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IRG Technology, Media and Telecommunications
and
Life Sciences Weekly Market Review

Week of 7 July – 13 July, 2008

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Equity Market Indicators					
Index	**Closing Level (7/11/2008)**	**% Change 1 Week Ago**	**% Change Month to Date**	**% Change 1/1/2008**	**% Change 1/1/2007**
S&P 500	1,239.49	-1.9%	-3.2%	-15.6%	-12.6%
Dow Jones Industrial Avg.	11,100.54	-1.7%	-2.2%	-16.3%	-10.9%
Dow Jones Tech. Index	386.72	-1.2%	-2.8%	-15.8%	-6.3%
Dow Jones Telecom. Index	258.25	-0.8%	-1.4%	-17.6%	-0.7%
NASDAQ Composite	2,239.08	-0.3%	-2.4%	-15.6%	-7.3%
The Street.com Net	249.54	-1.6%	-1.5%	-11.4%	0.9%
Japan Nikkei 225	13,039.69	-1.5%	-3.3%	-14.8%	-24.3%
JASDAQ	60.02	-1.3%	-1.5%	-16.8%	-30.4%
Japan Mothers	517.53	-4.2%	-4.2%	-33.9%	-53.4%
Korea KOSPI Composite	1,567.51	-0.7%	-6.4%	-17.4%	9.3%
Korea Kosdaq	542.96	0.9%	-8.0%	-22.9%	-10.4%
Taiwan Stock Exchange	7,244.76	0.2%	-3.7%	-14.8%	-7.4%
Singapore Straight Times	2,926.84	1.2%	-0.7%	-15.5%	-2.0%
Hong Kong Hang Seng	22,184.55	3.6%	0.4%	-20.2%	11.1%
Hong Kong GEM	772.59	1.6%	-3.1%	-42.8%	-36.9%
China Shanghai (A-Share)	2,996.28	7.0%	4.4%	-45.7%	6.4%
China Shenzhen (A-Share)	901.93	6.7%	8.6%	-40.7%	58.4%
China Shanghai (B-Share)	219.77	4.7%	5.0%	-39.9%	68.9%
China Shenzhen (B-Share)	477.64	2.5%	0.5%	-32.7%	10.2%

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Technology, Media, Telecommunications and Life Sciences Market Activity

NASDAQ/NYSE TMT and Life Sciences IPO Filings

Filing Date	Issuer	Industry Sector	Size (US$MM)	Description	Book-Runner	Co-Manager
N/A						

NASDAQ/NYSE Equity Markets: TMT and Life Sciences IPO Pricing

IPO Date	Issuer (Exchange)	Description	Size (US$MM)	Offer Price	Price on 2/15/08	% Change From Offer
N/A						

Asian Equity Markets: TMT and Life Sciences IPO Filings

Filing Date	Issuer	Industry Sector	Size (US$MM)	Description	Book-Runner	Co-Manager
N/A						

Asian Equity Markets: TMT and Life Sciences IPO Pricing

IPO Date	Issuer (Exchange)	Description	Size (US$MM)	Offer Price	Price on 2/15/08	% Change From Offer
N/A						

Asian Markets: TMT and Life Sciences Convertibles

Issuance Date	Issuer [Equity Ticker]	Description of Issuer	Maturity Date	Size (US$MM)	Per US$10,000 converts to	Convertible Until
N/A						

IRG Technology, Media and Telecommunications and Life Sciences Weekly Market Review

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Weekly Highlights

International

Mobile/ Wireless

- **Global mobile subscriptions continued to expand rapidly in 2007, fuelled by rapid growth in China, India, and Africa.** In-Stat research found that 667.6 million subscribers were added last year. However, due to some areas approaching saturation and a relatively slow world economy, subscription growth in 2008 is expected to be much less, adding only 382.5 million. India and China subscription numbers are growing at a fast clip, as more of the population gets their first mobile phone, and often their first phone of any kind. Most of these phones are low-end GSM devices, but some of them are starting to incorporate what were thought of as high-end features. By 2012, yearly growth in subscribers is expected to decrease to 163 million per year, roughly twice the population increase projected in that year.
- **Global capital expenditure on mobile communications continues to rise due to greater emphasis on new data services, increased traffic load, and preparation for 4G deployments.** With the U.S. economy's uncertain outlook in 2008, ABI Research expects North America's capex to remain flat this year, while other regions will increase their capex commitments for new 2G/3G deployments or expansions, all-IP service discovery platform upgrades, softswitch unified core systems, and preparations for 4G. ABI Research calculates that capex investment in 2007 exceeded US$131 billion, and will reach US$163.5 billion in 2013. The Asia-Pacific and North American regions are estimated to be the biggest spenders. Most current capex is still directed to voice services and 2G networks expansion, as the majority of subscriber net adds in recent years are coming from emerging markets that are fairly contented with simple voice calls and messaging services. However, there is also increased awareness of the need for early investment to ensure that networks are ready to support the capacity demanded by higher bandwidth data services.
- **Qualcomm says mobile television services will be a new growth engine for both mobile operators and content providers in the Asia-Pacific region.** Technology-savvy consumers in cities such as Hong Kong and Singapore will be especially receptive to television programmes and online chat rooms available through mobile devices. The company, which holds the patent to code division multiple access mobile technology, is now promoting its MediaFLO digital terrestrial mobile television technology around the world following its launch in the U.S. last year. Mobile television is the new kid on the block in terms of the convergence of media and telecommunications. For operators, it is expected to be an entry point to bundling traditional voice, mobile entertainment and internet access services under one umbrella.

