



Company Report: Perfect World (PWRD US)

公司报告: 完美世界 (PWRD US)

Ricky Lai 黎柏坚

+852 2509 2603

ricky.lai@gtjas.com.hk

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Foreseeable Overseas Expansion Plan & Game Console Business, "Buy"

可预见的海外扩张计划及游戏机业务发展, "买入"

- China's online game revenue is expected to grow by 28.9% in 2014, which is driven by the popularity of mobile games and the shifting of PC gamers to mobile platform.
- Perfect World's FY14-16 online game operation revenue is expected to grow by 35.0%/20.0%/10.0%, respectively, thanks to the launch of new game titles, and the Company's overseas expansion plan and game console business development after the deregulation in China.
- Perfect World's annual active charging accounts in FY14-16 are expected to grow by 52.7%/28.3%/18.9%, respectively, with a CAGR of 32.6% in FY13-16. Due to stronger market competition, FY14-16 annual average revenue per active charging accounts is expected to decline by 5.0%/6.5%/7.5%, respectively.
- Set the investment rating as "Buy" and TP as US\$28.00. FY14-16 earnings per ADS are expected to grow by 17.4%/18.2%/12.6%, respectively. The TP represents 13.0x FY14 PER, 11.0x FY15 PER, 9.7x FY16 PER and 0.81 FY13-16 PEG. Due to the launch of new game titles, overseas expansion plan and game console businesses, we set the Company's investment rating as "Buy".
- 预期 2014 年中国网络游戏市场营收将按年增长 28.9%，是由于移动手机游戏的普及和计算机端游戏玩家转至移动平台的驱动。
- 预期完美世界 14-16 财年游戏收入分别按年增长 35.0%/20.0%/10.0%，因新游戏的推出、公司的海外扩张计划和中国在放松管制后游戏机机业务的发展。
- 预期完美世界 14-16 财年收费帐户分别按年增长 52.7%/28.3%/18.9%，13-16 财年的年均复合增长率为 32.6%。因市场竞争渐强，预期 14-16 财年每用户游戏玩家收益分别按年下跌 5.0%/6.5%/7.5%。
- 设定公司的投资评级为“买入”及目标价为 28.00 美元。预期 14-16 财年每股 ADS 盈利分别按年增长 17.4%/18.2%/12.6%。目标价相当于 13.0 倍 14 年市盈率、11.0 倍 15 年市盈率、9.7 倍 16 年市盈率及 13-16 年 PEG 为 0.81。由于新游戏的推出，海外扩张计划和游戏机业务的发展，我们设定公司的投资评级为“买入”。

Rating:

Buy

Initial

评级:

买入 (首次研究)

6-18m TP 目标价:

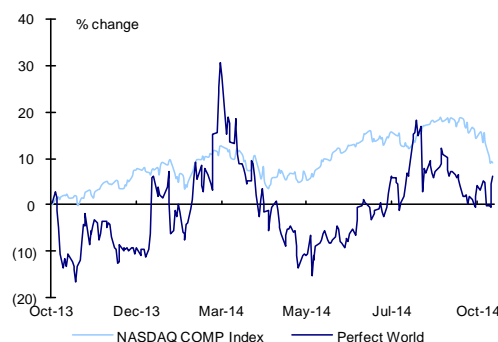
US\$28.00

ADS price ADS 股价:

US\$20.850

Stock performance

股价表现



Change in Share Price 股价变动	1 M 1 个月	3 M 3 个月	1 Y 1 年
Abs. % 绝对变动 %	0.3	5.8	7.4
Rel. % to NASDAQ index 相对纳指变动 %	19.5	35.5	35.0
Avg. ADS price(US\$) 平均 ADS 股价 (美元)	20.2	20.7	19.6

Source: Bloomberg, Guotai Junan International.

Year End 年结 12/31	Turnover 收入 (RMB m)	Net Profit 股东净利 (RMB m)	EPADS 每 ADS 净利 (RMB)	EPADS 每 ADS 净利变动 (△%)	PER 市盈率 (x)	BPADS 每 ADS 净资产 (RMB)	PBR 市净率 (x)	DPADS 每 ADS 股息 (RMB)	Yield 股息率 (%)	ROE 净资产收益率 (%)
2012A	2,771	541	11.305	(44.0)	11.5	83.887	1.5	12.705	9.8	13.6
2013A	3,053	542	11.117	(1.7)	11.3	92.397	1.4	2.811	2.2	12.8
2014F	3,995	642	13.054	17.4	9.7	109.037	1.2	3.273	2.6	13.1
2015F	4,713	764	15.430	18.2	8.2	127.502	1.0	3.869	3.1	13.2
2016F	5,133	864	17.381	12.6	7.3	147.585	0.9	4.358	3.5	12.7

Shares in ADS issue (m) 总 ADS 股数 (m)	49.6	Major shareholder 大股东	Mr Michael Yufeng Chi 42.4%
Market cap. (US\$ m) 市值 (US\$ m)	5,171.0	Free float (%) 自由流通比率 (%)	55.8
3 month average ADS vol. 3 个月平均成交 ADS 股数 ('000)	381.2	FY14 Net gearing (%) FY14 净负债/股东资金 (%)	Net Cash
52 Weeks high/low (US\$) 52 周高/低	25.660 / 16.350	FY13-16 PEG (x)	0.6

Source: the Company, Guotai Junan International.

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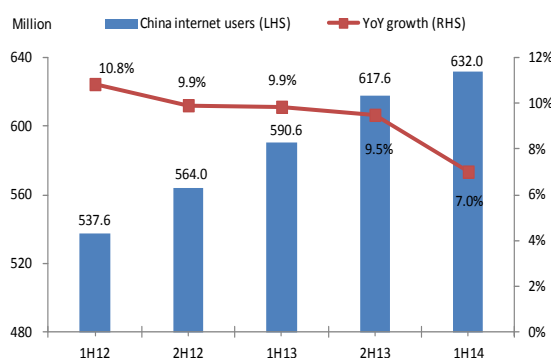
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Industry Analysis

China Internet Market Analysis

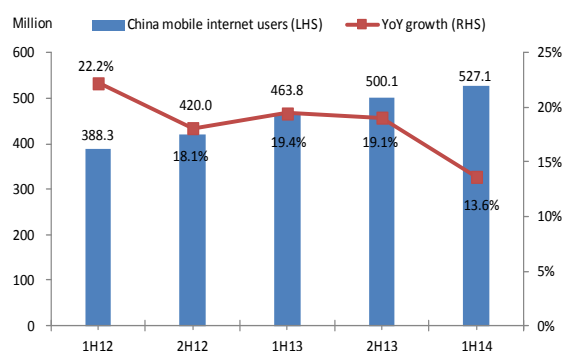
Strong internet user growth in China market. In June 2014, internet users reached 632 million, with the penetration rate of 46.9%, while there were 527.1 million mobile internet users in China. The utilization rate of mobile internet (83.4%) has surpassed that of the PC internet, indicating that the cannibalization effect and smartphone penetration are improving. We expect the mobile utilization rate of mobile internet would further strengthen in coming years with higher smartphone penetration in China. The smartphone penetration rate is supported by telecom operators' service tariffs reduction, the migration of 2G subscribers to 3G/4G network and the decline of smartphone ASP. The higher mobile and internet utilization is expected to boost internet spending. Higher internet user number improves the demand of internet businesses. Companies could expand their business with monetization opportunities because of longer internet surfing time, leisure and business activities.

Figure-1: China Internet Users and YoY Growth



Source: CNNIC.

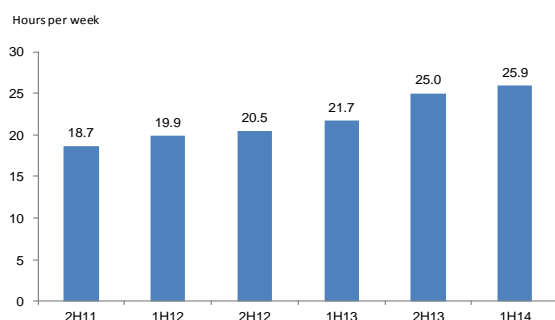
Figure-2: China Mobile Internet Users and YoY Growth



Source: CNNIC.

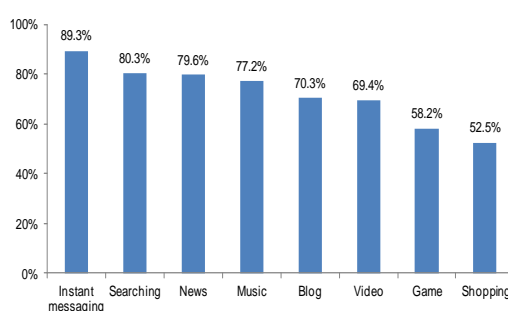
Instant messaging ranked the highest for the utilization rate, while online game ranked the seventh in June 2014. In June 2014, online game users reached 368 million with the utilization rate of 58.2% (compared with 54.7% in Dec 2013). Instant messaging ranked the highest among internet users with utilization rate of 89.3% in June 2014, due to the increasing substitution effect to traditional messaging. The high utilization rate of instant messaging is expected to sustain in coming years with high smartphone penetration rate. Searching ranked the second with 80.3% due to the convenience and ease to find nature. News reading ranked the third with 79.6% utilization rate because of the increasing migration of users from traditional newspaper to the mobile platform. Game ranked the seventh with the utilization rate of 58.2% and there was a sustainable improvement in recent quarters because of the launch of game titles on the social network platforms and free to play nature. We expect the utilization rate of online game would improve in coming quarters due to the launch of new game titles and increasing internet surfing time.

Figure-3: China Internet Users' Surging Time in 1H14



Source: CNNIC.

