

### Qualcomm: Wired for growth but uncertainty in China weighs on the price

Qualcomm has a unique business model in that, although it manufactures and sells semiconductors, what is especially attractive about the business is its intellectual property licensing. The Group played an essential role in developing CDMA technology, one of two basic technologies used in mobile phones globally, and the company has a treasure trove of patents. This has resulted in the firm developing licensing agreements with smartphone manufacturers and whenever a smartphone is activated Qualcomm is effectively paid between 3%-5% of that specific device's overall cost in the form of a licensing fee. With past robust growth in mobile and the industry expected to continue on this path (in August the *International Data Corporation* [IDC] said worldwide smartphone shipments topped 300mn [up 25% YoY] in 2Q14 - the first time this quarterly mark had been reached), Qualcomm has seen a huge tailwind from mobile. Added to that, its licensing has extremely high margins. Although licensing royalties make up only c. 30% of overall revenue (see *Figure on page 5—Operating profit by division, FY14*), the segment has a very high operating margin of c. 88% vs the 17% operating margin for its chip business. This effectively means that licensing royalties contribute two-thirds of Qualcomm's overall operating profit.

However, recently Qualcomm has been beset by very real pressure from competitors and issues in China, its biggest market (including the spectre of a large fine), which have been especially concerning. Nevertheless, despite this, we believe Qualcomm is well positioned in terms of its technology, ecosystem and global brand to benefit from long-term growth in mobile and, added to that, it will likely get a significant boost in 2015 when China rolls out 4G. The Company also currently has an attractive valuation (with a forward P/E of only c. 12.5x) and a decent dividend yield of c. 2.2%.

While the issues faced in China are of concern (we detail that later in the report), we believe once it has been resolved or there is more certainty around the size of the potential fine it might have to pay the Chinese authorities (market pundits believe it could go up to \$1bn), the market will be less likely to punish the company's share price. For a company whose net income exceeded c. \$7.9bn in FY13 and \$9.0bn in FY14, the question arises what the impact of a \$1bn+ fine will be and, in our view, although it is significant, Qualcomm will be able to survive and prosper. There is also the more likely scenario that Chinese authorities

would accept a compromise if Qualcomm were to make certain commitments regarding its technology and the licensing of technology in that country in lieu of a fine. In August, China's National Development and Reform Commission (NDRC) said in a statement that, following a meeting with the company, Qualcomm had indicated it was willing to change its pricing practices to avert antitrust action. Reports have also surfaced recently that the fine will be announced later in November and will include "... fines, patent fee adjustments, and elimination of non-exclusive and non-sublicense clauses in licensing agreements."

#### Qualcomm forecasts:

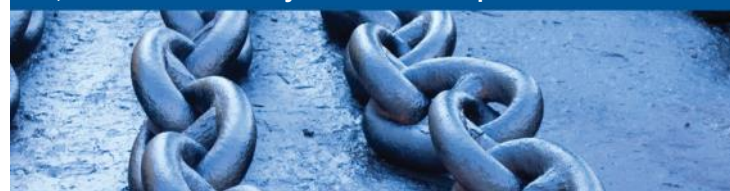
Qualcomm	FY14	FY15E	FY16E	FY17E
September y/e				
EPS (\$)	4.7	5.2	5.7	6.2
% growth		10%	9%	8%
DPS (\$)	1.5	1.7	1.9	1.9
P/E	15.1x	13.7x	12.6x	11.6x
DY	2.2%	2.4%	2.7%	2.6%
Share price (\$)	71.47			
12-mnth fwd P/E	13.5x			

Source: Bloomberg consensus, Anchor Capital



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Although Qualcomm's high revenue growth (c. 27% in FY12 and 30.4% in FY13) has slowed (to c. 7% in FY14 and a consensus estimate of c. 10% in FY15), we view its fundamentals as remaining attractive. It has a strong balance sheet, no debt, a leading position in the mobile market and it returns value to shareholders through buybacks and increasing dividend payments.

While the share has underperformed this year (mainly due to the issues in China), it remains a good, high-margin business. This despite margins declining due to a 20%+ increase in operating expenses each year between 2011 and 2013, attributed to investments in research and development (R&D) and the development of new technologies. Also, although most of its profit comes from technology licensing, the majority of sales come from semiconductors (an expanding business).

