's context, our telephone companies are also wireless carriers and function as internet service providers.

Currently, there are 3 major telcos operating in Singapore, namely Singtel, Starhub and M1. These companies have a combined market capitalization of S\$66 billion and average a dividend yield of 5.8%. With telecommunications stocks being pitched as defensive stocks and favoured for their stable and attractive dividend yields, these stocks appeal to many investors as a means to diversify their portfolio.

Telco	Singtel	Starhub	M1
Share Price	3.69	3.65	2.71
Market Cap	58.04B	6.26B	2.47B
Dividend Yield	4.78%	5.56%	2.47%

Figure 1: Stock Data, Source: Bloomberg

Over the last few years, mobile data usage has been increasing due to higher penetration rate and increased demand. The increasing connectivity between digital technologies and applications has resulted in new business opportunities for telecom companies to tap onto this rising data traffic. In order to keep up with the trend and meet consumers' needs, telcos have to adapt their business model.

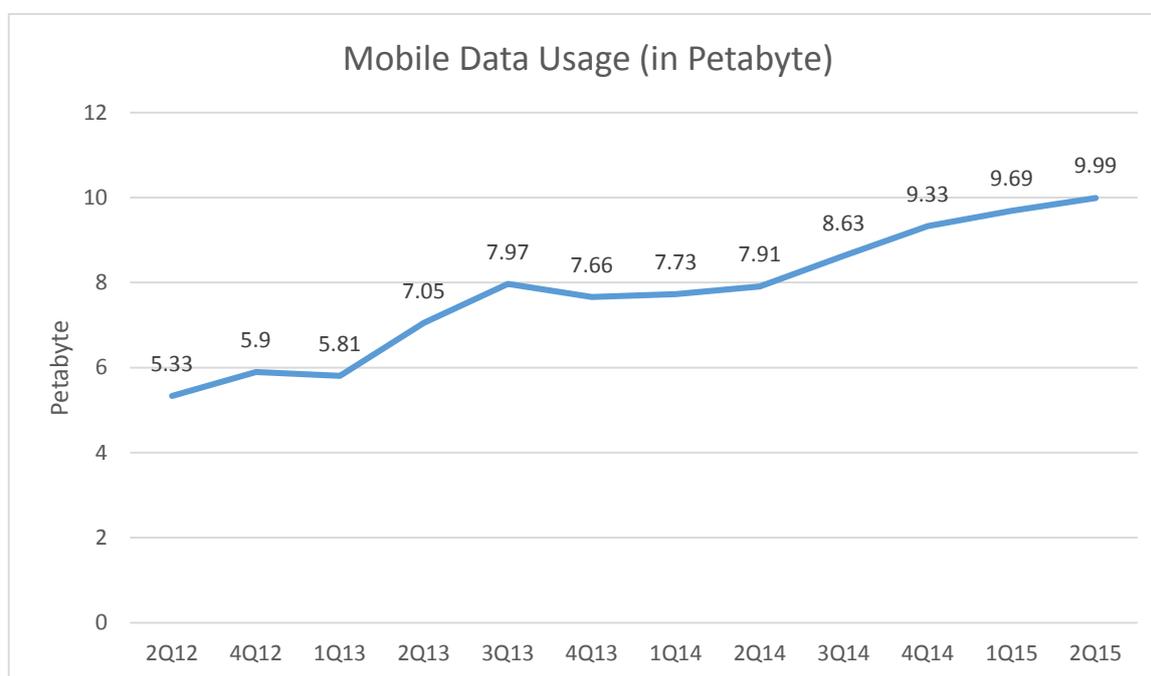


Figure 2: Mobile Data Usage from 2Q12-2Q15, Monthly Average¹

¹ <https://www.ida.gov.sg/Tech-Scene-News/Facts-and-Figures/Telecommunications>

Porter's five forces

To illustrate the overview of the industry, we use Porter's Five Forces to analyse the industry:

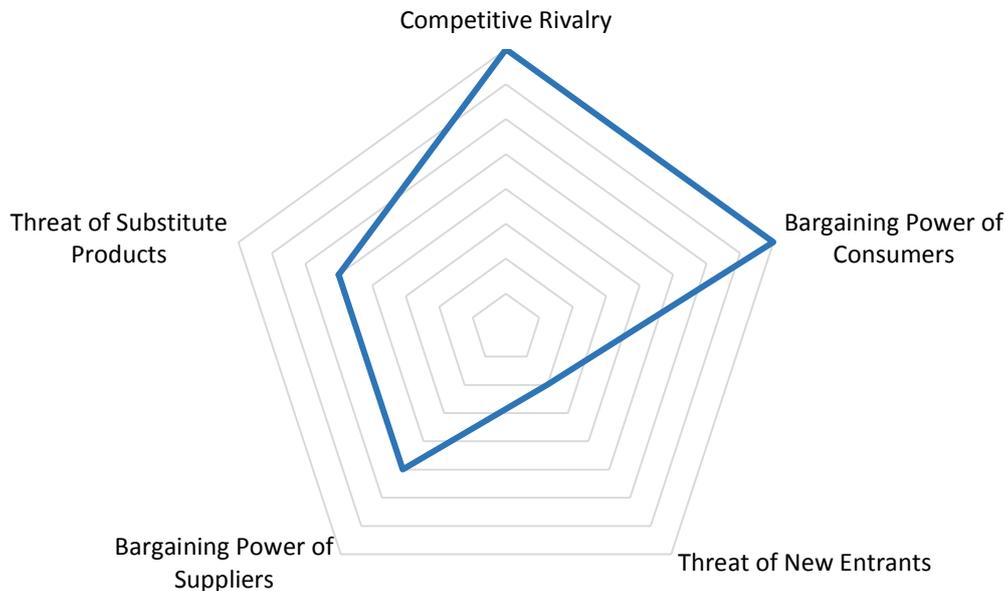


Figure 3: Porter's 5 forces overview of the Telecommunications industry

Bargaining Power of Consumers: High

There is a high bargaining power for consumers, considering their relatively ease of switching. In addition, there is often a great deal of transparency in this field, which allows price sensitive consumers to have a good assessment of the available options in the market and make an informed decision. This concept also applies to new enterprises looking for business solutions, as their switching costs remain low relative to more entrenched businesses.

Threat of New Entrants: Low

Due to the nature of the industry, there is high barriers of entry. Such barriers include high infrastructural costs, such as telecommunication towers for mobile consumers and data centres for managed cloud storage. In addition, companies in the industry can capitalize on economies of scale to further lower prices and keep out new entrants. For example in the context of mobile subscribers, after the high initial costs are incurred to set up the required infrastructure, the marginal cost of adding each additional subscriber is reduced, bringing down unit cost. Therefore, new entrants will find it difficult to stay competitive.

Bargaining Power of Suppliers: Moderate

For sellers of the latest technological and mobile devices, bargaining power is high. Companies in the industry cannot afford to lose out to competitors on this front, because majority of their mobile subscribers determine purchases based on these devices. Also, sellers of such specific items are often limited. In terms of any other hardware, however, the bargaining power of sellers is low, for there are many contractors willing to supply the goods.

Threat of Substitute Products: Moderate

In the consumer division, there is a high threat of substitutions due to the low switching costs and limited differentiation between mobile service providers. Consumers are highly price sensitive, and will generally switch the lower cost providers if they can. In terms of enterprises, the threat of substitutions might be relatively lower. This is due to the uniqueness of each tailored business solution that makes finding the exact same working parameters more difficult, resulting in high switching costs.

Competitive Rivalry: High

Stiff competition is mainly due to telecommunication companies supplying relatively undifferentiated products. High bargaining powers of consumers has resulted in price wars over the years.

Industry Overview

Mobile Market

Two key drivers of the mobile market is the population growth rate and smartphone penetration rate. Singapore's population growth rate has been on a declining trend in the last few years and growth is currently at about 1.2% in 2015. We expect the growth rate of new mobile subscribers to be similar to the population growth rate at the range of 1-2%.