Figure-4: The Utilization Rate of Internet Usage in 1H14



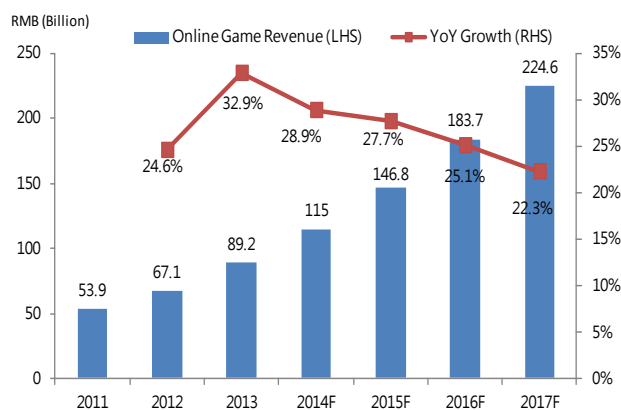
Source: CNNIC.

Online Game Analysis

China's Online Game Industry

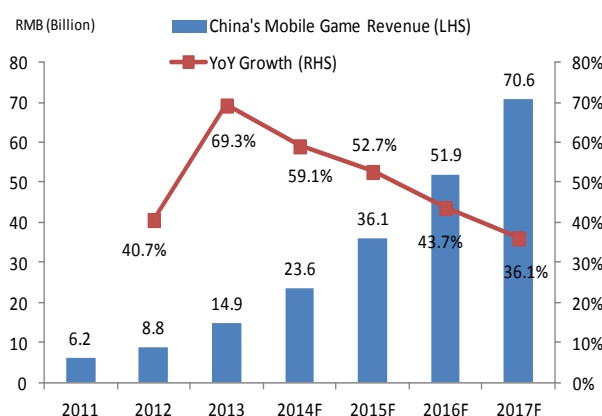
China's online game revenue is expected to grow by 28.9% in 2014. The improvement in China's online game revenue growth was due to the improvement of PC games and mobile games, better network infrastructure and more popularization of related devices attracting people to play online games. Online game revenue in 2014 is expected to grow by 28.9%, reaching RMB115 billion. The revenue in China's online game market is expected to reach RMB224.6 billion in 2017, with a 2013-17 CAGR of 26.0%. Large online game companies were actively developing mobile game titles in 2013 which was stimulated by the increasing smartphone usage and telecom operators' heavy handset subsidies. China's mobile game revenue in 2013 was RMB14.9 billion, up 69.3% YoY. The mobile game revenue in China is expected to reach RMB70.6 billion in 2017, with a CAGR of 47.5% in 2013-2017. Tencent (00700 HK) generated the most online game revenue in 2013 thanks to its strong social networking user base, a large variety of game titles and popularity of its game platforms. Netease (NTES US) was the second largest online game revenue generating company in 2013 due to the success of co-operating with international game developers for launching international well known game titles in China market. The online game industry in China is transforming from 2D to 2.5D and 3D games, with more and more new 2.5D and 3D game titles being launched recently to capture the demand. The MMORPG market and desktop gamers growth is expected to sustain in coming years as these 2.5D and 3D games are more suitable to play on the desktop platform and withstand the cannibalization effect from the mobile platform.

Figure-5: China's Online Game Revenue and YoY Growth



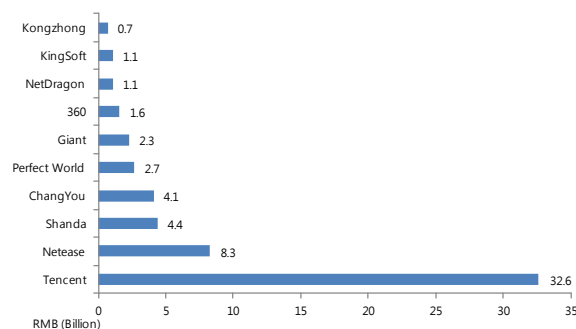
Source: iResearch.

Figure-6: China's Mobile Game Revenue and YoY Growth



Source: iResearch.

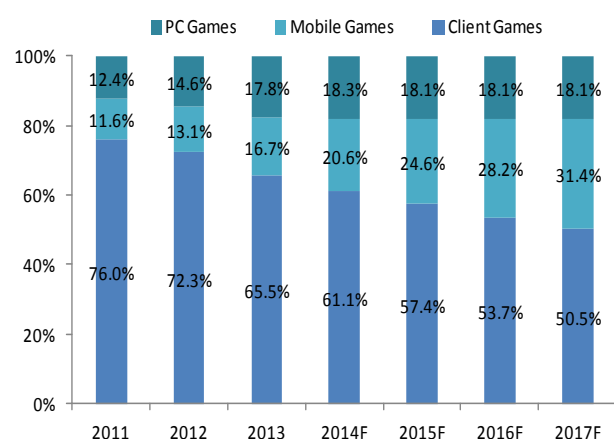
Figure-7: Revenue of China's Online Game Companies in 2013



Source: iResearch.

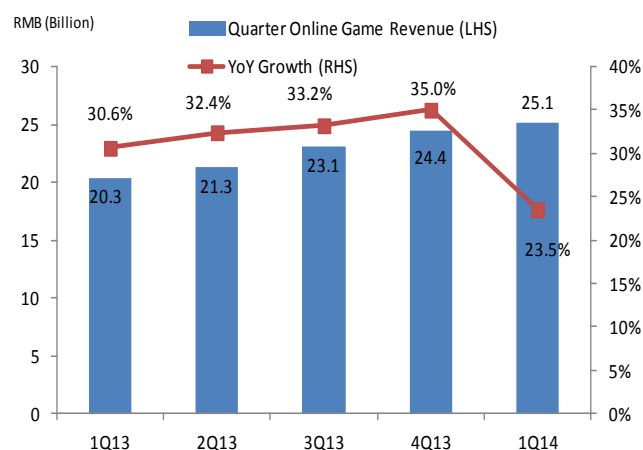
Client games are expected to contribute the most for China's online game market in 2014-17. China's online game revenue in 1Q14 was RMB25.1 billion, up 23.5% YoY, thanks to the proliferation of smartphones and telecom operators' mobile data service tariffs cuts. China's online game industry can be classified into three major categories including mobile games, PC games and client games. In 2013, client games, PC games and mobile games accounted for 65.5%, 17.8% and 16.7% of the total revenue of China online game market, respectively and it is predicted that mobile games will surpass web games in 2014. PC games maintained the highest revenue proportion in 1Q14 overall online game revenue, but there is a downward trend with higher proportions from the mobile game and web game. Game developers are launching new mobile game and web game titles with relatively short life cycles to capture market demand with casual games. Mobile games showed an impressive growth in 2013, because there were more choices for light users and non-registered players. China's web game revenue in 2013 was RMB15.9 billion, up 61.8% YoY. The CAGR of China web game revenue in 2013-2017 is expected to be 26.4%. The strong mobile game growth is supported by stronger smartphone penetration in China. China smartphone shipments are expected to reach 515.0 million in 2017 from 318.4 million in 2013, representing a CAGR of 12.8%. PC client games proportion is expected to decline in 2014-2017, with increasing substitution effect from mobile games.

Figure-8: Structure of China Online Game Market Revenue



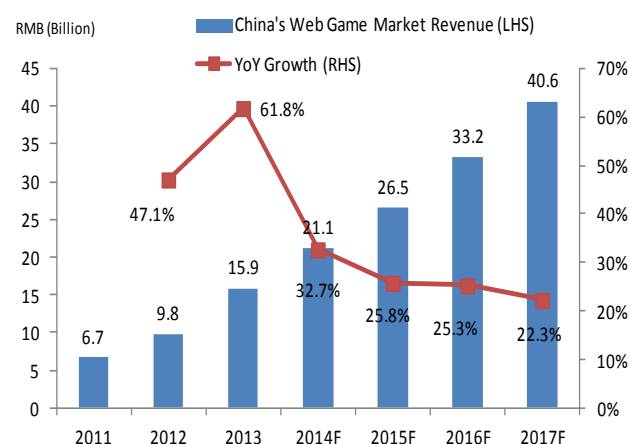
Source: iResearch.

Figure-9: China's Quarterly Mobile Game Revenue and YoY Growth



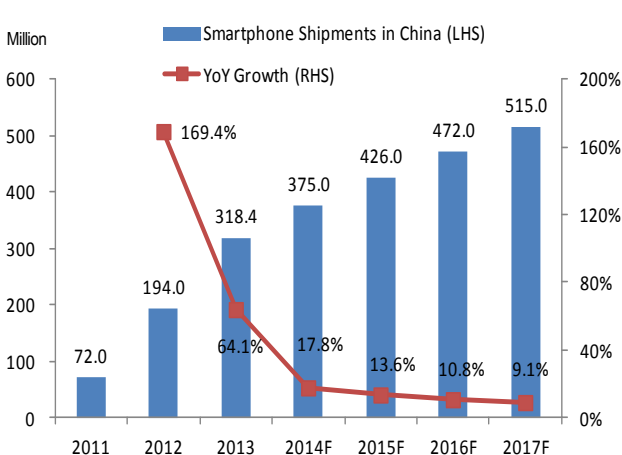
Source: iResearch.

Figure-10: China's Web Game Market Revenue and YoY Growth



Source: iResearch.

Figure-11: China's Smartphone Shipments and YoY Growth



Source: iResearch.