Below we discuss what we see as the growth drivers and possible pitfalls the company faces.

**Qualcomm positives:**

We see the following as growth drivers for the company:

- **Innovation:** Qualcomm became a pioneer on the back of innovation when it developed CDMA technology, which allowed for better cellular communications and it has continued to push innovative technologies. For the most part, it generates profit by licensing its intellectual property to companies like Apple, Samsung etc., while it also has a successful devices business that uses Google's Android platform. In terms of its CDMA technology alone, Qualcomm has over 10,000 patents.
- **Highly cash generative company:** In FY13 Qualcomm generated operating cash flows of \$8.78bn, up 46% YoY, and representing 35% of overall revenues. While net cash provided by operating activities slowed to 1.2% YoY growth in FY14 (to \$8.9bn), it is still a significant amount of money. This number is also up c. 82% from FY11.

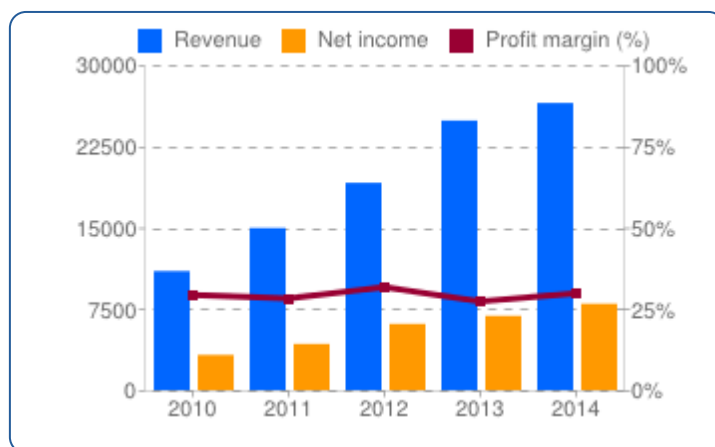
**Net cash provided by operating activities:**

	\$mn	% Change
FY11	4900	
FY12	5998	22.4
FY13	8778	46.3
FY14	8887	1.2

Source: Company data, Anchor Capital

Because it's a highly cash-generative business, it has ample resources to keep up its competitive position with aggressive R&D spending. Qualcomm also generated \$7.7bn in free cash flow in FY14 – this in a results period Wall Street saw as disappointing. Added to that, with almost no debt on the balance sheet the Group's cash is increasing and Qualcomm had \$32bn in cash and investments on its balance sheet in FY14 vs \$29.4bn in FY13 – up c.9% YoY. In addition, it paid \$1.9bn in dividends to shareholders which means that Qualcomm's free cash flow payout ratio stands at a healthy c. 29%.

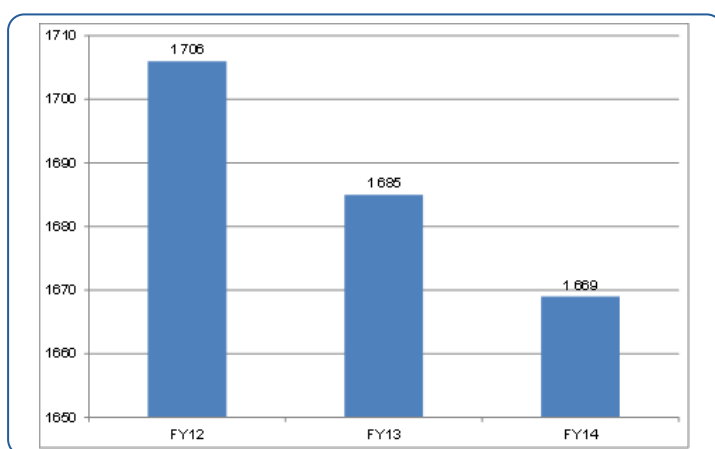
**Qualcomm revenue, net income and profit margin, FY10-FY14, \$mn**