Telecommunications

- **The global broadband telephony market will nearly double in size from 14.7 million subscribers in 2007 to 28.4 million lines in 2013.** Cable operators will see most of this increase, with their VoIP subscriber base nearly doubling during the forecast period, while growth for over-the-top VoIP providers will stagnate. The emergence of new service offerings, such as those from AT&T and Skype, will continue to generate buzz within the market. Cable multiple system operators (MSOs) have maintained momentum in the voice service market by continuing to focus on competitive triple-play service bundles. Of consumers who subscribe to a cable MSO-managed VoIP service, 47 percent said bundling had a strong influence on their selection of home phone service provider.

- **The total broadband revenue in Asia Pacific is projected to reach US$42 billion by the end of 2013 from US$28.1 billion last year with the compound annual growth rate (CAGR) of 7.1 percent.** By 2013, the household broadband penetration rate was forecast to hit 33.7 percent from 15.2 percent in 2007. The top five Asia Pacific countries with the highest household penetration rates last year were South Korea (90.8 percent), Hong Kong (83.8 percent), Taiwan (76.8 percent), Singapore (73.1 percent) and Australia (63.2 percent). The broadband subscriber base in the region was estimated to reach 321.8 million by the end of 2013 from 129.7 million last year, with a CAGR of 19.9 percent. Asia Pacific's broadband subscriber base was expected to reach 171 million by year-end, representing a year-on-year growth of 31.5 percent and a household broadband penetration rate of only 19.7 percent.

Japan

Hardware

- **Japan will stop pushing for legislation to charge royalties on the sales of iPods and other portable digital music players, giving in to opposition from electronics makers.** What is being dubbed here as "the iPod tax" has been tossed around for years. The tax would allow about 1 percent to 3 percent of the price of a digital recording device to go to recording companies, songwriters and artists. The Agency for Cultural Affairs had hoped to submit legislation to Parliament as early as this fall. But amid a flurry of criticism from electronics makers, a meeting of a panel studying the proposal failed to reach any agreement. The cultural agency proposed a compromise in May to charge only portable digital music players, such as Apple Inc.'s iPods, and digital hard disk recorders.

Telecommunications

- **DoCoMo will launch its BlackBerry service this August, targeting individuals, as well as small to midsize businesses.** The BlackBerry 8707h will be sold through its own online shops and DoCoMo's corporate business partners. The BlackBerry internet service will cost 3,045 yen (US$28.40) per month tax included. A discount packet-billing plan to be launched on September 1, called the BlackBerry data transmission package, will enable users to transmit up to 80,000 packets of data per month for a flat charge of 1,680 yen (US$15.70).

Semiconductor

- **Tokyo Electron said orders fell 35 percent in the fiscal first quarter because an oversupply of computer memory forced chipmakers to postpone spending plans.** Orders for equipment used to make chips and flat panels declined to 104 billion yen (US$973 million) in the three months ended June 30, from 159.3 billion yen (US$2 billion) in the previous quarter. Japanese makers including Tokyo Electron and Advantest Corp. may see a 6.6 percent drop to a combined 2.08 trillion yen for sales of gear used to make chips and flat panels this fiscal year. Tokyo Electron's orders have hit bottom and will begin to recover this quarter. Chipmaking equipment orders slid 27 percent to 72 billion yen (US$678 million) in the quarter.

Media, Entertainment and Gaming

- **Japanese videogame maker Square Enix Co. had launched its first game for Apple Inc's iPod, broadening its target hardware to the top-selling media player.** Square Enix, known for such blockbuster titles as "Final Fantasy" and "Kingdom Hearts", began offering the "Song Summoner: The Unsung Heroes" roll-playing game this week in Apple's iTune store. The game goes for US$4.99

in the U.S., 4.99 euros (US$7.84) in Europe and 600 yen (US$5.60) in Japan. Unlike some iPod games, which are modified versions of mobile phone games, "Song Summoner" was developed exclusively for iPod and is designed to take advantage of the machine's functionality. A game player picks a song stored in the iPod and the song determines the types and abilities of the fighters in the game, or "Tune Troopers".

Korea

Telecommunications

- **KT Corp. cut its 2008 earnings targets on its shrinking fixed-line business and would take action to counter competition, raising concerns of a price war in a sluggish market.** KT had lowered its operating profit target by 20 percent to 1.2 trillion won (US$1.21 billion) from a previously stated goal of 1.5 trillion won (US$1.5 billion). The company also cut its earnings before interest, tax, depreciation and amortization (EBITDA) target to 3.3 trillion won (US$3.3 billion) from 3.6 trillion won (US$3.6 billion), and slightly lowered its 2008 revenue target to 11.9 trillion won (US$12 billion). KT, which has about 90 percent of South Korea's fixed-line market and 44 percent of the country's broadband customers, has seen profits slide as it faces increasing competition from smaller rivals.

Mobile/Wireless

- **South Korea aims to lead the worldwide mobile industry in terms of market share within five years and increase cooperation with other Asian countries in developing next-generation technological standards.** The Ministry of Knowledge Economy aims to sell around 600 million mobile handsets and post US$70 billion in exports annually by 2012. Currently, South Korea is in second place in the global mobile industry after producing 250 million mobile phones and exporting US$29 billion worth of handsets last year. South Korea is home to Samsung Electronics and LG Electronics, the world's second and fourth-largest mobile phone makers. The industry has been undergoing an upheaval with efforts on technological convergence taking place across the world.