China's online game industry is influenced by Government's policies including regulations and limitations. Online game developers are subjected to the regulations of a number of Chinese authorities including the Ministry of Industry and Information Technology (MIIT), General Administration of Press and Publications, the State Administration for Industry and Commerce, the Ministry of Culture and the Ministry of Public Security. The Chinese Government had just deregulated the game console business in 1H14 after years of banning the sales of game consoles in the China market. Online game operator are required to obtain permits and licenses in order to operate online game related business in China which include ICP licenses, Internet Culture Operation Licenses, Internet Publishing License and Online Bulletin Board Service Approval. Also, the content of the online games are monitored to screen for violence and unhealthy contents in the hope to reduce the negative effect of online games to development of child. MIIT has published regulations that subject website operators to potential liability for content included on their websites and the actions of users and others using their websites including liability for violations of PRC laws prohibiting the dissemination of content deemed to be socially destabilizing.

Online game companies deploy different business models to suit for China market. Some online game companies only focuses on developing game titles, while others also operate online game platform to share game revenue with third party developers to diversify its revenue income. Game platform owners can usually share over 50% of the game revenue with third party game developers when game players pay for online games. Through operating online game platform, game companies can provide a more diversified game portfolio for users.

Company Analysis

Background Introduction

Perfect World, founded in Mar 2004 by Mr. Michael Yufeng Chi, is a company engaged in producing online games and operating online game platforms based in China (Beijing). Perfect World was listed on NASDAQ in US in July 2007 with the code of PWRD. Perfect World launches self-developed online games including massively multiplayer online role playing games ("MMORPGs"): "Perfect World," "Legend of Martial Arts," "Perfect World II," "Zhu Xian," "Chi Bi," "Pocketpet Journey West," "Battle of the Immortals," "Fantasy Zhu Xian," "Forsaken World," "Dragon Excalibur," "Empire of the Immortals," "Return of the Condor Heroes," "Saint Seiya Online," "Swordsman Online" and "Holy King", online casual game: "Hot Dance Party" and a number of web games and mobile games. Perfect World generates revenue through two operating models including item based and time based online games. While most of the revenues are generated in China, Perfect World operates its games in North America, Europe, Japan, Korea and Southeast Asia through its own subsidiaries. Perfect World's games have also been licensed to leading game operators in a number of countries and regions in Asia, Latin America, and the Russian Federation and other Russian speaking territories. The Company specializes in 3G games which could provide a more realistic form of representation of real-life objects and can depict more complex activities.

Company Milestone

Perfect World primarily develops online games based on proprietary game engines and game development platforms. The Company developed business through acquisitions and self-established subsidiaries to explore opportunities in the market.

Table-1: Perfect World's Major Corporate Events

Date	Events
Mar 2004	Company founded
July 2007	Listed on NASDAQ
April 2008	Established US subsidiary Perfect World Entertainment Inc.
Jan 2010	Established European subsidiary, Perfect World Europe B.V.
April 2010	Acquired C&C Media Co., Ltd. to expand operations in Japan
August 2011	Acquired Cryptic Studios, Inc., a reputable US based online game company
Dec 2011	Launches web games
Dec 2012	Started to operate games through subsidiaries in Southeast Asia
Feb 2013	Started to operate games through subsidiary Perfect World Korea Co., Ltd in Korea
May 2013	Started to launch mobile games
Nov 2013	Acquired 100% equity stake in Wuhu Huitian Shengshi Network Technology Co. Ltd.
Nov 2013	Acquired minority stake in Beijing Shouyou Daqu Technology Co., Ltd.
Dec 2013	Disposed Beijing Huanxiang Zongheng Chinese Literature Website Co., Ltd. to Baidu (BIDU US)

Source: the Company.

Online Games

Online game is the Company's core business. The Company provides online game services on its game portals such as arcgames.com and wanmei.com. The Company adopts the item-based revenue model for all its self-developed games except one for the time-based revenue model in the MMORPG. The item-based revenue model is expected to attract more users because of its free-to-play nature. The free-to-play nature can lower the entry barrier as users will only make payments when purchasing virtual items online. China contributed most of the Company's revenue income. Perfect World explores overseas opportunities through (1) its overseas subsidiaries and (2) licensing to third parties. The Company has also invested two online

game platforms including ptbus.com and tgbus.com to tap into different customer segments. The Company is going to launch game titles for game consoles after the deregulation in China market in 1H14, by introducing its first game console title in Microsoft (MSFT US)'s Xbox. Besides distributing games through its platform, the Company also distributes games on the third party platforms such as 91 Wireless and Qihoo 360 (QIHU US).

Figure-12: Perfect World's Game Platform
arcgames.com



Figure-13: Perfect World's Game Platform
wanmei.com



Source: the Company.

Source: the Company.

Figure-14: Perfect World's Game Platform
PTBUS.com



Figure-15: Perfect World's Game Platform
TGBUS.com





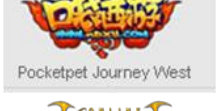








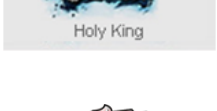




Source: the Company.

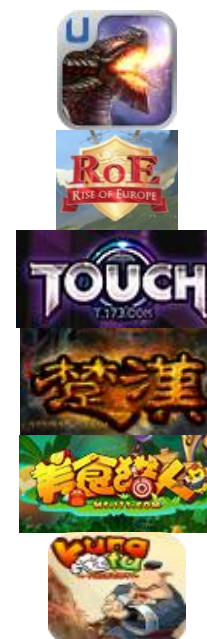
Source: the Company.

Table-2: Perfect World's Game Titles

Game Title (English)	Game Title (Chinese)	Launched Date	Descriptions	Game Logo
MMORPG Games				
Perfect World	完美世界	Jan 2006	Adventure and fantasy game with traditional Chinese settings, time-based revenue model	

Legend of Martial Arts	武林外传	Sept 2006	Cartoon adventure game based on a popular TV drama series with the same Chinese name	
Perfect World II	完美世界 II	Nov 2006	Modified game title based on Perfect World, but deploying item-based revenue model	
Zhu Xian	诛仙	May 2007	Based on a popular internet novel with the same name	
Chi Bi	赤壁	Jan 2008	Based on three kingdoms history	
Pocketpet Journey West	口袋西游	Oct 2008	Based on the story of Journey to the West	
Battle of the Immortals	神鬼传奇	Oct 2008	2.5D mysterious adventure game featuring themes from Norse mythology to the history of China's Qin Dynasty	
Fantasy Zhu Xian	梦幻诛仙	Oct 2009	Based on the story of Zhu Xian	
Forsaken World	神魔大陆	April 2010	2D MMORPG based on a popular internet fantasy novel "Zhu Xian"	
Dragon Excalibur	降龙之剑	Oct 2010	2D real time MMORPG based on ancient Chinese mythology	
Empire of the immortals	神鬼世界	Mar 2011	2.5D MMORPG featuring the international style of immortals series	
Return of the Condor Heroes	神雕侠侣	Sept 2012	2D MMORPG based on Louis Cha's acclaimed martial arts novel of the same name	
Saint Seiya Online	圣斗士星矢	May 2013	3D comic MMORPG based on famous comic Saint Seiya	
Swordsman Online	笑傲江湖	June 2013	3D martial arts MMORPG adapted from Louis Cha's acclaimed classic martial arts novel	
Holy King	圣王	Sept 2013	Featuring a fantasy setting and fierce battles	
Online Casual Games				
Hot Dance Party	热舞派对	March 2008	3D online casual game allowing users to enjoy dancing game play	
Web Game and Mobile Game				
Knights of the Rose	玫瑰骑士	Dec 2011	2D cartoon style web game mixed with SLG and SNS features	

Saga Age	传说时代	April 2012	2D cartoon RPG web game based on martial arts theme
Rise of Europe		August 2012	2D SLG web game based on western medieval theme
Touch		Mar 2013	3D dancing web game featuring high quality graphics
Legend of Chu and Han	楚汉传奇	April 2013	A strategy war epic web game based on well-known war between Chu and Han
Gourmet Adventurer	美食猎人	May 2013	2D cartoon game featuring an elimination based combat style
Heaven Sword and Dragon Saber	倚天屠龙记	August 2013	2D real time martial arts ARPG web game based on Louis Cha's famous martial arts novel

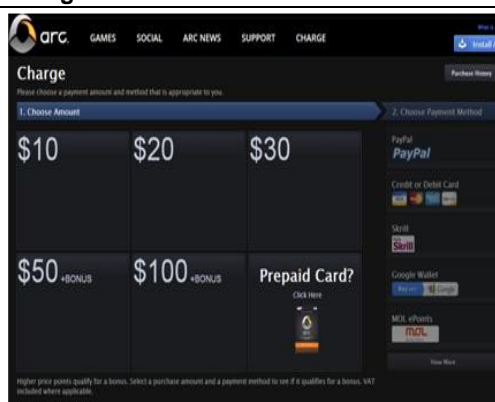


Source: the Company.

New game titles to be launch in 2H14. The Company has a game pipeline to sustain user growth which includes PC game titles of Neverwinter and Legend of the Condor Heroes. The new game titles are expected to refresh its game portfolio. Also, the new game titles for Xbox are expected to capture the demand in the market which is just deregulated in the China market.

The Company collects gamers' payment through three methods including physical cards, electronic distribution system and online payment platforms. Perfect World sells physical cards through a network of third party distributors over 37 provincial distributors in China. These distributors resell the cards to sub-distributors who in turn distribute the cards to numerous internet cafes, newsstands, convenience stores and other retail outlets. Through electronic distribution system, Perfect World's regional distributors sell the virtual cards and online points to gamers. Perfect World sells online points directly to players for charging their accounts via the Company's website. Payments for purchases are processed by banks and other third-party online payment platform service providers. These online payment platform service providers receive transaction fees, which reduce the net payment that the Company receives from them.

Figure-16: Perfect World's Game Points Recharging Page on argames.com



Source: the Company.

Figure-17: Perfect World's Game Points Recharging Page on wanmei.com



Source: the Company.