Source: Company data

- **Returning cash to shareholders:** The company has ample cash available for shareholder payouts. In FY14 it returned \$7.14bn in dividends and share repurchases - \$4.55bn through repurchases of 60.3mn shares (historically it seems to buy back c. \$1bn-\$1.5bn in shares every quarter) and \$2.59bn (\$1.54/share) in cash dividends. Currently the DY (which has increased for 13 consecutive years) is just over 2%. Although this might seem to some a low yield, the company is expected to grow its dividends at YoY double-digit rates in FY15 (+10.4% YoY) and FY16 (+14.1% YoY). For FY14, Qualcomm increased its dividend by over 28% YoY and according to YCharts, the dividend yield is now at its highest point in the past five years. Management have also publicly undertaken to share profit with shareholders by paying higher dividends and, in general, the company aims to return c. 70%-80% of free cash flow to shareholders in dividends and buybacks. Since 28 September it repurchased and retired an additional 8.6mn shares of common stock for \$638mn.

**Total common shares outstanding FY12-FY14, mn:**



Source: Company data

- Mobile industry growth:** The mobile industry should continue to grow in the long term (which will benefit Qualcomm) with *Wireless Intelligence* expecting the number of global mobile connections to jump from 6.6bn in 2012 to 8.3bn by 2016 – up c. 26%. The main reason for this is the move away from voice calls to data-based applications, which includes video, social networking, gaming, cloud computing etc. Another key growth driver for the industry is the rollout of next-generation networks globally (4G in China next year). All of this means demand for Qualcomm technologies.
- Internet of Things:** Qualcomm has been building up its business for the so-called Internet of things (IoT), a development of the Internet where everyday objects have network connectivity (for example a user controls their cars, lights, alarm etc. using a smartphone), allowing them to send and receive data. This is a logical progression for a company so dominant in the mobile space, in our view. It also means it should be a very easy transition for the group. IoT is by all accounts the next big wave in computing with *Gartner* estimating that the IoT market will grow c. 30 times (excluding PCs, tablets and smartphones), from an installed base of 0.9bn in 2009 to 26bn by 2020, resulting in \$1.9trn in global economic value-add through sales into “diverse end markets”. The *IDC* estimated this industry could be worth c. \$7.1trn by 2020 from \$1.9trn in 2013.

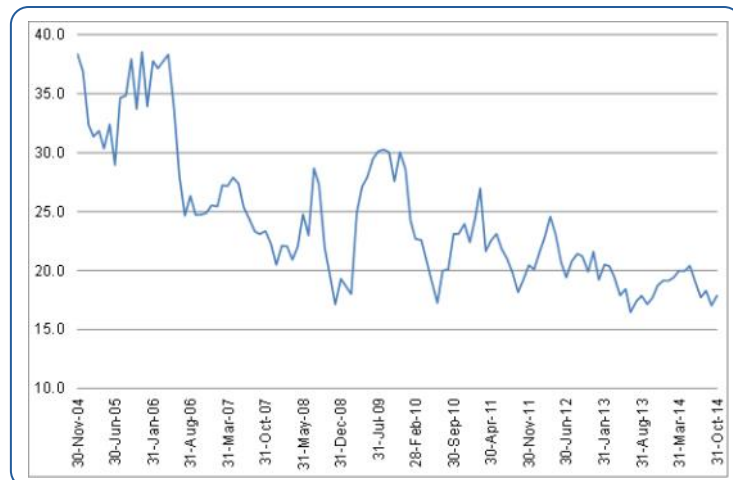
Qualcomm’s announcement in mid-October, that it would buy UK chipmaker CSR in a \$2.5bn deal is seen by market commentators as a sure sign the company is extremely serious about IoT. CSR is expected to expand Qualcomm’s technology for connected appliances. The CSR acquisition can likely also be an indication Qualcomm intends becoming more focused on making chips for devices (connected cars, thermostats etc.) that a user can control from their mobile phone. The acquisition is expected to be completed by mid-2015 and, according to Qualcomm, it will add to its EPS in FY16 - the first full year it will be included. Earlier this year Qualcomm also acquired a company called Wilocity, which makes Wi-Fi products that can be used in home Internet routers and appliances that connect to the Web. Qualcomm itself has also developed the All-Joyn platform, an open-source project that helps connected devices work together.

