

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



Week of 31 August - 6 September 2003

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Equity Market Indicators					
Index	Closing Level (9/5/03)	% Change 1 Week Ago	% Change 1/1/2003	% Change 1/1/2002	% Change 2002 Low
S&P 500	1,021.39	1.9%	16.1%	-11.5%	32.3%
Dow Jones Industrial Avg.	9,503.34	1.4%	13.9%	-5.7%	31.6%
Dow Jones Tech. Index	323.54	3.8%	40.9%	-4.1%	78.4%
Dow Jones Telecom. Index	162.05	2.0%	9.6%	-22.3%	38.9%
NASDAQ Composite	1,858.24	3.2%	39.1%	-6.1%	67.8%
The Street.com Net	136.31	4.3%	59.1%	-30.3%	121.0%
Japan Nikkei 225	10,696.81	0.3%	24.7%	-1.6%	28.3%
Japan TOPIX	1,027.00	0.0%	21.8%	-2.6%	25.8%
Korea KOSPI Composite	758.39	-0.7%	20.8%	4.6%	30.4%
Korea Kosdaq	49.65	0.2%	11.9%	-33.3%	14.7%
Taiwan Stock Exchange	5,632.42	-1.0%	26.5%	0.6%	46.5%
Singapore Straits Times	1,617.85	0.8%	20.6%	-0.5%	21.5%
Hong Kong Hang Seng	11,170.61	2.4%	19.8%	-1.6%	25.7%
Hong Kong GEM	1,243.83	3.4%	30.9%	-34.7%	35.2%
China Shanghai (A-Share)	1,500.57	0.7%	5.7%	-10.5%	10.0%
China Shenzhen (A-Share)	412.68	0.5%	0.7%	-15.8%	6.8%
China Shanghai (B-Share)	100.13	-0.1%	-11.8%	-40.8%	-9.1%
China Shenzhen (B-Share)	225.29	-0.1%	20.5%	-13.9%	23.2%

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Technology, Media, Telecommunications and Life Sciences Market Activity

NASDAQ/NYSE TMT and Life Sciences IPO Filings

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

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

Pricing Date	Issuer (Exchange)	Description	Size (US\$MM)	Offer Price	Price on 9/5/03	% Change From Offer
N/A						

Asian Equity Markets: TMT and Life Sciences IPO Pricing

Pricing Date	Issuer (Exchange)	Description	Size (US\$MM)	Offer Price	Price on 9/5/03	% Change From Offer
9/3/03	Taipei Multipower Electronic [6248.TT] (GRETAI)	Manufactures and markets transformers and coils. Company products include switching power transformers, surface mount device transformers, and current sensors.	US\$1.8	NT\$20	NT\$24.3	21.5%
9/3/03	Wintest Corp. [6721.JP] (TSE)	Develops, designs, manufactures testing devices used for the production of flat-panel displays and image sensors.	US\$8.3	¥750,000	¥2,530,000	237.3%

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Weekly Highlights

International

Hardware

- **Worldwide sales of hard-disk storage systems fell 3.9% in the second quarter from the year-ago period**, as gains in North America were pared by weakness in Asia. The quarterly survey gives little hope that a much-anticipated broad-based recovery in the struggling sector is close at hand. Storage systems, which business customers use to store digital data, are a major component of technology budgets, usually about half of what a company spends on computer servers.

Media, Entertainment and Gaming

- **Sony Corp. will launch an Internet music service in the U.S. and Europe next spring.** The service would be called the "Net Music Download Initiative" and the service would work with computers using Microsoft Corp.'s Windows operating system and give access to Sony's music catalog. This latest move is peculiar since just last may Sony and Vivendi Universal sold their online music joint venture "Pressplay" to Roxio Inc for about US\$40 million.

Mobile / Wireless

- **Global handset sales are expected to rise by 8% next year, boosted by shipments of 3G wireless handsets and camera phones.** The number of handsets sold will exceed 500 million for the first time in 2004 after more than 460 million unit sales this year. Handset makers like Nokia Corp. and Motorola Inc. are rushing to provide phones capable of running 3G services. Telecommunications operators, including Vodafone Group PLC and Deutsche Telekom AG, want to roll out 3G and lift sales by offering consumers high-speed Internet via their mobile phones, but they would not fully launch their networks commercially until there are enough handsets in the market.