Semiconductors

- **Yingli Green Energy announced that it has entered into five new sales contracts to supply an aggregate of more than 7 MW of PV modules to five companies in Korea.** All modules will be used in projects located in Korea. Customers that signed these contracts include LG CNS Co., DMS Co., Hyosung Corporation, Nam Jung Energy Co., and Kaycom Corp, to which Yingli Green Energy will supply PV modules during the third quarter of 2008.

Hardware

- **LG Display Co. raised production-spending plans this year by 50 percent, defying an industry glut that JPMorgan Chase & Co. and Lehman Brothers Holdings Inc. say may extend to next year.** LG Display also forecast third- quarter profitability will fall more than analysts estimated. LG Display plans to invest about 1.4 trillion won (US$1.4 billion), part of its 4.5 trillion won (US$5 billion) spending plan for the year, to build a production line for monitor and notebook LCDs that is scheduled to start output in the second quarter. The company will also begin operating a bigger eighth-generation plant in the first half of 2009.
- **LG Electronics Co. said its global touch-screen phone sales surpassed the 7 million unit mark recently.** Sales in terms of units of the South Korean company's 11 models of touch-screen phones reached the mark at the end of June for the first time since LG introduced the "Prada" model, a joint

effort between LG and Italian fashion company Prada, in March 2007. The company sold some 2 million units of its "Viewty" handset, with a built-in 5-megapixel camera, around the world, followed by 1.6 million units and 1.3 million units of its "Venus" and "Voyager" models, respectively. Strong sales of the relatively high-priced models were attributed mostly to boosted recognition of the LG brand in the European and North American markets.

China

Internet

- **Macquarie Group and Seek agreed to invest a combined US$105 million in Zhaopin , owner of China's third-biggest recruitment Web site, to capitalize on a market where sales have almost doubled in the past two years.** Australia's biggest investment bank will buy 29 percent of the Beijing-based company for US$60 million and Seek will pay US$45 million to raise its stake to 43 percent. The sale will help unlisted Zhaopin hire workers in smaller Chinese cities, where the demand is growing faster than in major municipalities such as Beijing and Shanghai. Online recruitment in China generated 277 million yuan (US$40.4 million) in sales during the first quarter, almost double from two years earlier.
- **Alibaba Group will invest 2 billion yuan (US$293 million) over the next five years in wholly owned Taobao.com, China's leading online auction site by transaction value.** The investment will be spent on technological innovation and attracting new employees. Alibaba Group has invested a total of 1.45 billion yuan (US$212million) in Taobao since it was established in 2003. Alibaba Group expects Taobao's transactions to total 100 billion yuan (US$15 billion) this year.

Mobile/Wireless

- **Around one million iPhones have been unlocked and brought into China and are running on China Mobile's network.** According to In-Stat China, the number of unlocked iPhones potentially in use in China has more than doubled in the last six months (from around 400,000 in December 2007), a figure that does not include iPhones running on rival China Unicom's network. Apple had shipped 5.4 million iPhones globally by the end of first-quarter 2008, which means the one million devices could account for a sizable proportion of all iPhones in circulation. Negotiations between China Mobile and Apple over an official launch of the iPhone reportedly broke down over Apple's insistence on securing a portion of China Mobile's iPhone revenue.
- **DoCoMo has established DoCoMo China, as a wholly owned subsidiary in Shanghai, China. DoCoMo China will focus mainly on providing mobile solutions for corporate customers, especially locally based Japanese companies.** The office is expected to begin operating from the end of July, once the necessary governmental and commercial approvals have been obtained.
- **China's CDMA subscribers had exceeded 43 million by the end of the first quarter this year.** It is predicted that by 2011, global CDMA subscribers will surge to 720 million, with a compound annual growth rate of 13.8 percent. At present, the Middle East and Africa remain the most valuable areas to be tapped. The increase in the number of subscribers ushers in the prosperity of CDMA equipment manufacturers, and ZTE, Alcatel-Lucent, Huawei, Nortel and Motorola all become big gainers in the world network equipment market.
- **Nokia Siemens Networks is to power China Mobile's expansion drive, signing a 550 million euros (US$874.4 million) network expansion frame agreement.** Under the contract, Nokia

Siemens Networks, a joint venture between Finland's Nokia Corp. and Germany's Siemens AG, will build the radio and core network for China Mobile, in provinces and cities across China. The deal represents the strengthening of our position as a leading solution provider to China Mobile. The deal has strategic importance as it may help pave the way for larger 3G orders in China later on.