- Lucrative licensing business:** Its high-margin patent licensing business is a play on mobile growth, in general.
- The share price offers value:** Currently Qualcomm is very reasonably-valued, trading at c. 13.5x earnings (1Y fwd) and significantly off a c. 40x P/E in 2004. According to *Gurufocus* over the past 13 years, Qualcomm’s highest RoE was 41.98%, its lowest -10.63% and the median 16.90%. For FY14 its RoE, which has been steadily rising over the past five years, stood at 20.34% (see chart below—*Qualcomm historic RoE, 2004 to date*).

In terms of EPS growth, *Bloomberg consensus* expects it to grow by double-digits one year forward after which it slows to c. 9% and 8% in 2016 and 2017, respectively. We note that the uncertainty around China is weigh-

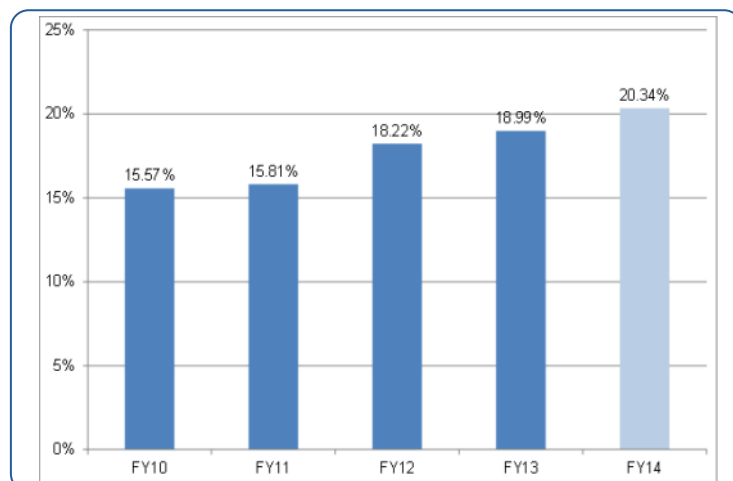
ing on earnings growth and once this is resolved we believe 2Y and 3Y fwd growth could again be in the double-digits. Nevertheless, the company has demonstrated a pattern of positive EPS growth over the past several years and we are of the view that this trend will continue.

**Qualcomm historic P/E, 2004 to date:**



Source: Bloomberg, Anchor Capital

**Qualcomm historic RoE, 2004 to date:**



Source: Bloomberg, Anchor Capital

**Negatives:**

We view the following as factors currently weighing on Qualcomm’s share price and which could impact its growth potential:

- Challenges in China:** Of great concern to investors (and the company itself) has been China. Qualcomm is in the unique position that it benefits from the sale of handsets even when these handsets don’t use Qualcomm’s chips. The reason for this is the company’s ownership of the aforementioned CDMA technology, which allows it to charge royalties on most phones connected to modern data networks. The company has more than a 30% share of the global mobile phone-chip market and an even higher share in China. Because Qualcomm owns so many patented technologies approved by the International Tele- com Union (ITU), it is near impossible for any mobile phone manufacturer to completely bypass it.

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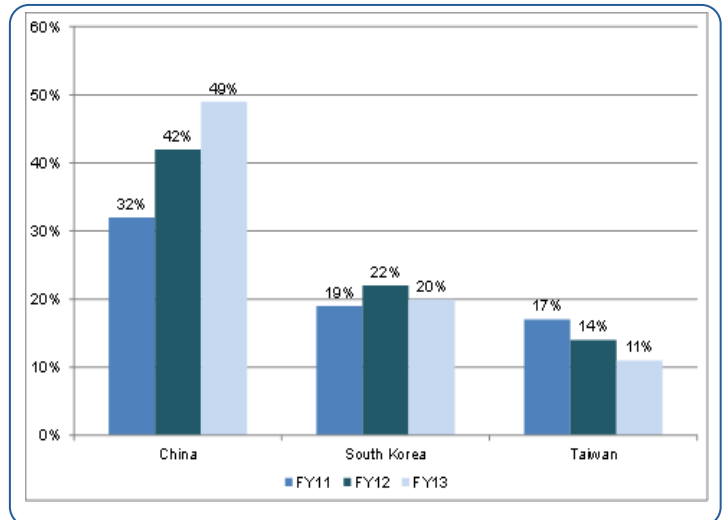
For every device sold, Chinese handset makers are supposed to pay up to c. 5% of that device's price to Qualcomm for its 3G patents (we note that Qualcomm told *Bloomberg* recently that its royalty on devices which only support 4G will be lower than that for 3G). However, for the past year or so China's smartphone manufacturers and Qualcomm have been embroiled in a dispute over patent payments, which has seen the country's device manufacturers taking complaints over high rates for chipmaker's royalties to China's NDRC. Qualcomm has now been the subject of an 11-month long antitrust investigation by the NDRC and the threat of a significant fine is hanging over its head. Under the country's anti-monopoly legislation a fine can be imposed of between 1% and 10% of a company's preceding year revenue and Qualcomm might have to pay more than \$1bn since it made \$12.3bn from China in FY13. Added to that it could be forced to make concessions in China that would hurt its extremely profitable business of charging royalties on phones that use its patents. The market hates uncertainty and company president Derek Aberle said at its FY14 results release that the group cannot update investors in terms of "expectations and timing" regarding the China investigation/fine. We note again that although chip sales account for most of its revenue, profit is fuelled by the abovementioned licensing fees.