Software

- **Ross Systems, Inc., a global provider of enterprise software for manufacturers, and CDC Software Holdings Inc, a subsidiary of chinadotcom corporation announced that they have signed a definitive agreement whereby CDC Software will acquire Ross Systems in a merger valued at approximately US\$68.9 million.** Following the merger, Ross Systems would operate under chinadotcom's CDC Software unit. chinadotcom believes that the acquisition of Ross Systems, a profitable company with solid margins and recurring revenue streams, represents an attractive and earnings-accretive transaction. Ross Systems expects that its results for the fiscal year ended June 30, 2003 will reflect revenues of US\$48.1 million, an operating profit of US\$4.8 million and a net profit of US\$4.1 million.

Japan

Internet

- **Medical start-up eHope is joining forces with Nihon Edunet Co. to launch a medical examination service using an Internet videophone system as early as this fall.** eHope will organize

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medical specialists from hospitals and clinics and publish their career histories online, enabling users to select their own doctors. Users will then reserve 20-minute counseling sessions with the professionals, during which they will be able to interact directly by videophone so that specialists can see their expressions and complexions and thus provide more accurate diagnoses than are possible over regular phones.

Mobile / Wireless

- **NEC Infrontia Corp. will introduce a wireless local area network on Oct. 10 that will triple the data traffic a single access point can handle.** The system consists of access points, cards that are inserted into personal computers and personal digital assistants, and power supply units to operate access points. It enables communications within a radius of 50 meters, at a frequency of 2.4 gigahertz and speeds of up to 11 megabits per second. By bundling the packets for transmission, the system increases the amount of data that one access point can handle.
- **MediaStick Inc. plans to launch a new payment service developed in cooperation with banks that is based on camera-equipped mobile phones.** The start-up is in negotiations with several banks and that it hopes to start the service before the end of the year. The system will be based on a special kind of bar code the company has developed that can be read by using a mobile phone's high-resolution camera, which will initiate a transfer of payment from the user's bank account. Currently, only some phones offered by NTT DoCoMo Inc. have the bar code reader function.

Semiconductors

- **Elpida Memory Inc. will receive an extra ¥2.7 billion (US\$23.2 million) in funding from Intel Corp.,** a move that will help the Japanese semiconductor manufacturer boost its manufacturing capacity for high-end dynamic-random-access memory chips. Elpida, a joint venture between NEC Corp. and Hitachi Ltd. and Japan's only DRAM chip maker, has signed an agreement with Intel Capital, an investment arm of the U.S. chip giant, for the extra funding.

Software

- **Network Associates Inc. signed a pact with NEC Corp. to preinstall McAfee virus protection services on NEC PCs in Japan,** marking a new strategy to boost the security software maker's disappointing 10% consumer market share there. The move returns Network Associates to direct distribution in the Japanese market. Network Associates lags well behind rivals Trend Micro Inc. and Symantec Corp. in Japan, the No. 3 consumer anti-virus market after North America and Europe. The new pact will make McAfee the only preinstalled anti-virus option on NEC personal computers in Japan.

Korea

Hardware

- **Hynix Semiconductor Inc. are in talks with several buyers including U.S. financial services company Citigroup Inc. to sell the beleaguered chip maker's non-memory operations.** The company aims to spin off its non-memory operations -- specifically its system-integrated-circuit business -- and raise foreign investment. That may involve some sort of an alliance, selling off a stake or the entire non-memory operations, but negotiations are still underway.

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Information Technology

- **The Korean government's efforts to develop Korea into a research and development hub are showing progress, with an increasing number of foreign institutes agreeing to set up branches.** The Ministry of Science and Technology has recently agreed with France's Institute Pasteur and Russia's State Optical Institute to set up research facilities in Korea. The announcement followed Intel Corp.'s promise to establish an R&D center for wireless and information technology.

Media, Entertainment and Gaming

- **Plenus Entertainment has completed its merger with game portal service provider Netmarble Inc.** The merger, first announced in May, drew attention from other dot-com players at a time when investors witnessed a much-awaited rally of Internet firm shares. The combined market capitalization of Netmarble and its parent firm Plenus is worth 580 billion won (US\$493 million). Plenus, which is involved in both online and offline entertainment fields, is expected to strengthen its position through diversified content ranging from movies to games to animation.