Telecommunications

- **China's telecoms reshuffle unlikely to deter Korean operator from participating in market, but could make its plan to offer mobile services there difficult.** SK Telecom Co. may have to reevaluate its expansion strategy in China's fast-growing telecommunications market following a telecom sector revamp in the mainland. While the South Korean mobile carrier isn't likely to withdraw from China altogether, the company may find it increasingly difficult to raise its stake in local operators due to stiffer competition from foreign telecom firms and China's policy of preventing significant foreign influence in its telecoms sector. Facing slow revenue growth at home, with more than eight out of every 10 people carrying a cellphone, SK Telecom, with a market capitalization of 15.5 trillion won (US$14.8 billion), has been looking to expand overseas. SK Telecom has helped China Unicom run its code division multiple access network for a second-generation wireless service.
- **Pacnet set up a joint venture with China-based firm Zhong Ren Telecom, to offer internet protocol services to Chinese companies and expand its presence in the country.** Pacnet and Zhong Ren Telecom will each hold a 50 percent stake in the joint venture. The two firms did not disclose financial details. Pacnet, formed from China Netcom's former Asia Netcom unit and Singapore internet services provider Pacific internet, teamed up with a group of companies including Google and SingTel in February to build a trans-Pacific undersea cable.
- **BT Group plans to expand its workforce on the mainland by 10 to 15 percent within a year to meet increasing demand from the banking and logistic sectors.** On the mainland, the company's customers include Industrial and Commercial Bank of China, Bank of Communications, Air China Logistics and China Shipping Container Lines. Multinational customers include Reuters, Nestle and PepsiCo. China Netcom and China Telecom provide BT with network support in the country while Huawei Technologies and ZTE Corp supply hardware to the company.
- **China Telecom has appointed Shang Bing as president and chief operating officer of the company, replacing Leng Rongquan who resigned from his posts.** The mainland telecom operator did not give any reason for Leng's resignation. Shang Bing, a 52 year-old senior economist, is currently a vice president of China Telecommunications Corp, the controlling shareholder of the listed company. China Telecom also appointed Yang Xiaowei as an executive vice president of the company. Yang, a 44 year-old senior engineer, is also a vice president at China Telecommunications Corp.
- **Huawei Technologies Co. said its profit rose 32 percent in 2007 on increased orders from clients such as Vodafone Group Plc and China Mobile.** Net income climbed to US$674 million, from US$512 million in 2006. Sales rose 48 percent to US$12.6 billion. The company had sales of US$12.6 billion in 2007, up from US$8.5 billion a year earlier. The company realized global contract sales of US$16 billion in 2007, up 45 percent year-on-year. International markets accounted for 72 percent of revenue. Huawei has achieved a growth rate of over 150 percent in developed markets, such as Europe, the U.S. and Japan, while managing strong growth in emerging markets, including the Asia-Pacific, Latin America, the Middle East and North Africa. In mobile networks, Huawei won 45 percent of all new UMTS/HSPA contracts in 2007, making it a top-three supplier for GSM globally.

- **ZTE Corporation's global sales of mobile phones will leap 61 percent to 50 million units this year.** The company grew into the world's sixth largest mobile phone maker following Nokia, Motorola, Samsung, LG, and Sony Ericsson in 2007, but it gained only 1.3 percent growth in its mobile phone revenues in the first quarter of this year. ZTE will seek booming growths in the coming two years thanks to China's telecom industry regrouping and the to-be-expanded TD-SCDMA networks. The company will gain 11 billion yuan (US2 billion) revenues from the telecom industry regrouping in 2009 because China Telecom and China Unicom will spend more money on network upgrading. Moreover, if the third-generation mobile license is granted, it will obtain 6 billion yuan (US$878 million) revenues at least next year thanks to the 3G infrastructure construction.
- **China Telecom sets a strategic goal to lift the number of CDMA subscribers to 100 million in 2009, rivaling its peer China Mobile.** China Telecom, which is taking steps to achieve the goal, have mapped out a plan to set up a mobile business operation that is said to be under the charge of Yang Xiaowei, deputy general manager for China Telecom. The telecoms operator has already nominated management executives for all the divisions under its newly formed operation except the terminal customizing unit. In a bid to come up with the demand for CDMA terminals, China Telecom earlier set up a terminal customizing unit engaged in customization, procurement and distribution of mobile devices.
- **Sales outlets of China Netcom began accepting GSM mobile telecom business of China Unicom in Beijing.** However, it is still pending when China Unicom is able to carry out businesses of China Netcom. Insiders from China Netcom say that China Netcom's Beijing branch is not alone as China Netcom has started to accept businesses of China Unicom in many cities around the country. Even before the completion of the merger, China Unicom and China Netcom had sent employees to each other for trainings.
- **ChinaTel Group has completed the installation of the first phase of an internet wireless network in Beijing.** The wireless network is live and provides internet access services across approximately 100 sq km of metropolitan Beijing. Wireless broadband services will be provided on the 3.5 GHz radio frequency spectrum that the Chinese government has granted use to Chinacomm for its WiMAX broadband services.

Media, Entertainment and Gaming

- **Perfect World Co. announced that "Zhu Xian" was launched in Taiwan through Game Flier International Corp., a subsidiary of Soft-World International Corp. on June 30, 2008.** "Zhu Xian," an online game developed based on a popular Internet novel with the same name, has been well-received by domestic online game players since its launch in China in 2007. Licensing agreements for exporting the game to nine countries and regions including Taiwan have been signed so far.
- **The9 announced that it would soon kick off inner beta test on Audition2.** The Chinese cyber game vendor was licensed the exclusive operation right in May last year from South Korea-based game developer G10 Entertainment under a cooperative agreement. Audition2 is the upgraded version of Audition. It is an online 3D leisure dancing competition cyber game, with unbeatable music experience. The game recorded 780,000 game players simultaneously at maximum. Based on its predecessor, Audition2 has added new features and online community-oriented functions. Chen Xiaowei, president of The9, says that lately it joined hands with South Korean game vendor T3 to set up a joint venture to run and manage a series of cyber games including Audition2. The partnership with T3 deepens the cooperation between the two companies in cyber game development and localization.

Hardware

- **Lenovo Group will see sales growth in its core domestic market slip in its fiscal first quarter, weighed down by the impact of the Sichuan earthquake.** Add that to lingering slow demand in North America, the company could see lower than forecast global shipments and revenue in the quarter to June. Lenovo's personal computer shipment growth on the mainland was 15 percent in the quarter to June, down from 24 percent in the quarter to March. Lenovo's Greater China sales geography makes up its largest market worldwide. It accounted for 34.5 percent of company's revenue in its fiscal fourth quarter to March, while its Americas geographical market contributed 27.5 percent. Sichuan accounted for 3 percent of total personal computer shipments on the mainland.