The investigation by China is not unique, however and previously Qualcomm faced a similar investigation by South Korea's anti-trust agency (in 2009) which fined it \$208mn for "abusing its dominant position and discriminating against clients who used rivals' products". In that same year Qualcomm was also under anti-trust investigation in Europe on the back of complaints from European Union (EU) companies, but regulators dropped the case after Qualcomm and the firms reached an agreement. In China the handset vendors also want to change the way Qualcomm charges (it usually extracts a royalty as a percentage of the retail price of a device).

So while China continues to present huge opportunities for Qualcomm, especially with the rollout of 4G LTE, significant challenges also remain. Added to the anti-trust investigation certain licensees in China are underreporting sales of licensed products to Qualcomm which means a significant loss of revenue for the Group.

In FY13, almost 50% of Qualcomm's revenues came from China. Here we highlight however that although half its revenue came from China, it also received a significant portion of its revenue from selling chipsets to companies like Apple that have their supply chains in China (and from licensing patents as well). From the above it is clear that China, despite being extremely profitable for Qualcomm, has also been a very challenging market and the obstacles facing its business in China is the main negative that could impact its potential growth.

**Qualcomm biggest revenue generators – by country:**



Source: Company data

- Intensifying competition:** Qualcomm operates in an intensely competitive business arena. The company has big-name rivals such as Intel to contend with and at the same time it has to fend off competition from smaller companies that focus on the lower end of the market, especially in China. Qualcomm has also lagged in terms of tablets and this resulted in it recently losing out on a deal to supply chips for Microsoft's Surface 2 tablet when Microsoft went with NVIDIA instead.
- Qualcomm's current licensing model:** Although licensing provides high-margin revenues to the business, these revenues are far from guaranteed. Often licensees try to find approaches to renegotiate or terminate agreements (as is happening in China). This means that Qualcomm constantly has to deal with litigation, patent cases etc. and, for example, recently the company had to take a US\$10/share charge because of a patent case with ParkerVision.
- Emerging markets:** With the global smartphone market hitting saturation levels in developed markets like the US and Europe, Qualcomm has been moving more aggressively into emerging markets (EMs). Although there is significant room for growth in these market, pricing remains a huge issue since EMs generally have lower income levels which could result in significant margin pressures for the company. Government interference in EMs can also make it a difficult to do business.
- 1Q15 outlook disappointed the market:** The company said in November that its outlook for 1Q15 was below Wall Street's expectations which saw its share price drop (this was its second quarter of disappointing market expectations). For the current quarter (1Q15) Qualcomm said it expects to earn between \$1.18 and \$1.30/share on \$6.6bn-\$7.2bn in revenue. However, consensus forecasts had expected an adjusted profit of \$1.44/share on \$7.38bn in revenue, on average. Qualcomm forecast revenue for FY15 of between \$26.8bn and \$28.8bn - analysts on average had expected \$28.91bn.
- New government investigations:** At its FY14 results, Qualcomm also disclosed new regulatory investigations in the US and Europe around rebates and other financial incentives in the sale of its chips.