Overseas Licensing

The Company expands overseas opportunities through licensing its game titles to overseas licensees. Perfect World generated revenue through overseas licensing by charging licensees an initial fee and ongoing royalties, for which the ongoing royalties are determined based on the amount of money charged to players' accounts or the services fees payable to the licensee in the specific country. The licensees are responsible for the sales and marketing of Perfect World's game titles in the specific regions including price setting of the games and virtual items. The licensees are also generally in charge of maintenance of the network infrastructure and customer service. Rather than expanding games titles overseas by itself, Perfect World can better improve overseas market share by forming alliance with overseas parties because these parties understand more about their geographical characteristics and better marketing plans could be launched to target their desired customers.

Table-3: Perfect World's Overseas Licensing Games

Game Title	Country/Region
Perfect World II	Taiwan, Hong Kong, Macau, Vietnam, The Philippines, Brazil, Thailand, Indonesia, and The Russian Federation and other Russian-speaking territories
Zhu Xian	Thailand, Taiwan, The Russian Federation and other Russian speaking territories and Indonesia
Chi Bi	The Philippines
Hot Dance Party	Malaysia, Singapore, Vietnam, Thailand and The Philippines
Battle of the Immortals	Taiwan, Thailand, Turkey and Azerbaijan
Forsaken World	Taiwan, Indonesia, Thailand, The Russian Federation and other Russian-speaking territories, Brazil, The Spanish-speaking countries in Latin America and Vietnam
Dragon Excalibur	Korea
Empire of the Immortals	Taiwan, Turkey, Azerbaijan and Indonesia
Saint Seiya Online	Taiwan
Swordsman Online	Taiwan, Vietnam and Indonesia
Legend of the Condor Heroes	Taiwan

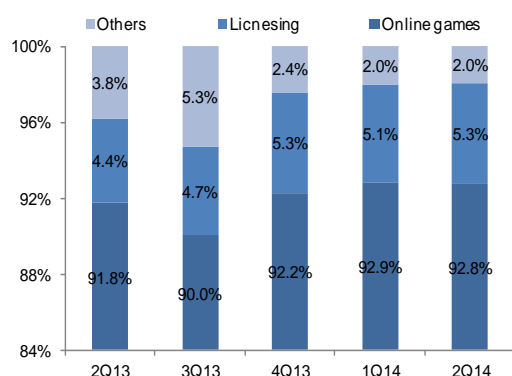
Source: the Company.

Financial Analysis

Revenue Analysis

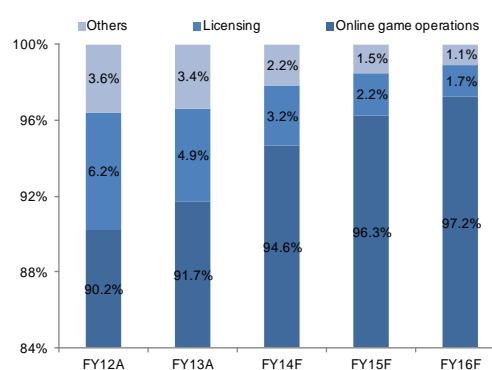
Majority of the Company's revenue contributions comes from online game operations. Perfect World generated all of its revenue income related from online games related businesses, which include (1) online game operations; (2) licensing games; and (3) others. The Company's major revenue is contributed by online game operations with over 91.7% in FY13 while the second one was licensing games with over 4.9% in FY13 and the third one was other revenue income with 3.4%. The revenue proportions among online games, licensing and others were stabilized in recent quarters. We estimate the revenue contributions from online game operations would increase in coming quarters due to the launch of new game titles and the lower revenue income growths from licensing and others revenue income. FY14-16 revenue from online game operations is expected to be 94.6%/96.3%/97.2%, respectively.

Figure-18: Perfect World's Quarterly Revenue Breakdown



Source: the Company.

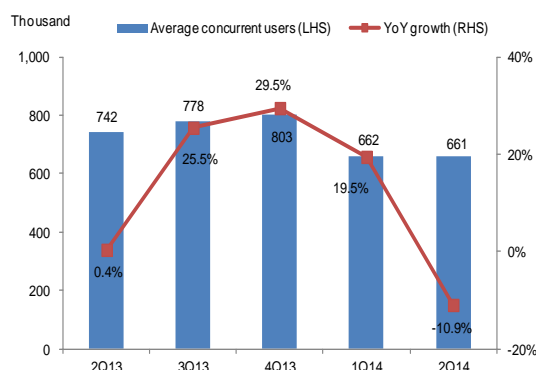
Figure-19: Perfect World's Annual Revenue Breakdown



Source: the Company, Guotai Junan International.

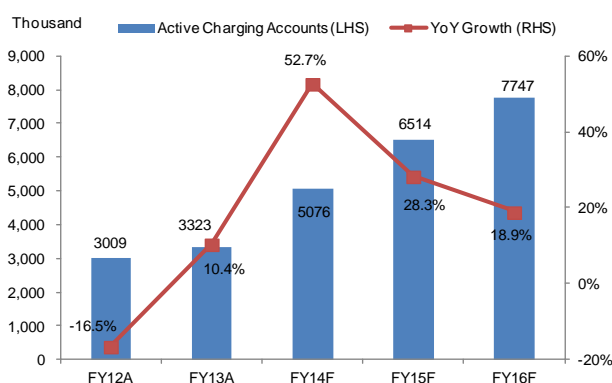
Games users are expected to improve in FY14-16 with the launch of new game titles in mobile and client platforms. Annual active charging accounts in FY13 reached 3,323k, up 10.4% YoY, thanks to the launch of new game titles and expansion packages to stimulate user growth. The annual active charging accounts in FY12 were down 16.5% YoY. Annual average revenue per active charging accounts was RMB784 in FY13, down 4.0% YoY, and RMB817 in FY12, up 10.3% YoY. Aggregate Average Concurrent Users (ACU) was 661k in 2Q14, down 10.9% YoY, which was due to the different playing behaviors of online gamers related to the mobile games. We expect the average charging users in FY14-16 would grow by 52.7%/28.3%/18.9%, respectively. Due to stronger market competition, FY14-16 annual average revenue per active charging accounts is expected to decline by 5.0%/6.5%/7.5% to RMB745/RMB696/RMB644, respectively.

Figure-20: Perfect World's ACU and YoY Growth



Source: the Company.

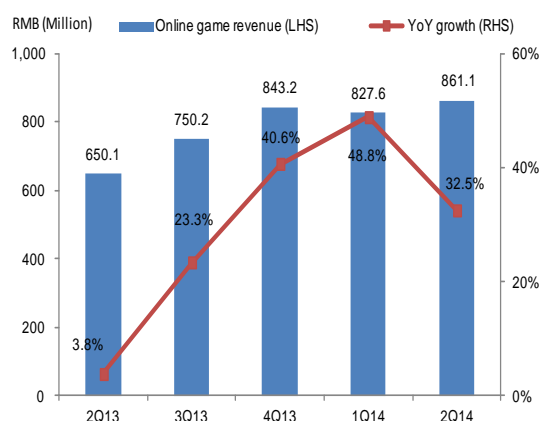
Figure-21: Perfect World's Active Charging Accounts and YoY Growth



Source: the Company, Guotai Junan International.

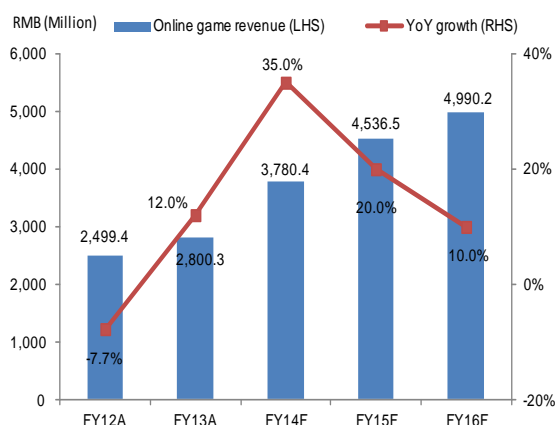
The CAGR of online game operations revenue in FY13-16 is expected to be 21.2%. Perfect World's online game operations revenue in FY13 grew by 12.0% YoY, compared with -7.7% in FY12. Over 75.0% of the online game operation revenue was generated in China market in FY13, compared with 76.0% in FY12. We expect China market would maintain the biggest contributing region to the Company in FY14-16 as there is a stronger development potential for game thanks to the growing momentum of smartphone penetration. 2Q14 online game operation revenue was RMB861.1 million, up 32.5% YoY, and the strong growth was sustainable in recent quarters thanks to the launch of new mobile games and client games to stimulate game revenue. A series of mobile game titles will be launched, including Forsaken World, Touch, CrossGate Mobile and Swordsman Mobile, which could benefit the Company's game revenue with the strong demand of mobile games. The Company is also launching rich client game pipes in coming quarters including Legend of the Condor Heroes (a 3D MMORPG based on one of Lousi Cha's classic martial arts novels). The Company is going to launch game titles for Xbox One by teaming up with Microsoft (MSFT US) with the first series of Neverwinter in China after the deregulation of game console recently. We expect the contributions from the mobile games would significantly increase in FY14 due to the Company's effort of launching new game titles in order to capture the growing momentum. The online game operations revenue in FY14-16 is expected to grow by 35.0%/20.0%/10.0%, respectively. FY14-16 online game operations revenue is expected to be RMB3,780.4 million/RMB4,536.5 million/RMB4,990.2 million, representing a CAGR of 21.2% in FY13-16.

Figure-22: Perfect World's Quarter Online Game Operation Revenue and YoY Growth



Source: the Company.