Taiwan

Telecommunications

- **Chunghwa Telecom Co. Ltd. had a parent-level net profit of NT$4.64 billion (US$153 million) in June, up from 3.80 billion posted in May.** Parent sales during the month fell to NT$15.73 billion (US$518 million) from 15.87 billion a year earlier. There was a cumulative net profit of NT$23.32 billion (US$768 million), or NT$2.40 (US$0.08) per share, in the first six months of the year, without giving comparative figures. The first-half EPS attained 53.7 percent of its full-year forecast. Six-month parent sales increased to NT$93.37 billion (US$3.1 billion) from 92.33 billion.
- **Chunghwa is still in discussions to launch Apple Inc.'s new iPhone in Taiwan.** Chunghwa Telecom will be selling iPhones in Taiwan starting September.

Hardware

- **Delta Electronics, Inc., announced that its consolidated sales revenues for June 2008.** Sales totaled NT$12.1 billion (US$399.3 million), representing a 13 percent increase as compared to NT$10.7 billion (US$352.6 million) for June 2007 and a 1 percent decrease as compared to NT$12.3 million (US$404 million) for May 2008. The Company's cumulative consolidated sales revenues from January to June in 2008 were NT$69.7 billion (US$2.3 billion), a 19 percent increase as compared to NT$58.6 billion (US$1.9 billion) for the same period last year.
- **Hon Hai Precision Industry Co. posted its slowest monthly sales growth in 19 months.** Hon Hai, which makes games consoles for Sony Corp. and iPhones for Apple Inc., posted a 14 percent increase in June sales to NT$107 billion (US$3.5 billion), the smallest increase in monthly sales since December 2006.

Semiconductor

- **Nanya Technology Corp has raised contract manufacturing prices for dynamic random access memory (DRAM) chips for the first half of July by 5 percent from June second-half levels.** The price increase came amid a loss suffered by the DRAM operations. But the magnitude of price increase was limited by still high inventories at computer contract makers.

Information Technology

- **Revenue of Taiwan's information technology (IT) service market reached US$1.88 billion in 2007, up 2.7 percent from previous year.** In the second half of 2007, IT service revenue in Taiwan was US$961 million, up 3.7 percent from the same period of previous year. IDC Taiwan, the local branch of the premier global provider of market intelligence and advisory services, pointed out that three major IT service engagement types account for the greatest market share, including technologyproduct services. The top-five IT service providers in Taiwan are IBM Global Services (accounting for 11.9 percent of total revenue), HP (6.3 percent), Systex Corp. (4.1 percent), Chunghwa Telecom (2.7 percent), and Mitac (2.5 percent). Some IT service providers that rely much on governmental bidding projects would benefit from the government's approval of some budgets for the projects in the second half of 2007.

Hong Kong

Telecommunications

- **PCCW Ltd., Hong Kong's biggest phone carrier, may pay its highest rates to borrow $3 billion in loans for a new unit that will hold the company's main assets, said people familiar with the deal but declined to be identified because the information isn't public.** HKT Group Holdings Ltd. may need to pay between 175 to 250 basis points above the benchmark lending rate for the five-year part of the loans. PCCW-HKT Telephone's 6 percent $500 million bonds maturing in 2013 traded at 308 basis points above U.S. Treasuries on July 11, up 8 basis points from the end of June, according to BNP Paribas SA's prices. Banks, saddled with at least $409.9 billion of writedowns and losses since the beginning of last year from the collapse of the subprime-mortgage market, are demanding higher interest charges from even their top investment-grade clients, as they seek to preserve capital and limit risk. PCCW said on June 27 it plans to use proceeds from the sale of a stake in HKT Group to repay debt at PCCW and PCCW-HKT Telephone, before new investment-grade rated debt is raised at HKT Group. PCCW-HKT Telephone, which provides local and international telephony, local data and broadband services, is rated BBB by Standard & Poor's and Baa2 by Moody's Investors Service. Both ratings are the second-lowest investment grade.
- **Hong Kong's PCCW expects to shortlist bidders for a 45% stake in a newly formed telecoms, media and IT unit HKT Group Holdings within a month, after receiving an estimated eight expressions of interest from potential buyers including private equity firms, Reuters reports.** The stake is expected to be worth upwards of US$2.5 billion. PCCW's managing director Alex Arena told reporters that some of the interested companies had broadband television investments in Taiwan and South Korea, but did not name any private equity groups. TPG Capital, Macquarie Group, Blackstone Group, Providence Equity Partners, Kohlberg Kravis Roberts and MBK partners are believed to be amongst the interested parties. The auction is being managed by UBS. TPG and Macquarie were the main contenders for PCCW's assets two years ago, in what was mooted to be a $7 billion deal before the Chinese government intervened.
- **Hutchison Whampoa denied an Italian newspaper report that Egyptian billionaire Naguib Sawiris had offered to buy its struggling 3 Italia telecoms unit for close to 4 billion euros (US$6.3 billion).** Sawiris, who owns Italian mobile phone operator Wind, wanted to expand his empire. But Hutchison said the report was incorrect. The newspaper added that Sawiris had proposed a deal to Hutchison owner and Hong Kong billionaire Li Ka-shing, who thought Sawiris' initial offer too low and who now appeared to be seeking another 1 billion euros (US$2 billion) on top of that. Sawiris, who also chairs Egypt-based mobile operator Orascom Telecom , had engaged Credit Suisse to advise him on a deal.