**Background:**

Qualcomm is a US global semi-conductor company that designs and markets wireless telecommunications products and services based on code division multiple access (CDMA—which refers to any of several protocols used in so-called second-generation (2G) and third-generation (3G) wireless communications which basically optimises available bandwidth), Orthogonal Frequency Division Multiplexing (OFDMA - a method of encoding digital data on multiple carrier frequencies) and other technologies. It has 157 worldwide locations and conducts business through multiple direct and indirect subsidiaries. Qualcomm operates through four segments:

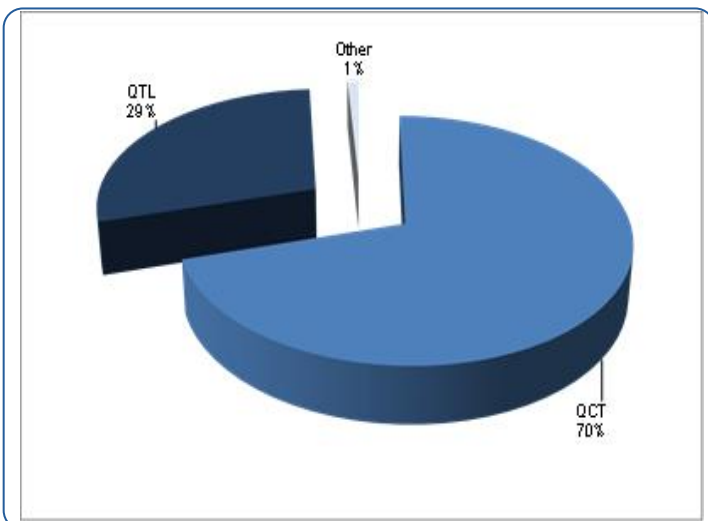
- **Qualcomm CDMA Technologies (QCT):** QCT develops and supplies integrated circuits and system software based on CDMA, OFDMA and other technologies for use in voice and data communications, networking, multimedia and global positioning system (GPS) products.
- **Qualcomm Technology Licensing (QTL):** QTL grants licenses or provides the rights to use portions of Qualcomm’s intellectual property portfolio.
- **Qualcomm Strategic Initiatives (QSI)** invests in early-stage companies that support the design and introduction of new products and services, as well as holds a wireless spectrum license.

Other businesses include:

- **Qualcomm Internet Services (QSI)** provides technology to accelerate the convergence of wireless data, Internet and voice services.
- **Qualcomm Government Technologies (QGOV)** provides US government agencies and contractors with secure wireless communications.
- **Qualcomm MEMS Technologies (QMT).**

Qualcomm’s **Omnitracs** segment (a fleet tracking business) was recently sold to a US-based private equity firm for \$800mn in cash. Although it had struggled in recent years and only made up a small part of Qualcomm’s revenue, it was once extremely profitable for the group, helping it fund the development of its core CDMA technology.

**Revenue by division, FY14:**

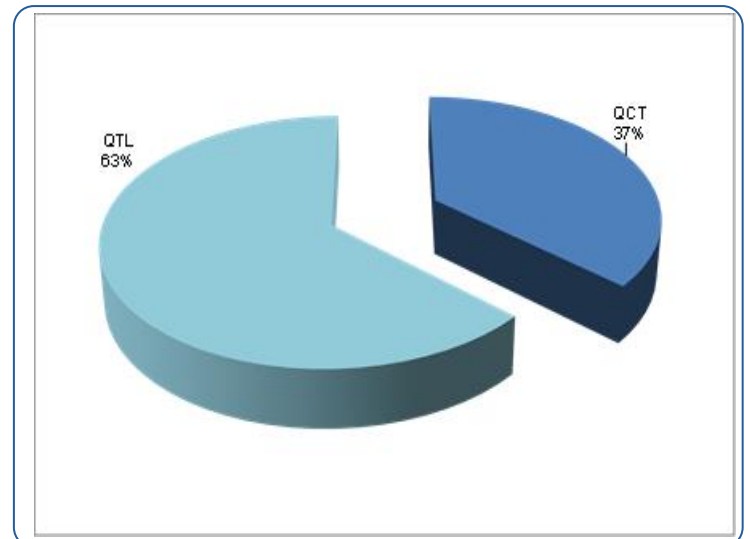


Source: Company data, Anchor Capital

**What it does?**

What is especially attractive about Qualcomm is its intellectual property licensing and it has a virtual treasure trove of patents, resulting in the firm developing licensing agreements with smartphone manufacturers. Although royalties make up only c. 30% of its overall revenue, the segment has a very high operating margin of c. 88% vs the 17% operating margin for its chip business. This means that licensing royalties contribute two-thirds of Qualcomm’s overall operating profit (see Figure below).