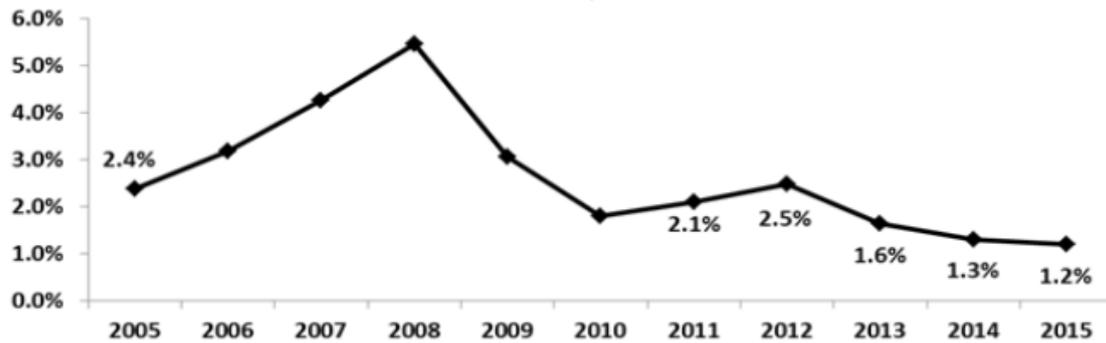


Figure 4: Total population growth rate per year, as of June (%)²

As for smartphone penetration rate, Singapore ranks 1st across the world with 85%. Penetration rate will increase at a much slower rate compared to other countries. In the near future, we believe that growth in the mobile market will slow down due to telecommunications industry being a relatively saturated market in Singapore and being limited by the population growth rate.

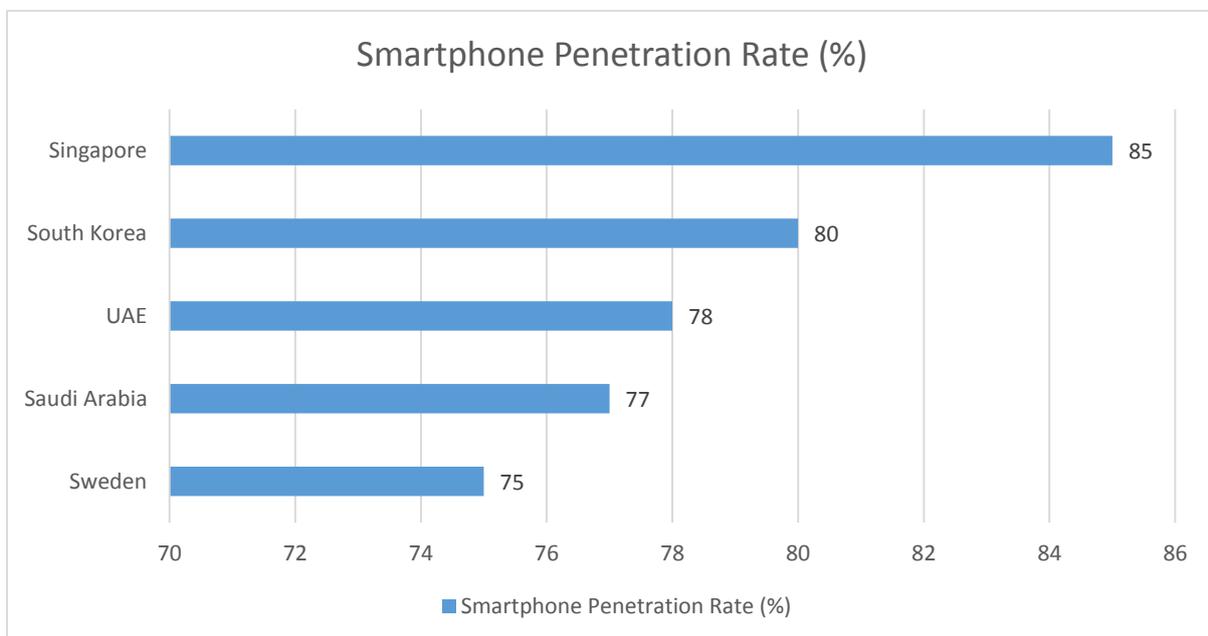


Figure 5: Top 5 countries for smartphone penetration rate³

² <http://population.sg/population-in-brief/files/population-in-brief-2015.pdf>

³ <http://www.mumbrella.asia/2014/10/google-study-singapore-worlds-top-smartphone-market-per-capita/>

Broadband

Demand for broadband has been on the increase over the last few years as more consumers switch to optical fiber broadband. It is also worth noting that subscribers are now switching to faster broadband which indicates higher revenue for the telecom companies.