Singapore/Malaysia/Philippines/Indonesia/India

Telecommunications

- **AT&T Inc is close to buying Malaysia's Maxis Communications' 74 percent stake in Indian mobile operator Aircel. AT&T, which is seeking to re-enter the cellular market, has valued Aircel at US$5-$6 billion.** Maxis, Malaysia's top mobile services firm, holds 74 percent in Aircel, the maximum permissible by Indian law, with the remainder held by India's Apollo Hospitals Enterprises . Aircel, which has 7,000 telecom towers, has nearly 11 million subscribers in India. AT&T, which has applied for licences in India in partnership with the Mahindra Group, was reported last year to be eyeing a wireless acquisition in the fast-growing market.
- **Malaysia's TM International and Indian mobile operator Idea Cellular will launch an open offer on Aug. 22 to buy up to 20 percent of Spice Communications.** The mandatory offer follows a three-way deal struck to acquire Spice by Idea Cellular, India's fifth-largest mobile operator. Under the deal, TM International's, a unit of Telekom Malaysia , 39.2 percent stake in Spice will be converted into Idea shares. TM will also pay for a preferential allotment that will give it around a fifth of Idea.
- **South Africa's MTN and India's Reliance Communications may continue their tie-up talks beyond the deadline.** MTN and Reliance agreed in May to 45 days of exclusive negotiations to create a global 10 telecoms company. An extension would give Reliance Communications' chairman Anil Ambani some time to try to resolve a claim of right of first refusal on the telecom's shares by his estranged brother Mukesh, who runs Reliance Industries, India's largest company. MTN, sub-Saharan Africa's top mobile operator, is nervous about entering a deal with a legal cloud over it and has looked at ways to restructure a transaction. The discussions had initially focused on a takeover of Reliance by MTN, but now the companies are weighing the reverse, a takeover of MTN by Reliance.
- **Philippine Long Distance Telephone Co. (PLDT), added more than 1.6 million mobile phone subscribers in the second quarter, beating its 1.5 million target.** PLDT expected rising fuel and food costs as well as a volatile peso to weigh on sales, trimming its revenues and core net profit this year. PLDT has set core earnings guidance of 37 billion pesos this year, up 5 percent from 2007. In the first quarter, PLDT's core net profit climbed 11 percent to 9.3 billion pesos (US$203 million).
- **Connectivity Unlimited Resource Enterprise (CURE) is expecting an additional 60,000 to 70,000 customers to subscribe to its latest service, uMobile, by the end of this year.** Around 5,000 to 10,000 people had subscribed to this service within the first month of its commencement. The move comes against a backdrop of rising mobile subscribers in Philippines. BMI estimates that there will be 62.5 million mobile subscribers in 2008, with the total rising 13 percent by 2012 to 75.14 million. Over this period, penetration will rise from 69.7 percent to 78 percent.
- **Ayala has sold a part of its stake in Globe Telecom to its partner SingTel for 4.6 billion pesos (US$101 million).** The capital raised through this sale will be invested by Ayala in Integrated Microelectronics (IMI), its Business Process Outsourcing (BPO) and electronic manufacturing service subsidiary. This move by Ayala has been in part due to anxiety over IMI's planned Initial Public Offering (IPO) and listing during a period of unstable financial markets. The move comes against a backdrop of rising mobile subscribers in Philippines. BMI estimates that there will be 62.50 million mobile subscribers in 2008, with the total rising by 13 percent as of 2012 to 75.14 million. Over this period, penetration will rise from 69.7 percent to 78 percent.
- **Vodafone could be forced to pay more than US$4 billion if it loses its court case relating to tax claims by the Indian government over its Hutchison Essar acquisition, reports the Financial**

Times. India is trying to levy US$2 billion of capital gains tax on Vodafone's 2007 US$11 billion acquisition of Hutchison Essar, despite Vodafone being the buyer and not the seller of the asset, on the grounds it should have withheld the tax on behalf of the government. Vodafone argues that the transaction is not taxable because the deal itself took place overseas. The government can award a penalty which would bring the final sum payable by the operator to over US$4 billion. Vodafone opposes the amendment on the grounds that India's constitution forbids imposing such penalties retrospectively. Both sides concluded their arguments in the Bombay High Court, and a verdict is expected in the next few weeks.

United States/Canada

Mobile/Wireless

- **The U.S. International Trade Commission staff sided with Samsung Electronics Co. in a patent dispute against InterDigital Inc.** The commission found that Samsung didn't break trade rules by importing mobile handsets and components that InterDigital said infringed its patents. InterDigital has accused both Nokia Oyj and Samsung of violating its patents related to so-called 3G technology.

Media, Entertainment and Gaming

- **Americans are watching more television at home than they did last year even as time spent browsing the Internet and watching video online is increasing.** As of May, people on average watched more than 127 hours of TV monthly, up 4 percent from a year earlier, and spent more than 26 hours a month online, a gain of 9 percent. People spent about 5.5 hours combined watching video on the Internet or mobile devices, the first time the media researcher recorded such measurements. More channels from digital cable and satellite services are boosting traditional television audiences. More than 65 percent of U.S. homes receive digital cable or satellite TV, averaging about 160 channels. Adults 65 and older watched the most TV from their homes, averaging about 178 hours a month, compared with about 103 hours for those ages 18 to 24 years. The younger demographic spent more time than their elders accessing video on a mobile phone or the Internet.
- **SEGA Mobile announced the release of Super Monkey Ball for the iPhone and iPod Touch for US$9.99.** Super Monkey Ball takes full advantage of Apple's iPhone OS to deliver a unique and immersive gaming experience with action in full 3D. Apple's new App Store will provide iPhone users with native applications in a variety of categories including games, business, news, sports, health, reference and travel.