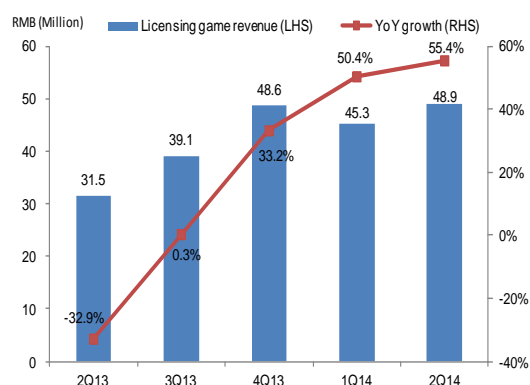
Figure-23: Perfect World's Annual Online Game Revenue and YoY Growth



Source: the Company, Guotai Junan International.

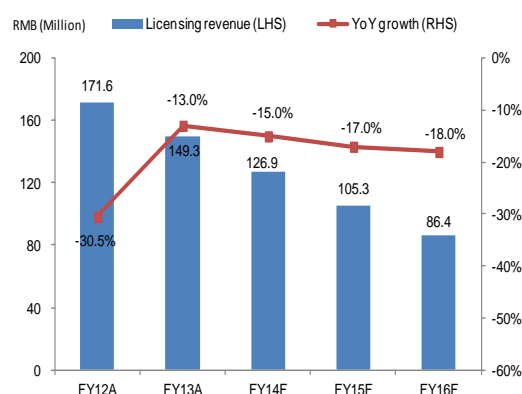
The CAGR of licensing game revenue in FY13-16 is expected to be -16.7%. The Company is expected to capture the overseas demand through licensing its game titles to third parties. The demand of Perfect World's games is strong, especially in emerging markets such as Indonesia. The licensing revenue contribution to the Company is expected to decline in FY14-16 because of the Company's decision of setting up self-operating subsidiaries overseas instead of relying on the third parties.

Figure-24: Perfect World's Quarterly Licensing Game Revenue and YoY Growth



Source: the Company.

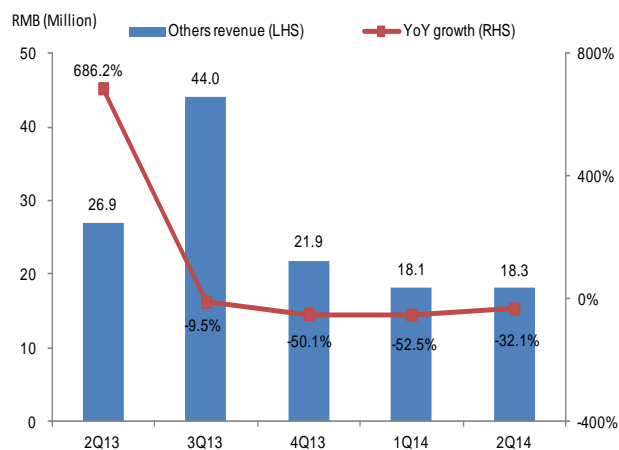
Figure-25: Perfect World's Annual Licensing Game Revenue and YoY Growth



Source: the Company, Guotai Junan International.

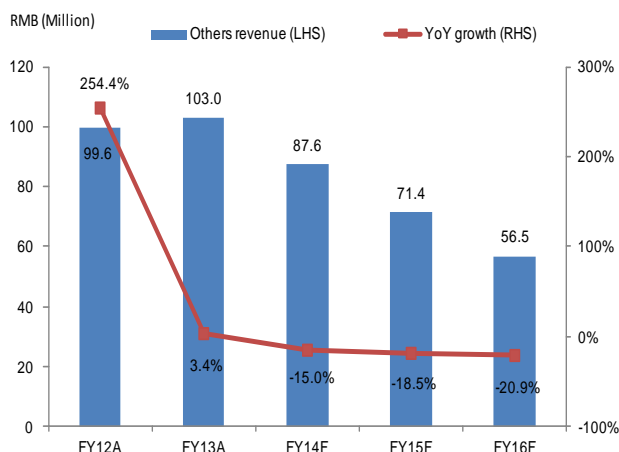
The CAGR of others revenue in FY13-16 is expected to be -18.2%. The Company earns others revenue through the pay-per-install game title of Torchlight 2 which was developed by its majority owned subsidiary Runic Games. The revenue contributed from the installation of Torchlight 2 had declined in FY13 and is expected to show a similar trend in coming years due to the phasing out of this game title and there is no other game title deploying this payment method. Other revenue in 2Q14 was RMB18.3 million, down 32.1% YoY. Others revenue in FY13 was RMB103.0 million, up 3.4% and we expect there would a YoY decline of 15.0%/18.5%/20.9% in FY14-16.

Figure-26: Perfect World's Others Revenue and YoY Growth



Source: the Company.

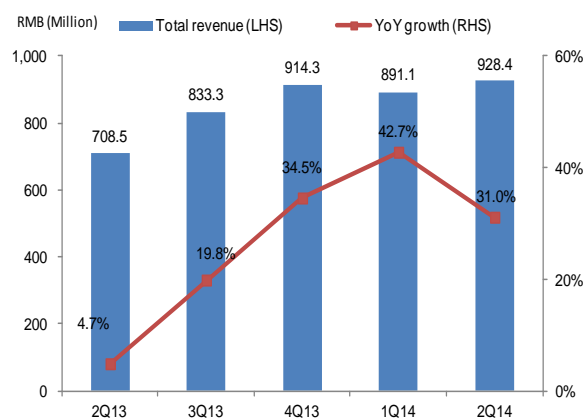
Figure-27: Perfect World's Annual Others Revenue and YoY Growth



Source: the Company, Guotai Junan International.

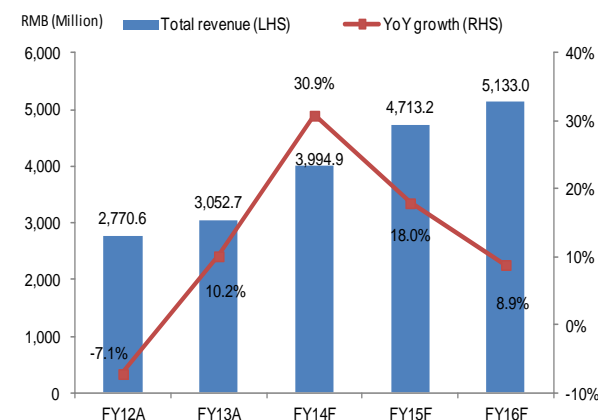
The CAGR of total revenue is expected to be 18.9% in FY13-16. FY13 total revenue was RMB3,052.7 million, up 10.2% compared with -7.1% in FY12. Due to the strong growth of online game operation business revenue, we expect FY14-16 total revenue would grow annually by 30.9%/18.0%/8.9%, respectively. The CAGR of total revenue is expected to be 18.9% in FY13-16.

Figure-28: Perfect World's Total Revenue and YoY Growth



Source: the Company.

Figure-29: Perfect World's Annual Total Revenue and YoY Growth



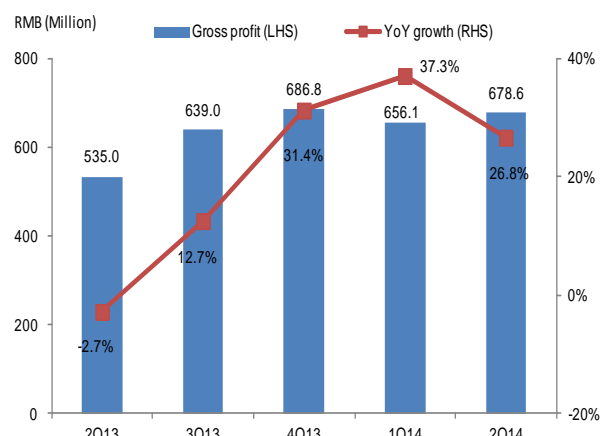
Source: the Company, Guotai Junan International.

Gross Profit Analysis

The Company's gross profit is expected to grow annually by 30.2%/17.5%/8.6% in FY14-16, respectively. The Company's gross profit in 2Q14 was RMB678.6 million, up 26.8% YoY, which was contributed by stronger revenue growth. Gross profit in FY13 was RMB2,341.0 million, up 4.9% YoY, compared with -10.9% in FY12. We expect the gross profit margin in FY14-16 to be 76.3%/76.0%/75.8%, respectively. The improvement in gross profit is attributable to the launch of more

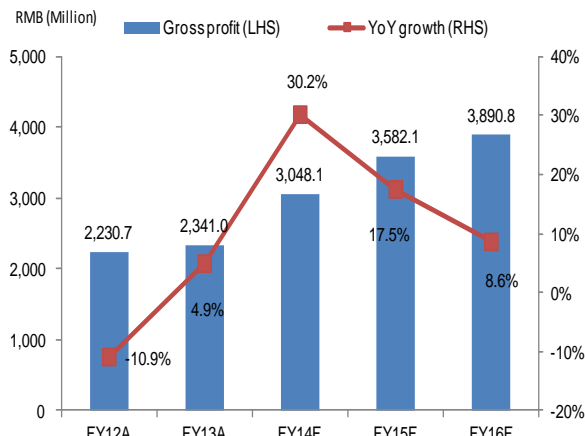
self-developed game titles and benefits from large user base. FY14-16 gross profit is expected to be RMB3,048.1 million/RMB3,582.1 million/RMB3,890.8 million, representing a YoY growth of 30.2%/17.5%/8.6%, respectively.