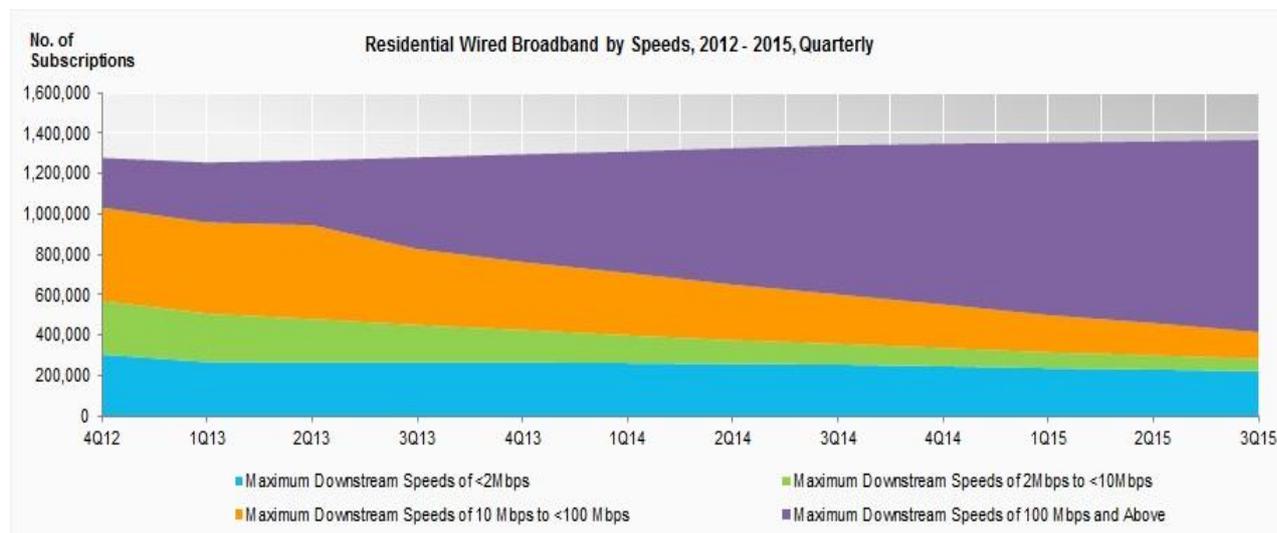


Figure 6: Residential Wired Broadband by Speeds⁴

Pay TV

Currently, all 3 telcos in Singapore offer their own Pay TV services (StarHub TV, mio TV and MiBox). Each carrier offers a wide array of shows ranging from sports and educational shows to movies and international channels. However, they have been facing competition from over the top (OTT) content providers such as Netflix which delivers their programs over the Net. Another competitor, ViewQwest⁵ has also offered a set-up box which allows broadband users to easily stream videos and bypass geographical restrictions. Therefore, the market for Pay TV is very competitive and it will be challenging for the telecom companies to retain their subscriber base.