Mobile / Wireless

- **Korea's small online portal operators remain cautious about investing in offering mobile Internet services even though the Korean government is set to open up the wireless network infrastructure.** The mobile Internet market, which is forecast to grow to 4.7 trillion won (US\$4 billion) in 2004, is widely deemed as an opportunity for online portals, as well as info-tech ventures, to increase their revenues. However, a majority of small, online content providers, except for a couple of portal heavyweights, are taking a wait-and-see strategy due to lingering uncertainty.
- **Samsung Electronics is estimated to have sold about 11.3 million mobile phones in the second quarter and placed third in the worldwide handset market.** For the quarter, Samsung controlled a 9.9 per cent share of the worldwide mobile phone market in which some 114.8 million handsets were sold according to Gartner Dataquest. Despite repeated delays in the launch third-generation mobile phone services in many countries and the effect of the global economic downturn, Samsung's sales rose 16 per cent on an annual basis and its market share inched up by 0.2 per centage points compared with the same period a year ago.
- **LG Electronics Inc. reported that it sold a total of 13.4 million mobile handsets worldwide in the first seven months of this year, up 63 per cent from the year-earlier period,** due to an increase in exports to the United States and India. Moreover, the firm sold 2.5 million units in July alone, registering its highest-ever monthly performance.

Semiconductors

- **Hynix Semiconductor Inc. will strengthen its mobile memory business in a bid to carve out a bigger share in the fast-growing wireless chip market.** The company would develop 64-megabyte Pseudo SRAM and NAND Flash memory chips within this year, amid surging demand for its Pseudo mobile SRAM chips. Pseudo SRAM chips are compatible with existing SRAM for mobile handsets but with faster data-processing speeds and lower electricity consumption rates. The new chips are customized for next-generation mobile devices that require faster speeds and longer battery lives.

Telecommunications

- **The Korean Information and Communication Ministry will introduce a new policy charging SK Telecom more for network usage as part of efforts to help smaller carriers stay competitive.** The

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policy will be implemented within this year, is aimed at spurring competition in the mobile market, referring to the lopsided structure in which SK Telecom continues to dominate over KTF and LG Telecom.

China

Hardware

- **Kyocera Corp. plans to expand its PHS (personal handyphone system) operations in China** by increasing combined monthly production of PHS phones there and in Japan to 950,000 units and introducing high-performance units by year-end. Kyocera aims to roughly quadruple PHS phone sales in China to 6 million units this fiscal year. A Kyocera factory in Fukushima Prefecture is to boost its monthly production by 350 per cent to slightly more than 900,000 units. Separately, a facility operated in China's Guizhou Province will increase its monthly output by 150 per cent to 50,000 units.

Mobile / Wireless

- **China's drive to create new standards in high technology continue and is part of its broader desire to claim equal footing with the world's top economic powers.** By creating homegrown technical standards, China is trying to increase the use of Chinese innovations worldwide. And it is leveraging its own large domestic market to help speed up their adoption. A case in point is when China declared three years ago that it would create its own technical standard for 3G mobile phones and went on to develop its own format for digital television. Most recently, it announced it was creating a different audio and video standard for the next wave of DVD players and video-game players.

Taiwan

Semiconductors

- **Taiwan Semiconductor Manufacturing Co. raised its third-quarter wafer shipment outlook**, and offered its first comments on how the fourth quarter appears to be shaping up. The firm anticipates wafer shipments in the July-September period will be up 10 per cent compared with the second quarter. The figure is slightly better than the one given in statements it made during its second-quarter investors' conference.

Singapore / Malaysia

Telecommunications

- **Two U.S. business lobby groups complained to the Singapore government that the rates Singapore Telecommunications Ltd. charges international carriers for local-data lines are hurting their city-state members.** A joint letter from the Coalition of Service Industries and the Information Technology Association of America, sent to Singapore Trade and Industry Minister George Yeo, backs international carriers who are battling SingTel to get rates lowered.
- **A US\$250 million bid by Singapore Technologies Telemedia to buy bankrupt U.S. telecommunications company Global Crossing is likely to be accepted later this month.** There have been fears the deal might not go through because of U.S. concerns about an overseas business

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buying a U.S. company that handles sensitive national security data. The deal is being reviewed by the Committee on Foreign Investment and the committee will present its views to President George W. Bush, after which Bush will have 15 days to decide whether to let the Singapore takeover go ahead.

Hong Kong

Telecommunications

- **PCCW Ltd. is rolling out a system that delivers television channels over its voice and Internet lines** -- the first time a phone company has made a cable-like service available on such a large scale. PCCW will sell the 23 TV channels individually, charging a few dollars each, rather than in the bundles that are typical of cable- and satellite-TV systems. PCCW executives plan to add at least 10 more channels by the end of the year.