Figure-30: Perfect World's Quarterly Gross Profit and YoY Growth



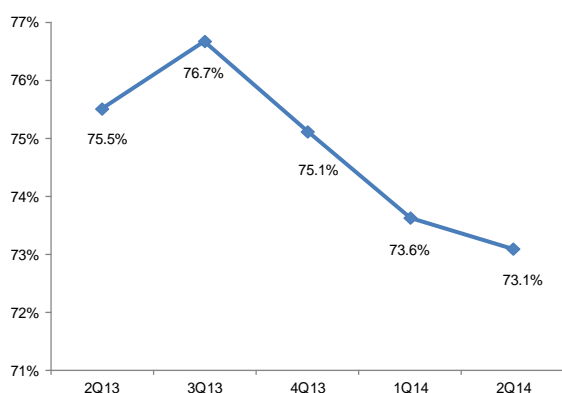
Source: the Company.

Figure-31: Perfect World's Annual Gross Profit and YoY Growth



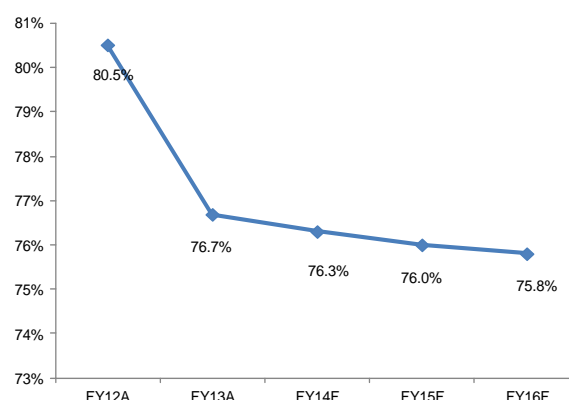
Source: the Company, Guotai Junan International.

Figure-32: Perfect World's Quarterly Gross Profit Margin Trend



Source: the Company.

Figure-33: Perfect World's Annual Gross Profit Margin Trend



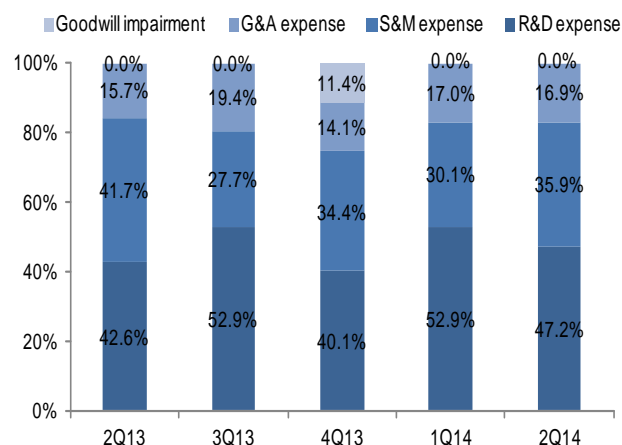
Source: the Company, Guotai Junan International.

Operating Expenses Analysis

Research and Development (R&D) expense was the biggest expense in the Company's operating expenses. R&D expenses to total operating expenses in FY12-13 were 47.9%/44.2%, respectively. The Company needed to spend a large amount of expenses to develop new game titles and launch new products in order to stay competitive. We expect heavy R&D expenses would continue in coming years. We estimate R&D to the overall operating expenses ratio in FY14-16 to be 46.3%/46.5%/46.7%, respectively. FY14-16 R&D expenses as a percentage of total revenue is expected to be 29.1%/29.3%/29.4%, respectively. Sales and Marketing (S&M) expense as a percentage of total operating expense in FY12-13 was 31.3%/36.4%, respectively. We think the Company may spend more S&M expenses to boost revenue income, and the S&M expense to the overall operating expense ratio in FY14-16 is expected to be 38.2%/38.3%/38.4%, respectively. FY14-16 S&M expenses as a percentage of total revenue is expected to be 24.0%/24.1%/24.2%, respectively. General and Administrative (G&A) expenses to the overall operating expenses in FY12-13 were 18.4%/15.5%, respectively. The Company is expected to reduce the related percentage in FY14-16 thanks to the economies of scale. FY14-16 G&A expenses to the overall operating expense are expected to be 15.6%/15.2%/14.9%, respectively. FY14-16 G&A expenses as a percentage of total

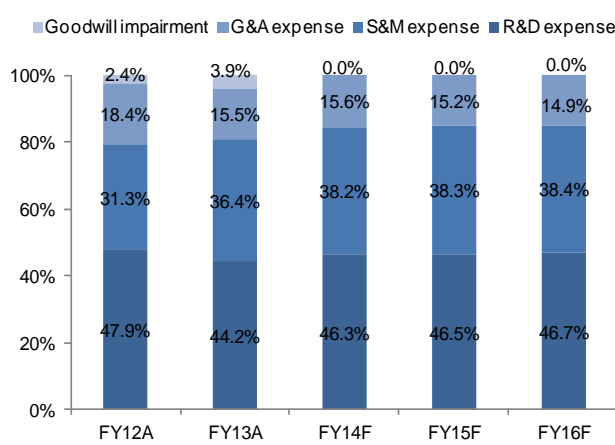
revenue is expected to be 9.8%/9.6%/9.4%, respectively. There were RMB40.8 million and RMB77.3 million in FY12 and FY13 corresponding to the goodwill impairment charges. These goodwill impairment charges were owing to the difference between implied fair value of the reporting unit's goodwill and the carrying amount of goodwill. The Company's goodwill impairment charges are related to the PRC online game business and four overseas business units including Runic Games, C&C Media, US online game business and Unknown Worlds.

Figure-34: Perfect World's Quarter Operating Expenses Breakdown



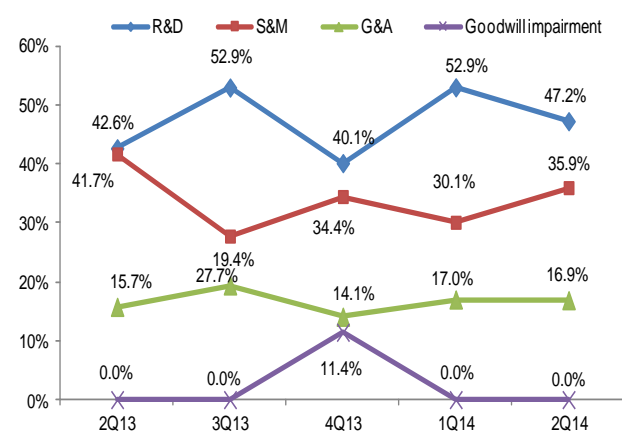
Source: the Company.

Figure-35: Perfect World's Annual Operating Expenses Breakdown



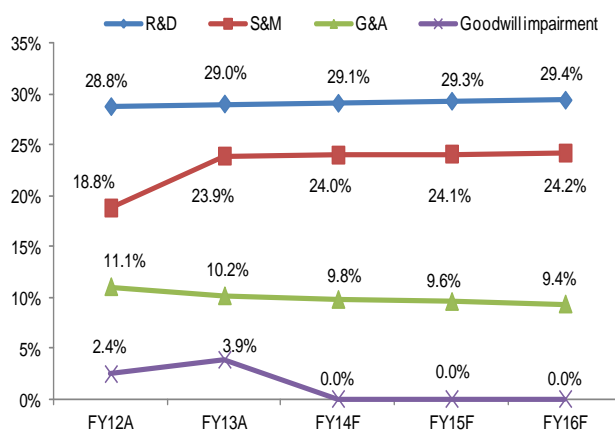
Source: the Company, Guotai Junan International.

Figure-36: Perfect World's Quarterly Operating Expenses as a Percentage of Total Revenue



Source: the Company.

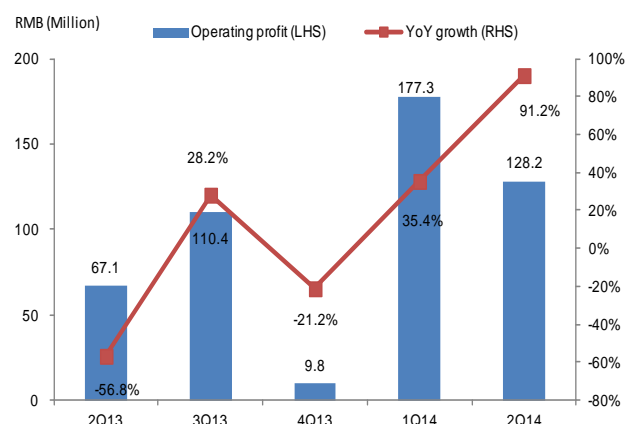
Figure-37: Perfect World's Annual Operating Expenses as a Percentage of Total Revenue



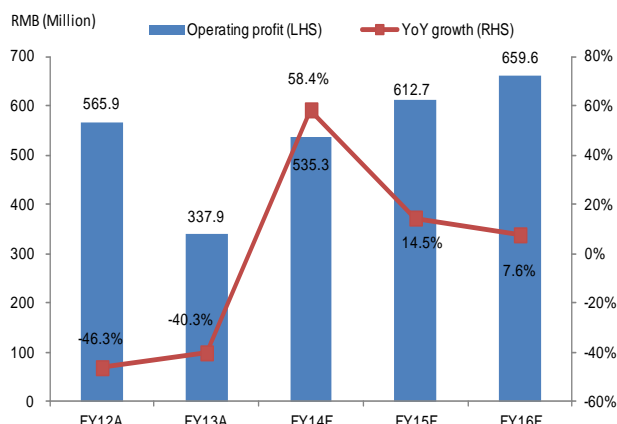
Source: the Company, Guotai Junan International.