**Operating profit by division, FY14:**



Source: Company data, Anchor Capital

**4Q14/FY14 results**

Qualcomm reported 4Q14 and FY14 results in early November with quarterly net income coming in at \$1.89bn (+26% YoY), or \$1.11/share (+29% YoY). Excluding one-time items, Qualcomm said it earned \$1.26/share (up 20% YoY). Revenue totalled \$6.69bn (+3% YoY).

For FY14, Qualcomm reported revenue of \$26.5bn, up 7% YoY, while FY14 earnings excluding charges came in \$9bn or \$5.27/share - up 17% YoY. It posted diluted EPS of \$4.65 - up 19% YoY. The company said its chip sales remain strong, with 236mn cellular semiconductors shipped in the quarter, up 24% YoY. However, this was offset by the continuing issues collecting technology licensing fees in China (China accounts for c. 49% of profit but this number also reflects a significant portion of its China revenue coming from selling chipsets to companies like Apple [and Samsung] that have their supply chains in that country). The results were also overshadowed by the possibility of a significant fine from China’s NDRC for anticompetitive behaviour.

Qualcomm disappointed on:

- **EPS:** It reported \$1.11/share, or \$1.26/share excluding one-time items (consensus had expected \$1.31/share) for 4Q.
- **Outlook:** The outlook fell short of analyst expectations. For the current quarter (1Q15), Qualcomm said it expected to earn between \$1.18 and \$1.30/share on \$6.6bn - \$7.2bn in revenue.

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However, consensus forecasts had expected an adjusted profit of \$1.44/share on \$7.38bn in revenue, on average. Qualcomm also forecast revenue for FY15 of between \$26.8bn and \$28.8bn - analysts on average expected \$28.91bn.

We note Qualcomm's results rely heavily on its two largest customers/licenses which have historically accounted for a significant portion of revenues. In FY11-FY13, Apple (through its suppliers including Hon Hai Precision Industry Co., Ltd./Foxconn, its affiliates and others) and Samsung were Qualcomm's most important customers, accounting for c. 49% of its FY14 revenue.

### **Conclusion:**

Although Qualcomm's share price has underperformed this year (mainly due to the issues in China), the company still remains a good, high-margin business and although most of its profit comes from technology licensing, the majority of sales come from semiconductors (an expanding business). Since it owns CDMA technology, it benefits from handset sales even when its chips aren't used as it charges royalties on most phones connected to modern data networks. So, while the issues in China are of concern we do think it will be resolved to the satisfaction of both parties.

Also it needs to be borne in mind that Qualcomm supplies chips to the two largest players in the smartphone industry (Apple and Samsung), and it will continue to benefit as long as these companies ship devices. Samsung has said it will cut its smartphone models by up to a third next year but exact numbers haven't been forthcoming so its not possible currently to quantify the effect this will have on Qualcomm. However, we think Qualcomm should be cushioned from this and the China impact as major mobile carriers migrate to 4G LTE services and continue buying its other products. One of the fastest-growing global tech companies, Lenovo, also mainly uses Qualcomm chips for handsets shipped outside China.

Nevertheless, until there is clarity around its issues in China we would recommend investors hold the share (as a long-term investment). While more certainty around its future in China and the size of the NDRC fine (as well as the investigations in the EU and US) will likely see a significant positive turnaround in the company's share price, we also highlight that the Group's underlying business continue to perform well. Added to that it is also fair to assume that after losing c. \$13bn in market value since releasing results, it's likely the financial damage from these investigations has already been priced in.

### **Qualcomm's metrics:**

Spot (\$)	71.47
Mkt Cap (\$bn)	118.9
12M trailing P/E	16.28
12M fwd P/E	13.5
10-year average P/E	118.5
10-year average DY	1.59
FYE	29-Sep
P/Book ratio	3.05
12M trailing DY	2.15
12M fwd DY	2.38

Source: Bloomberg

**Marco de Matos**



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