Internet

- **Yahoo investors may get less than US$30 a share for their stock if Carl Icahn succeeds in replacing the board and selling the Internet company to Microsoft Corp.** Microsoft had offered to buy Yahoo for as much as US$33, or US$47.5 billion, before dropping its bid May 3. An Icahn-backed board would be solely focused on selling Yahoo, giving the company less leverage in negotiations. Investors may take what they can get. Before Microsoft made its offer public on Feb. 1, Yahoo's profit had declined for eight straight quarters.
- **Google Inc. is expected to post strong profit and sales growth when it reports second-quarter results after the market's close.** Investors and analysts will be keying in on any sign in the company's results of weakness in the overall online advertising market amid the U.S. economic slowdown. Google executives have acknowledged in the past that the company may be susceptible to

swings in the overall economy, though they do not as a rule offer any guidance for their financial results. Investors and analysts also will be listening closely to what Google has to say about progress in broadening the company's services beyond search, for example by matching advertisements to videos served on its YouTube unit.

Semiconductors

- **Intel Corp. has supplanted Advanced Micro Devices Inc. as the supplier of microprocessing equipment to movie studio DreamWorks Animation SKG Inc.** Intel will install servers, computers that run networks, based on its technology at DreamWorks Animation. In 2005, AMD signed a three-year deal to provide processors to the company. Intel and AMD are working to improve the quality of graphics processing in computers by integrating the capability, normally provided by separate semiconductors, into their microprocessors. Starting next year, DreamWorks Animation intends to make all its films in "stereoscopic 3-D," which requires more computing power.
- **Advanced Micro Devices Inc. will post a writedown of about US$880 million because units from its purchase of ATI Technologies Inc. haven't performed as well as forecast**. The company will also have charges of US$32 million, mostly related to job cuts, and US$36 million, related to investments in Spansion Inc. and holdings of auction rate securities. The expense will be recorded in the second quarter. AMD has reported 9 annual losses in the past 15 years as it struggled to win share from Intel Corp. Its challenges were heightened by the 2006 purchase of graphics chipmaker ATI. The US$5.4 billion transaction now dwarfs AMD's company value of US$3.01 billion.

Software

- **VMware Inc. ousted founder and Chief Executive Officer Diane Greene and said 2008 sales will fall short of its projections of a 50 percent increase.** Greene may have disagreed with officials at parent EMC Corp. over how much independence to give VMware. Paul Maritz, an executive at EMC who once worked at Microsoft Corp., will replace Greene. EMC now owns about 86 percent of the company, whose programs help customers save money on maintenance and power by using fewer machines. The software competes with products from Microsoft.
- **Microsoft Corp. will sell pared-down, less expensive packages of its online business programs to appeal to nurses, clerks and workers who don't use computers often.** The company plans to offer a version of its software for viewing shared documents, e-mail and calendars for US$3 a user per month. The release builds on Microsoft's expansion into online software, escalating competition with Internet companies such as Google Inc. Online programs are the fastest growing segment of the business-software market. Microsoft currently gets most of its business-software revenue from programs such as Office that are installed on personal computers. The new package includes the Exchange e-mail program and SharePoint software, which helps workers share documents. Microsoft also assembled a discounted package of online software for creating internal Web sites and search engines, as well as handling instant messaging, e-mail and videoconferencing.
- **Microsoft Corp. is expected to post solid profit and sales growth when it reports fiscal fourth-quarter results as the company gears up for a showdown by proxy at Yahoo Inc.** Microsoft has been embroiled in a prolonged takeover battle for Yahoo, which it sees as a key to bolstering its online services unit and giving it a strong foothold in the relatively young, lucrative online advertising market. It has also struggled recently to combat a generally negative perception of Vista, the current version of its popular Windows operating system.

Europe

Mobile/ Wireless

- **Alcatel-Lucent is asking to be paid US$1.53 billion by Microsoft in patent dispute.** The case, in which Alcatel-Lucent says Microsoft's Windows Media player infringed on two of its patents, has the highest profile of several patent cases pending between the two companies. The company is said to have plans to defend its patents aggressively in this case.
- **Sony Ericsson is in talks to buy a majority stake in India's Spice Mobiles with an expected deal value of US$174 million), according to news reports.** The Economic Times, an Indian business publication, said that a "top source" in the Spice group confirmed that talks were ongoing but that a deal has not yet been finalized. Reuters reports that BK Modi, majority owner of Spice, is seeking 80-100 rupees per share, which would value the company at up to US$174 million. Sony Ericsson spokesman Drew Crowell said it is the company's policy not to comment on rumors.
- **According to Nokia, nine more firms, including telecom operators "3" and TIM, have lined up to support the new open mobile software alliance Symbian Foundation.** Nokia earlier disclosed it would buy out other shareholders of U.K.-based smartphone software maker Symbian for US$410 million and make its software royalty-free to other phone makers, in response to new rivals such as Google. Nokia will contribute Symbian's assets to the not-for-profit organization, Symbian Foundation, in which it would unite with leading handset makers, network operators and communications chipmakers to create an open-source platform. The foundation has now 30 members after also mobile operators 3.