⁴ <https://www.ida.gov.sg/Tech-Scene-News/Facts-and-Figures/Telecommunications>

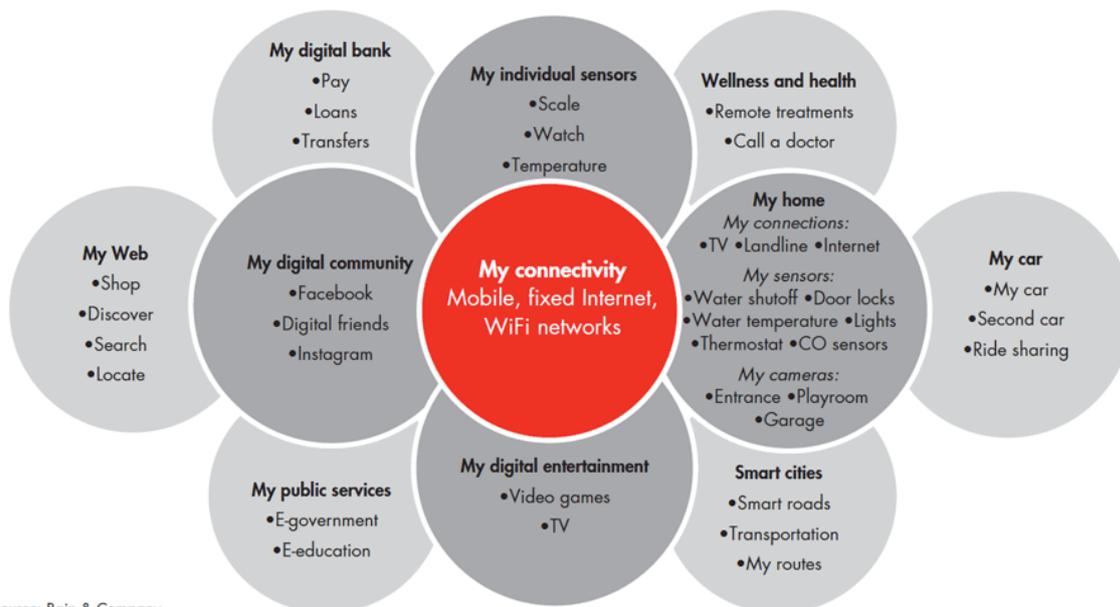
⁵ <http://www.viewqwest.com/vpn247/>

Key Sector Drivers

Digitization/Repremiumization of Core Business

With an increasing trend of dependence of customers towards a connected lifestyle, consumers are now more willing to pay for a unique and different kind of connectivity. In order to keep up with the trend and meet consumers' needs, telcos have to adopt digitization strategies and integrate its core businesses.

In North America, telecom providers are increasingly offering high-quality, state-of-the-art, and reliable communication services as well as consumer-friendly websites with online building, troubleshooting, scheduling and account support. Telcos also integrate these services with the different applications and devices that consumers own, allowing them to reposition as the core of a digitally enable lifestyle, managing connectivity for objects and data within and across many domains.⁶ Singapore telcos can use North America as a case study and generate higher value and better performance for their customers.



Source: Bain & Company

Figure 7: Integration of communication services, Source: Bain & Company

Digitization of Industries (Internet of things)

With the upcoming internet of things, this creates opportunities for more direct integration between the physical world and computer-based systems. According to McKinsey Insights, this industry is valued at a trillion dollars and will soon be able to link all manner of devices into larger networks. In addition to that, price of connectivity itself is declining, allowing telecom companies to monetize the additional network traffic. Singtel has embarked on a strategic partnership with Economic Development Board (EDB) as part of its three-pronged strategy to build strengths in cyber security, smart cities and analytics. Singtel's strengths in such areas will help encourage other firms to offer similar services and attract more businesses.

⁶ <http://www.bain.com/publications/articles/repremiumization-the-way-up-for-europes-telcos.aspx>

Case Study – Singapore Telecommunications Limited (SGX: Z74.SI)

Current Price: \$3.66

Company Description

Singapore Telecommunications Limited (SingTel), is a communications group listed on Singapore Exchange. The group engages in a diverse range of communication services including fixed, mobile, data, internet, pay television, info communications technology (ICT) and digital solutions. Singtel is Asia's leading communications group with over 550 million mobile customers across Asia, Australia and Africa. It has 3 business segments namely, Group Consumer, Group Enterprise and Group Digital Life.

Key Financials		(SGDmil)	FY14A	FY15A	FY16E	FY17E
Market Capitalization (mil)	60585 SGD	P/E (x)	15.7	17.6	15.91	12.81
Shares Outstanding (mil)	15940	P/B (x)	2.4	2.7	2.42	2.38
Free Float (%)	48.8	ROE (%)	15.3	15.6	-	-
52-Wk High	4.57 SGD	ROA (%)	9.2	9.3	-	-
52-Wk Low	3.65 SGD	ROIC (%)	11.6	12.1	-	-
P/E (ttm)	15.06	NET PM (%)	21.7	22	-	-

Figure 8: Key Financials, Source: Bloomberg

Strategic Priorities for each Business Segment

Moving forward, Singtel has identified the key drivers behind the growth of its three business segment. For Group Consumer segment, Singtel has significant investments in networks to ensure quality coverage, speeds and capabilities to help maximise customer experience. As for the Group Enterprise segment, Singtel is trying to incorporate cyber security in its business to provide an all-rounded solution. It has also formed a strong partnership with Microsoft to enable businesses and government better access to Microsoft application and services. Lastly, for Group Digital Life, Singtel has identified the increasing demand for premium over-the-top video. HOOQ, a joint venture with Sony Pictures Television and Warner Bros. Entertainment, was launched at the start of the year to develop new revenue streams and to cater to customers' demand. With a strategic business plan based on the different key drivers, we believe that Singtel is in good position to capture growth in its three business segments.

Strong Financial Ratios

Singtel and its regional associates have shown consistent increasing net profit in the past years. Although revenue of Optus has remained uninspiring, Singtel has invested heavily in improving mobile networks and other core infrastructures in Australia to increase market share. Among its competitors, Singtel has the highest net profit margin of 21.94% and also stable profitability margins.