United States / Canada

Hardware

- **Verizon Wireless awarded Nortel Networks Corp. a contract for network equipment valued at US\$1 billion over three and a half years.** Under the contract, Nortel is to expand and upgrade Verizon Wireless's voice and data network in San Diego, Los Angeles, Las Vegas, Detroit, Atlanta, Cleveland and other markets. The agreement also includes deployment of a 3G network in South Carolina. Verizon Wireless additional network capacity is needed to provide digital voice and data services like Web browsing and streaming audio and video. The contract offers evidence that carriers are starting to show signs of spending more on wireless networks.
- **Hewlett-Packard Co. reaffirms financial outlook, one month into the computer and printer maker's fiscal fourth quarter, and has agreed to buy a small web services software supplier.** The company stood by fourth-quarter forecasts that it made last month and estimated revenue for the fourth quarter ending in October would grow between 8 per cent and 10 per cent beyond the third quarter's US\$17.4 billion.

Internet

- **When online users mistype Internet addresses that do not exist, this "trash traffic," is being re-directed in creative ways.** AOL Time Warner Inc.'s America Online and Microsoft Corp., for instance, direct users who botch some Web addresses to the companies' Internet search engines, where they often display advertisements. This trash traffic may be an under appreciated source of traffic and hopefully revenue.
- **Non-Microsoft instant-message software users are likely to be blocked from accessing their MSN Messenger buddies beginning Oct. 15,** as Microsoft plans to upgrade the software potentially making it incompatible with other chat programs. Microsoft stressed that its move is aimed at strengthening security and protecting user information.
- **Hotels.com cut its ties to Travelocity and would work more closely with Expedia, its corporate sibling and the No. 1 travel site.** Hotels.com had decided to stop selling hotel rooms via Travelocity after the company had improperly terminated Hotels.com's exclusivity on Travelocity's site. One analyst

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saw the move as a precursor to InterActiveCorp folding together operations of Hotels.com and Expedia, both of which were merged into InterActive over the summer.

Media, Entertainment and Gaming

- **Vivendi Universal SA's board may announce a preliminary deal to merge its U.S. film and TV businesses with General Electric Co.'s NBC**, though it could be another month before the two sides negotiate a firm deal. The companies are expected to sign a non-binding letter of intent, allowing for exclusive negotiations for a limited period, putting pressure on both sides to ink a deal.

Semiconductors

- **National Semiconductor Corp. reported that its quarterly net profit jumped while revenue rose slightly from a year earlier, after cutting costs and gaining market share.** For the first quarter, which ended Aug. 24, net profit of US\$29.7 million compared with net income of US\$1.3 million a year earlier. Revenue rose to US\$424.8 million from US\$420.6 million a year earlier. In June, National Semiconductor expected first-quarter revenue to be flat-to-seasonally down 4 per cent from fiscal fourth-quarter sales of US\$425.3 million.

Software

- **Microsoft Corp. agreed to pay US\$23.3 million to Be Inc. to settle an antitrust lawsuit** that claimed the software giant negotiated deals with computer makers that cut out the smaller company's competing operating system. Microsoft admits no wrongdoing under the settlement. The lawsuit, filed in February 2002, is one of four private antitrust suits brought against Microsoft after a federal judge's ruling that Microsoft had acted as an illegal monopoly based on its dominance in desktop operating systems.
- **PeopleSoft Inc. raised its estimates for revenue and earnings for the rest of 2003 and next year**, citing the potential for additional sales and cost savings from its recently completed acquisition of J.D. Edwards & Co. PeopleSoft's merger-integration effort has been closely watched as an indicator of the company's ability to continue to fight off a hostile US\$7.3 billion bid from Oracle Corp. Furthermore, PeopleSoft will maintain three distinct product lines, with offerings for medium and large businesses as well as for J.D. Edwards's base of customers using the AS-400 business computer system from IBM. The emphasis on continuity and new products distinguished the merger plans from Oracle's stated intentions to discontinue active marketing and development of PeopleSoft's products.

Telecommunications

- **The Baby Bell local telephone companies and their trade association have asked the Federal Communications Commission to delay implementation of its new phone-competition rules** pending court review. The rules require the Bells to continue leasing elements of their networks at deep discounts to competitors like the local arms of AT&T Corp. and MCI, the former WorldCom Inc.
- **Qwest Communications International Inc. reported a loss for the second quarter as its local phone business continued to suffer from increased competition.** Its second-quarter loss was US\$91 million on revenue of US\$3.6 billion. The company, facing investigations of its accounting practices, does not have audited financial statements for 2000, 2001 and 2002. Qwest is in the process of restating financial results for those years. For the first quarter, Qwest reported a profit of US\$128 million on revenue of US\$3.6 billion.