Operating Profit and Margin Analysis

The CAGR of operating profit in FY13-16 is expected to be 25.0%. FY12-13 operating profit was RMB565.9 million/RMB337.9 million, respectively. Operating profit margin in FY12-13 was 20.4%/11.1%, respectively. The decline in operating profit margin was attributable to the higher operating expenses for marketing and product development to boost revenue growth. We expect the operating profit margin in FY14-16 to be 13.4%/13.0%/12.9%, respectively. The Company's operating profit margin is expected to show a improvement in FY14-16 compared with FY11-13, thanks to the economies of scale and the improvement in gross profit margin. We estimate FY14-16 operating profit to be RMB535.3 million/RMB612.7 million/RMB659.6 million, representing a CAGR of 25.0% in FY13-16.

Figure-38: Perfect World's Operating Profit and YoY Growth


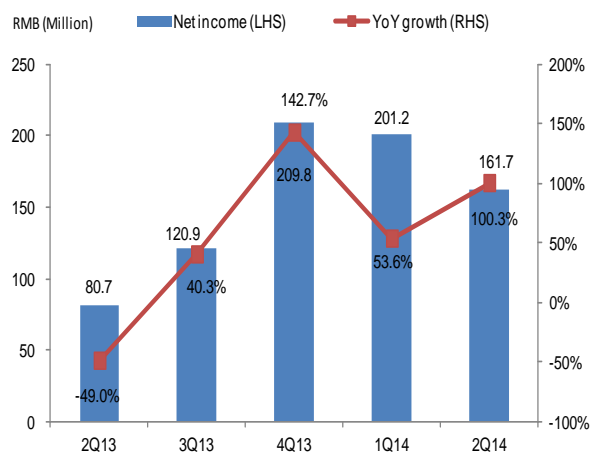
Source: the Company.

Figure-39: Perfect World's Operating Profit and YoY Growth


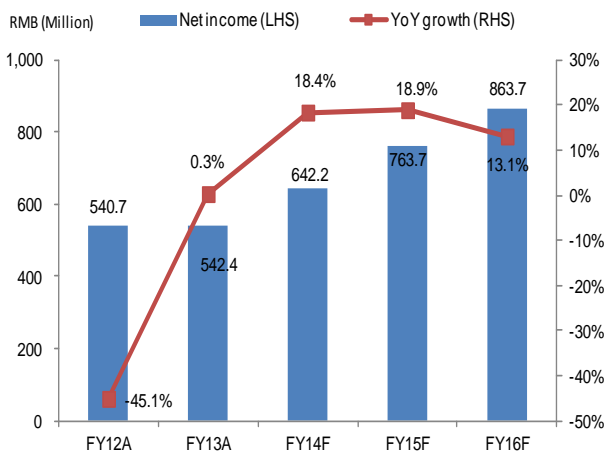
Source: the Company, Guotai Junan International.

Net Profit and Margin Analysis

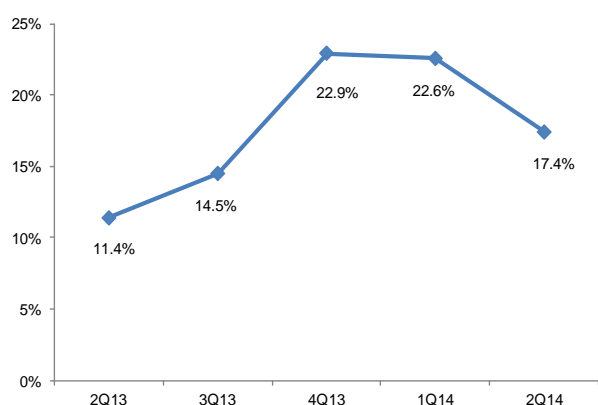
The CAGR of net income in FY13-16 is expected to be 16.8%. FY12-13 net income was RMB540.7 million/RMB542.4 million, respectively. Net income margin in FY12-13 was 19.5%/17.8%, respectively. The Company's net income is expected to record a YoY growth of 13.5%/20.4%/13.8% in FY14-16, respectively. FY14-16 net income is expected to be RMB642.2 million/RMB763.7 million/RMB863.7 million, respectively, representing a CAGR of 16.8% in FY13-16. FY14-16 net income margin is estimated to be 16.1%/16.2%/16.8%, respectively. FY14-16 earnings per ADS are estimated to be RMB13.1, RMB15.4 and RMB17.4, representing a YoY growth of 17.4%/18.2%/12.6%, respectively.

Figure-40: Perfect World's Quarterly Net Income and YoY Growth


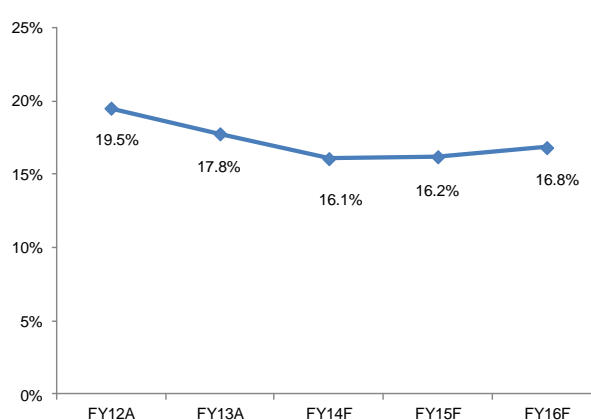
Source: the Company.

Figure-41: Perfect World's Annual Net Income and YoY Growth


Source: the Company, Guotai Junan International.

Figure-42: Perfect World's Quarterly Net Income Margin


Source: the Company.

Figure-43: Perfect World's Annual Net Income Margin


Source: the Company, Guotai Junan International.

Comparisons with Other Major Game Companies in China

Tencent has the highest market share in the China's online game market with the most diversified game titles and user base. Online game businesses contributed all Perfect World's revenue, compared with Tencent's 74.4% and Netease in 85.0% in FY13. Perfect World focuses more on providing online games business which was also reflected on its gross profit margin. Perfect World had the highest gross profit margin in FY13 with over 76.7%, compared with Netease's 73.0% and Tencent's 54.0%. Tencent had other businesses in FY13 such as e-commerce and advertising which had a relatively lower gross profit margin than online games business. Tencent dominated the online game market in China thanks to its large user base of its social network platforms and strong game portfolio.

Table-4: Comparison Table of Financial Metrics between Perfect World and Other Major Game Developers in FY13

Online game companies	Online Game Revenue (RMB Million)	Online Game Revenue Proportion	Gross Profit Margin	Operating Margin	Net Profit Margin
Tencent (00700 HK)	44,985	74.4%	54.0%	13.6%	17.8%
Netease (NTES US)	8,309	85.0%	73.0%	47.3%	48.3%
Perfect World (PWRD US)	2,800	100%	76.7%	28.6%	25.6%

Source: the Companies.

Risk Factors

The major risks of Perfect World include the following:

- (1) Competition in online game intensifies.** There are lots of internet portals offering online games in the China market such as Tencent, Sohu (SOHU US), Sina (SINA US) and Netdragon (00777 HK). Netease's revenue income or profit margins would be affected if these internet portals launch new game titles or game series similar to those of Perfect World.
- (2) Changes of Chinese telecom operators' handset subsidies and service tariffs may affect Perfect World's business prospects.** If Chinese telecom operators change their company strategy with the reduction in handset subsidies or increment of service tariffs, the mobile internet penetration rate would be lower and thus affect Perfect World's mobile game income.
- (3) The Company's mobile games are not popular as expected.** If the mobile games that the Company developed are not

as popular as expected, there would be an obstacle to the company's revenue growth. As the mobile game business is expected to be the market trend, we think the Company's revenue growth would be significantly affected if their mobile games are not that popular.

Valuation

We set the Company's investment rating as "Buy" and the TP of US\$28.00. FY14-16 earnings per ADS are estimated to grow by 17.4%/18.2%/12.6%, respectively. The TP of US\$28.00 represents 13.0x FY14 PER, 11.0x FY15 PER, 9.7x FY16 PER and 0.81 FY14-16 PEG. Due to the launch of new game titles, overseas expansion plan and game console businesses, we set the Company's investment rating as "Buy".

Figure-44: Perfect World's Historical PE Chart



Source: Bloomberg.

Table-5: Peer Comparisons:

Company	Ticker	Currency	Price	Market Cap (HKD Mn)	PER (x)			PBR (x)			ROE(%)	ROA(%)
					14F	15F	16F	14F	15F	16F	14F	14F
US Online Game Companies												
Changyou	CYOU US	USD	17.500	7,309	n.a.	13.2	6.2	1.0	0.8	0.7	(1.6)	(2.0)
Perfect World Co	PWRD US	USD	20.850	8,012	9.3	8.2	7.6	1.3	1.1	1.0	13.5	10.6
Shanda Games	GAME US	USD	6.480	13,499	n.a.	n.a.	n.a.	1.5	1.2	n.a.	20.4	n.a.
Electronic Arts Inc	EA US	USD	32.620	79,112	n.a.	17.0	14.4	4.2	3.8	3.2	0.3	0.1
Taomee Holdings	TAOM US	USD	4.120	1,149	274.7	22.3	n.a.	1.2	1.2	n.a.	0.3	0.2
Activision Blizzard Inc	ATVI US	USD	18.990	105,703	14.4	13.3	12.1	1.8	1.7	1.5	13.6	8.6
Netease	NTES US	USD	88.100	89,317	14.2	12.6	11.2	2.9	2.4	2.1	22.1	17.8
Simple Average					78.1	14.4	10.3	2.0	1.8	1.7	9.8	5.9
Weighted Average					15.6	14.0	12.2	2.7	2.4	2.1	12.5	8.9
HK Online Game Companies												
Tencent	700 HK	HKD	113.000	1,058,355	34.5	25.9	20.7	10.5	7.8	5.9	34.6	19.8
Boyaa Interactive Int.	434 HK	HKD	7.050	5,335	14.1	10.4	7.6	2.8	2.3	1.8	22.2	19.0
Forgame Holdings	484 HK	HKD	13.800	1,753	189.0	14.6	8.8	1.0	1.0	0.9	(0.6)	(1.2)
IGG	8002 HK	HKD	3.100	4,241	7.5	5.8	4.2	2.4	1.7	1.4	33.9	34.6
Netdragon	777 HK	HKD	12.620	6,463	15.1	13.7	12.6	1.1	1.0	0.9	6.7	4.4
Simple Average					52.1	14.1	10.8	3.5	2.7	2.2	19.3	15.3
Weighted Average					34.5	25.7	20.5	10.3	7.7	5.8	34.3	19.8
Advertising Companies												
Sohu.Com Inc	SOHU US	USD	44.970	13,424	n.a.	n.a.	29.6	1.4	1.4	1.3	(12.3)	(6.1)
Youku Tudou Inc-Adr	YOKU US	USD	17.500	28,278	n.a.	123.2	28.6	1.5	1.5	1.4	(4.1)	(5.5)
Sina Corp	SINA US	USD	38.710	20,012	58.1	30.6	18.9	1.4	1.4	1.2	1.5	0.8
Facebook Inc-A	FB US	USD	72.630	1,458,055	44.7	35.7	26.8	10.1	7.7	5.7	21.6	21.1
Qihoo 360 Technology Co-	QIHU US	USD	63.060	61,606	26.2	16.0	11.5	7.8	5.4	3.6	30.9	16.5
Simple Average					43.0	51.4	23.1	4.5	3.5	2.6	7.5	5.4
Weighted Average					44.1	36.4	26.2	9.7	7.4	5.5	21.0	20.0
E-commerce Companies												
Alibaba	BABA US	USD	88.850	1,732,222	51.2	38.3	30.0	41.9	13.0	9.1	88.0	26.6
VIPSHOP	VIPS US	USD	189.330	83,009	68.4	38.7	24.1	27.4	16.6	9.7	45.2	8.1
E-commerce China-Spon	DANG US	USD	11.460	7,246	57.0	19.1	10.3	6.2	4.4	2.9	14.4	2.1
Ebay Inc	EBAY US	USD	47.880	461,481	16.2	14.6	13.0	2.6	2.2	1.9	9.9	5.1
JD.com	JD US	USD	25.020	265,358	n.a.	n.a.	113.2	9.7	10.6	10.2	(32.1)	(19.6)
AMAZON	MZN US	USD	302.860	1,085,594	119.7	66.5	34.2	13.0	10.9	8.4	4.0	1.4
Gome Electrical Appliances	493 HK	HKD	1.280	21,708	13.3	11.6	9.7	1.0	1.0	0.9	8.1	3.1
Simple Average					54.3	31.5	33.5	14.6	8.4	6.1	19.7	3.8
Weighted Average					68.6	43.9	34.8	25.4	10.8	8.0	42.9	12.4
Search Engine Companies												
Google	GOOG US	USD	524.510	2,782,259	19.9	16.7	14.2	3.3	2.8	2.4	17.0	14.1
Yahoo! Inc	YHOO US	USD	38.115	294,101	27.6	31.2	30.2	1.9	1.9	1.6	10.1	5.8
Baidu Inc - Spon Adr	BIDU US	USD	211.220	574,524	33.6	24.0	17.6	8.6	6.3	4.6	28.4	15.6
Simple Average					27.0	24.0	20.7	4.6	3.7	2.9	18.5	11.8
Weighted Average					22.7	19.0	16.0	4.0	3.3	2.7	18.2	13.7
Overall Average					50.9	27.1	19.7	5.8	4.0	3.1	15.0	8.4
Overall Weighted Average					37.1	27.8	22.0	10.4	6.3	4.8	25.8	15.0

Source: Bloomberg.

Financial Statements and Ratios:

INCOME STATEMENT					
Year end Dec, RMB m	2012A	2013A	2014F	2015F	2016F
Online games operation	2,499	2,800	3,780	4,537	4,990
Licensing	172	149	127	105	86
Others	100	103	88	71	56
Total revenue	2,771	3,053	3,995	4,713	5,133
Cost of revenue	(540)	(712)	(947)	(1,131)	(1,242)
Gross profit	2,231	2,341	3,048	3,582	3,891
R&D expenses	(797)	(886)	(1,163)	(1,381)	(1,509)
S&M expenses	(521)	(730)	(959)	(1,136)	(1,242)
G&A expenses	(306)	(310)	(392)	(452)	(480)
Goodwill impairment	(41)	(77)	0	0	0
Operating profit	566	338	535	613	660
Total other income	128	154	216	280	350
Income before tax	694	492	751	893	1,010
Income tax	(116)	(70)	(107)	(127)	(144)
Gain from disposal of discontinued operation	0	166	0	0	0
Loss from discontinued operations	(30)	(44)	0	0	0
Net income	541	542	642	764	864
Non-controlling interest	7	2	2	2	3
EPADS (RMB)	11.305	11.117	13.054	15.430	17.381

CASH FLOW STATEMENT					
Year end Dec, RMB m	2012A	2013A	2014F	2015F	2016F
Total net income	547	544	644	766	866
Adjustments					
Share-based compensation	71	97	107	118	130
D&A	183	200	195	198	200
Others	54	(38)	157	195	246
Change in working capital	(116)	230	162	199	245
Cash flow from operating activities	739	1,033	1,264	1,476	1,687
CAPEX	(84)	(235)	(270)	(311)	(357)
Change in restricted cash and time deposits	(364)	665	45	36	29
Cash paid for equity investment	(200)	(256)	(94)	(113)	(135)
Purchases of short term investments	(1,437)	(1,710)	(1,796)	(1,885)	(1,980)
Others	373	1,546	1,740	1,765	1,780
Cash flow from investing activities	(1,712)	10	(375)	(507)	(663)
Short term bank loans	187	(527)	(17)	(14)	(11)
Dividends paid to shareholders	(608)	(137)	(161)	(191)	(217)
Others	45	45	45	45	45
Cash flow from financing activities	(375)	(618)	(133)	(160)	(182)
Effect of exchange rate changes on cash held in foreign currencies	(3)	(12)	(13)	(13)	(14)
Net increase (decrease) in cash and cash equivalents	(1,351)	413	744	796	827
Cash and cash equivalent at the beginning of year	2,150	800	1,212	1,956	2,752
Cash and cash equivalent at the end of year	800	1,212	1,956	2,752	3,579

Source: the Company, Guotai Junan International.

BALANCE SHEET					
Year end Dec, RMB m	2012A	2013A	2014F	2015F	2016F
Cash and equivalents	800	1,212	1,956	2,752	3,579
Short term investments	1,509	1,308	1,166	1,035	919
Restricted cash and time deposits	891	226	181	145	116
Others	315	666	752	853	972
Total current assets	3,515	3,412	4,055	4,786	5,586
Equity investment	228	470	564	677	812
Property, software & equipment	1,206	1,354	1,504	1,677	1,876
Goodwill	409	511	588	676	778
Intangible assets	229	331	456	587	729
Others	209	267	276	286	298
Total non-current assets	2,282	2,933	3,388	3,904	4,493
Short term bank loans	748	213	196	183	172
Salary and welfare payable	232	287	339	400	472
Deferred revenue	366	742	891	1,069	1,282
Others	374	539	600	675	765
Total current liabilities	1,720	1,782	2,026	2,326	2,691
Deferred revenue	57	39	35	31	28
Others	8	16	19	22	25
Total non-current liabilities	65	55	54	53	54
Paid-in capital	330	453	544	652	783
Statutory reserves	273	312	826	1,437	2,128
Accumulated other comprehensive loss	(81)	(127)	(146)	(167)	(192)
Retained earnings	3,466	3,832	4,100	4,347	4,571
Total shareholders' equity	3,989	4,471	5,325	6,269	7,290
Non-controlling interest	23	37	39	41	44
Total equity	4,012	4,508	5,364	6,310	7,334
BPADS (RMB)	83.887	92.397	109.037	127.502	147.585

FINANCIAL RATIOS					
Year end Dec	2012A	2013A	2014F	2015F	2016F
Profitability					
Gross margin (%)	80.5	76.7	76.3	76.0	75.8
Operating margin (%)	20.4	11.1	13.4	13.0	12.9
Net profit margin (%)	19.5	17.8	16.1	16.2	16.8
Ratios					
ROE (%)	13.6	12.8	13.1	13.2	12.7
ROA (%)	9.4	8.9	9.3	9.5	9.2
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

17 October 2014

Perfect World 完美世界 (PWRD US)

Company Report

Company Rating Definition

The Benchmark: NASDAQ Composite Index

Time Horizon: 6 to 18 months

Rating	Definition
Buy	Relative Performance >15%; or the fundamental outlook of the company or sector is favorable.
Accumulate	Relative Performance is 5% to 15%; or the fundamental outlook of the company or sector is favorable.
Neutral	Relative Performance is -5% to 5%; or the fundamental outlook of the company or sector is neutral.
Reduce	Relative Performance is -5% to -15%; or the fundamental outlook of the company or sector is unfavorable.
Sell	Relative Performance <-15%; or the fundamental outlook of the company or sector is unfavorable.

Sector Rating Definition

The Benchmark: NASDAQ Composite Index

Time Horizon: 6 to 18 months

Rating	Definition
Outperform	Relative Performance >5%; or the fundamental outlook of the sector is favorable.
Neutral	Relative Performance is -5% to 5%; or the fundamental outlook of the sector is neutral.
Underperform	Relative Performance <-5%; or the fundamental outlook of the sector is unfavorable.

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 27/F., Low Block, Grand Millennium Plaza, 181 Queen's Road Central, Hong Kong.
 Tel.: (852) 2509-9118 Fax: (852) 2509-7793
 Website: www.gtja.com.hk