Telecommunications

- **Comstar United TeleSystems will acquire 100 percent of regional operator Ural TeleSystems (UTC) in a cash deal worth US$43.3 million.** UTC is currently the leading alternative fixed-line provider in Ekaterinburg and the Sverdlovsk region in central Russia's Ural Federal District. It provides local and regional fixed-line services and broadband Internet access to corporate and residential customers on ADSL and via its own 800-kilometre fibre network. UTC has an installed user base of 61,000 fixed-line phone customers in Ekaterinburg, with a current total capacity of 150,000 numbers. Revenues of US$20.7 million as of December 2007, up 43 percent from a year earlier. The deal is in line with the group's regional development strategy.
- **Deutsche Telekom AG has launched a pilot test of femtocell technology base stations for cellular networks.** T-Mobile has thus become the first German mobile communications provider to conduct a practical test of the new devices, with which users can set up their own small UMTS networks. In keeping with the overall aim of enhancing convenience for broadband customers, current aims with regard to the new technology include improving the quality of UMTS voice connections and enhancing support for fast HSDPA and HSUPA data links. The femtocell field test for Deutsche Telekom is being conducted in the Cologne/Bonn metro area. Femtocells enhance coverage for UMTS and HSPA (High Speed Packet Access).

Hardware

- **Samsung Electronics Co. was the second-largest seller of digital camcorders in Italy during the first five months of the year.** Samsung's sales accounted for 26.9 percent of all digital camcorders sold in Italy in the January-May period, trailing Sony Corp. with a 30.3 percent share. Samsung was followed by JVC and Canon Inc., which accounted for 15.6 percent and 14.6 percent, respectively, of all digital camcorders sold in Italy during the period. Samsung attributed its sound performance to its aggressive marketing activities, including an endorsement contract with Portuguese football star Luis Figo. In the five-month period, about 240,000 camcorders were sold in the European country.

- **Royal Philips Electronics NV may say second-quarter profit plunged as U.S. television prices fell and after selling a semiconductor stake a year earlier.** Net income may have slipped to 183.5 million euros (US$288.2 million) from 1.57 billion euros (US$3 billion) a year earlier. Philips had a gain of 1.22 billion euros (US$2 billion) from selling Taiwan Semiconductor Manufacturing Co. shares in the year-earlier period. Philips has sold most of its chip assets and spent more than 10 billion euros (US$16 billion) since 2005 buying medical and lighting companies, whose earnings are more stable. To lower costs at its television business, the company is cutting jobs and entering brand-licensing deals at the unprofitable unit.

IRG Technology, Media and Telecommunications and Life Sciences Weekly Market Review

Week of 7 July – 13 July, 2008

Other Economic Data

Currency Exchange Rates						
Currency	**Units**	**Current Rate (on 7/11/08)**	**% Change 1 Week Ago**	**% Change Month to Date**	**% Change 1/1/2008**	**% Change 1/1/2007**
Japanese yen	¥/US$	106.2100	-0.6%	0.1%	-5.6%	-10.8%
Hong Kong dollar	HK$/ US$	7.8041	0.1%	0.1%	-0.01%	0.3%
Chinese renmenbi	RMB/ US$	6.8340	-0.4%	-0.3%	-6.4%	-12.4%
Singapore dollar	S$/ US$	1.3549	-0.5%	-0.4%	-6.3%	-11.9%
South Korean won	KRW/ US$	999.7500	-4.7%	-4.9%	6.8%	7.5%
New Taiwan dollar	NT$/ US$	30.3800	-0.05%	0.1%	-6.5%	-6.8%
Australian dollar	US$/A$	0.9670	0.4%	1.0%	10.6%	22.6%
New Zealand dollar	US$/NZ$	0.7605	0.1%	-0.1%	-1.7%	8.0%
Philippine peso	PHP/ US$	45.5700	0.5%	1.7%	10.6%	-7.0%
Euro	US$/€	1.5941	1.5%	1.2%	8.3%	20.8%
British pound	US$/£	1.9906	0.4%	-0.1%	-0.1%	1.6%

Fixed Income Prices and Yields							
Note	**Currency**	**Current (on 7/11/08)**		**1 Week Ago**		**4 Weeks Ago**	
		Price	**Yield**	**Price**	**Yield**	**Price**	**Yield**
US 30-year	US$	97.27	4.54%	97.50	4.53%	93.16	4.79%
Japan 30-year	¥	101.64	2.41%	101.59	2.41%	98.90	2.58%
Hong Kong 10-year	HK$	99.87	3.61%	99.63	3.64%	97.20	3.64%
China (06/16)	US$	109.06	3.38%	109.06	3.38%	110.71	3.16%
Singapore 10-year	S$	105.38	3.37%	104.95	3.42%	100.49	3.69%
South Korea 20-year	KRW	9,537.32	6.07%	9,669.37	5.94%	9,704.14	6.02%
Australia 15-year	A$	94.83	6.34%	94.23	6.41%	91.64	6.73%
New Zealand (12/17)	NZ$	98.93	6.15%	97.26	6.39%	96.77	6.46%
Philippines 20-year	PHP	81.51	10.91%	83.12	10.72%	83.89	10.43%
India 30-year	INR	86.74	9.71%	89.99	9.34%	95.43	8.77%
UK 30-year	£	102.59	4.59%	102.31	4.61%	100.86	4.70%
Germany 30-year	€	88.15	4.77%	87.38	4.82%	86.67	4.87%