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Europe

Hardware

- **Philips Electronics NV plans to outsource more of its chip production to contract manufacturers in Asia.** The company will increase the amount of chips it outsources to 50 per cent from 10 per cent, which could boost its longtime partner in the region, chip-foundry company Taiwan Semiconductor Manufacturing Co.

Mobile/Wireless

- **LG Electronics has entered the GSM mobile phone market in Britain by signing a contract with Vodafone,** signaling a new phase for Korean mobile phone manufacturers. Under the deal, LG will provide general packet radio service phones, named "LG-G53001i," to Vodafone, marking a major step forward in its push to capture some of the GSM market. The contract reflects the progress that has been made in connection with GSM certification, paving the way for more exports to the European mobile phone market where GSM remains dominant.

Telecommunications

- **Telecom Italia Mobile SpA that its net profit dropped 23 per cent in the first half due to one-time gains from the year earlier,** but the result still beat analysts' expectations. TIM's consolidated net profit was €993 million (US\$1.1 billion) in the first half of 2003, compared to €1.2 billion (US\$1.3 billion) in the same period a year earlier. In the first half of 2002, TIM notched up one-time capital gains on the sale of its stake in French cellular assets. TIM operating profit rose 8.4 per cent to €1.8 billion (US\$2 billion), while revenue rose 6.7 per cent to €5.5 billion (US\$6.0 billion) in the first half.

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Other Economic Data

Currency Exchange Rates						
Currency	Units	Current Rate (on 9/5/03)	% Change 1 Week Ago	% Change 1/1/2002	% Change 1/1/ 2003	% Change Last 12 Mth.
Japanese yen	¥/US\$	117.2300	-0.6%	-11.0%	1.3%	1.4%
Hong Kong dollar	HK\$/ US\$	7.7995	0.0%	0.0%	0.0%	0.0%
Chinese renmenbi	RMB/ US\$	8.2770	0.0%	0.0%	0.0%	0.0%
Singapore dollar	S\$/ US\$	1.7588	-0.3%	-4.8%	-1.4%	-0.5%
South Korean won	KRW/ US\$	1173.6500	0.2%	-10.6%	1.0%	2.0%
New Taiwan dollar	NT\$/ US\$	34.1245	-0.1%	-2.5%	1.5%	0.4%
Australian dollar	US\$/A\$	0.6472	0.2%	27.0%	15.2%	18.2%
New Zealand dollar	US\$/NZ\$	0.5767	-0.2%	38.6%	9.9%	22.6%
Philippine peso	PHP/ US\$	55.0600	-0.2%	6.6%	-2.7%	-5.7%
Euro	US\$/€	1.1096	1.2%	24.7%	5.8%	13.3%
British pound	US\$/£	1.5899	1.2%	9.4%	-1.2%	2.1%

Fixed Income Prices and Yields							
Note	Currency	Current (on 9/5/03)		1 Week Ago		4 Weeks Ago	
		Price	Yield	Price	Yield	Price	Yield
US 30-year	US\$	102.5000	5.20%	102.1875	5.22%	102.0781	5.23%
Japan 30-year	¥	104.4950	1.94%	101.8405	2.10%	113.6550	1.50%
Hong Kong 10-year	HK\$	119.4741	3.96%	119.4064	3.98%	121.2028	3.72%
China (10/2027)	US\$	140.8232	4.66%	140.3991	4.69%	139.4949	4.74%
Singapore 10-year	S\$	108.6500	3.19%	107.7614	3.34%	110.5054	2.93%
South Korea 10-year	US\$	120.0526	4.05%	119.5847	4.16%	120.9538	3.92%
Australia 15-year	A\$	107.6890	5.46%	107.3030	5.52%	108.2460	5.40%
New Zealand (07/2009)	NZ\$	105.8162	5.81%	105.9754	5.78%	107.0167	5.59%
Philippines 20-year	PHP	149.5072	11.87%	148.8503	11.93%	148.8984	11.93%
India 20-year	INR	152.4710	5.75%	153.1007	5.71%	150.7546	5.89%
UK 30-year	£	91.8370	4.77%	93.0565	4.69%	95.5990	4.52%
Germany 30-year	€	107.6590	4.98%	109.2837	4.88%	111.0166	4.77%

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