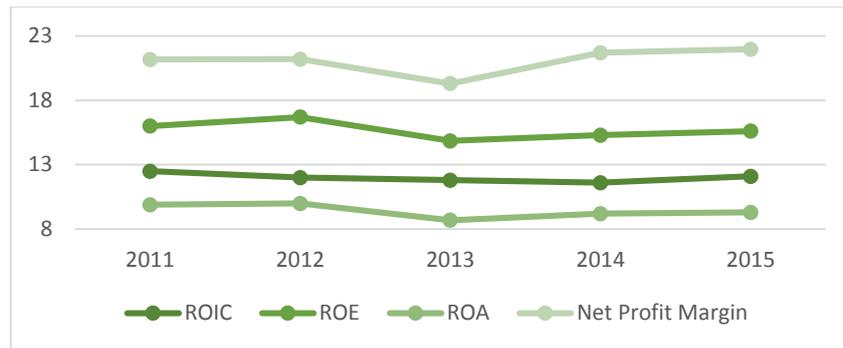


Figure 9: Financial Ratios, Source: Bloomberg

Diversification across Markets and Services

One key advantage Singtel has to its main local competitors, is its strength in diversification. Singtel is diversified across different regional markets, with 74% of their revenue coming from its overseas business in Australia and regional associates in Indonesia, India, Africa, Thailand and the Philippines. In addition, with their recent acquisition of Trustwave, they now have a presence in North America as well. As such, they are less exposed or vulnerable to any possible upsets in specific markets, such as the potential entrant of 4th main telecom carrier in Singapore. Also, they are well positioned to capitalize on growth in any of these regions, in particular the emerging markets. In addition, Singtel has also taken a step towards diversifying its services. With the recognition of the growing prevalence of cyber threats, Singtel's move towards cyber security is surely a move in the right direction. Furthermore, this move looks to boost its Managed Services division, which currently only accounts for 9% of its total revenue.

Growth in Associates/Joint Ventures

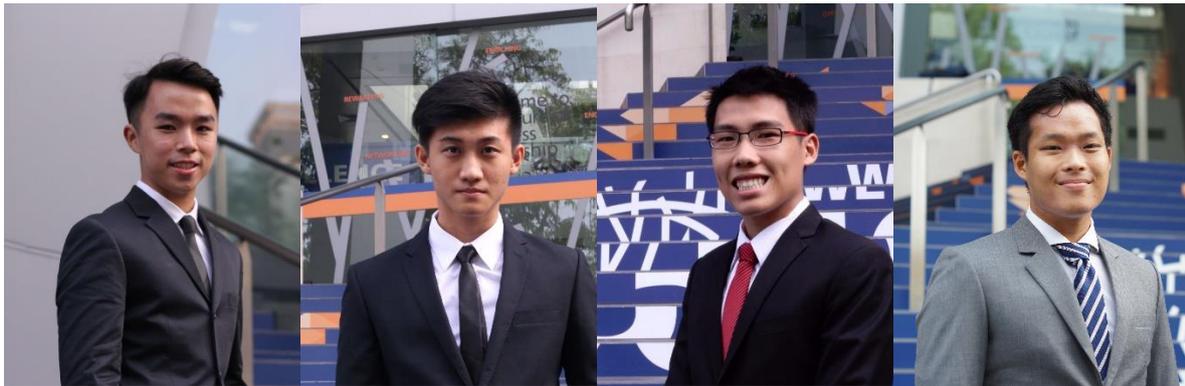
The good progression of Singtel' associates and joint ventures can help to propel its business forward. These associates and joint ventures comprise of about 45% of the Group's underlying net profit in the first quarter of 2015. By diversifying into these countries, Singtel is able to latch itself onto more opportunities for growth given the rather stagnant growth in Singapore. Furthermore, most of these associates and joint ventures are leaders in their respective countries. In India (Airtel), only 32% of customer base uses data. This places Singtel at a sweet spot to tap on this potential growth. Given the imminent proliferation of mobile data in these countries, we believe Singtel is in an excellent position to maximize the opportunities and expand its business.

Valuation

For the valuation of Singtel, we split up the valuation of their different business segments to accurately reflect their business' value. We have projected the revenues of Singapore (Singtel) and Australia (Optus) to accurately reflect the managerial decisions of Singtel regarding their expansion plans in those countries. We then added the equivalent stakes of their joint ventures to arrive at a warranted price of \$4.19.

Risk Free Rate	2.5%
Market Risk Premium	6.5%
Beta	0.97
Discount Rate	8.5%
Price	\$ 4.19
Growth	2%

Figure 10: Assumptions for valuation

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