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

Week of 15 December - 21 December 2002

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| Equity Market Indicators |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Index | Closing Level <br> $\mathbf{1 2 / 2 0 / 2 0 0 2 )}$ | \% Change <br> 1 Week Ago | \% Change <br> $\mathbf{1 / 1 / 2 0 0 1}$ | \% Change <br> $\mathbf{1 / 1 / 2 0 0 2}$ | \% Change <br> 2001 Low |  |
| S\&P 500 | 895.75 | $0.7 \%$ | $-30.2 \%$ | $-22.0 \%$ | $-6.4 \%$ |  |
| Dow Jones Industrial Avg. | $8,511.32$ | $0.9 \%$ | $-20.1 \%$ | $-15.1 \%$ | $3.8 \%$ |  |
| NASDAQ Composite | $1,363.05$ | $0.0 \%$ | $-40.5 \%$ | $-30.1 \%$ | $-2.4 \%$ |  |
| The Street.com Net | 88.06 | $-0.7 \%$ | $-67.8 \%$ | $-54.4 \%$ | $-20.6 \%$ |  |
| Japan Nikkei 225 | $8,406.88$ | $-1.3 \%$ | $-38.6 \%$ | $-20.3 \%$ | $-10.6 \%$ |  |
| Japan TOPIX | 822.46 | $-1.6 \%$ | $-35.8 \%$ | $-20.3 \%$ | $-16.8 \%$ |  |
| Korea KOSPI Composite | 709.44 | $-0.8 \%$ | $36.2 \%$ | $2.3 \%$ | $53.0 \%$ |  |
| Korea Kosdaq | 51.76 | $-3.0 \%$ | $-7.1 \%$ | $-28.3 \%$ | $14.8 \%$ |  |
| Taiwan Stock Exchange | $4,595.67$ | $0.2 \%$ | $-6.9 \%$ | $-17.2 \%$ | $33.3 \%$ |  |
| Singapore Straits Times | $1,337.45$ | $-2.2 \%$ | $-29.5 \%$ | $-17.6 \%$ | $13.1 \%$ |  |
| Hong Kong Hang Seng | $9,628.69$ | $-1.0 \%$ | $-35.2 \%$ | $-15.5 \%$ | $7.5 \%$ |  |
| Hong Kong GEM | 111.54 | $-1.5 \%$ | $-63.6 \%$ | $-44.1 \%$ | $-30.6 \%$ |  |
| China Shanghai (A-Share) | $1,492.02$ | $2.2 \%$ | $-32.9 \%$ | $-12.9 \%$ | $-6.9 \%$ |  |
| China Shenzhen (A-Share) | 432.61 | $2.8 \%$ | $-37.5 \%$ | $-13.4 \%$ | $-7.4 \%$ |  |
| China Shanghai (B-Share) | 121.89 | $3.0 \%$ | $36.6 \%$ | $-28.9 \%$ | $55.2 \%$ |  |
| China Shenzhen (B-Share) | 197.91 | $1.9 \%$ | $42.4 \%$ | $-25.5 \%$ | $59.0 \%$ |  |

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Technology, Media, Telecommunications and Life Sciences Market Activity

| NASDAQ/NYSE TMT and Life Sciences IPO Filings |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| File <br> Date | Issuer | Industry Sector | Size <br> $(\$ M M)$ | Description | Book- <br> Runner | Co-Manager |  |
| $12 / 18 / 02$ | Accpac <br> International <br> Inc. [2983Q.us] | Software | N/A | Provides financial accounting and <br> business management software <br> solutions to the corporate, small <br> business and small office/home <br> office markets | RBC <br> Capital <br> Markets | N/A |  |


| NASDAQ/NYSE Equity Markets: TMT and Life Sciences IPO Pricing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pricing <br> Date | Issuer <br> (Exchange) | Description | Size <br> (US\$MM) | Offer <br> Price | Price <br> on 8/2/02 | $\%$ <br> Change <br> From <br> Offer |
| $12 / 17 / 02$ | VistaCare Inc <br> [VSTA.us] <br> (Nasdaq) | Provides hospice services through <br> (eams of physicians, nurses, home <br> healthcare aides, social workers, <br> spiritual and other counselors, and <br> volunteers | $\$ 72$ | $\$ 12.00$ | $\$ 15.77$ | $31.4 \%$ |


| Asian Equity Markets: TMT and Life Sciences IPO Pricing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pricing Date | Issuer (Exchange) | Description | $\begin{gathered} \text { Size } \\ \text { (US\$MM) } \end{gathered}$ | Offer <br> Price | $\begin{gathered} \text { Price } \\ \text { on } 8 / 2 / 02 \end{gathered}$ |  |
| 12/20/02 | Chant Sincere <br> Co Ltd <br> [6205.tt] <br> (Gretai) | Manufactures and markets connectors, including digital terminal connectors and memory card connectors | \$3.0 | NT\$33 | NT\$35.3 | 7.0\% |
| 12/20/02 | DMX <br> Technology Group Ltd [DMX.sp] (SE of Singapore) | A computer systems integrator that provides networking, Internet security, e-commerce and webbased television solutions in Hong Kong, China, Singapore and Malaysia | \$6.6 | SGD0.12 | SGD0.14 | 16.7\% |
| 12/20/02 | Netel <br> Technology (Hldgs) Ltd [8256.hk] (HKSE) | Provides long-distance call services through an integrated network infrastructure comprising both IPbased packet switched systems and circuit-switched systems in the AsiaPacific and US | \$5.8 | HK\$1.00 | HK\$1.10 | 10.0\% |
| 12/18/02 | Axell Corp [6730.jp] (Jasdaq) | Designs, manufactures and sells semiconductor integrated switches for graphics and sound | \$13.0 | $¥ 600,000$ | $¥ 520,000$ | -13.3\% |

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| Asian Equity Markets: TMT and Life Sciences IPO Pricing |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| $12 / 18 / 02$ | Promise <br> Technology <br> Corp [3057.tt] <br> (TSE) | Manufactures and markets ATA <br> (Advanced Technology Attachment) <br> RAID (Redundant Array of <br> Inexpensive Disk) cards | $\$ 14.6$ | NT\$79 | NT\$65.5 | $-17.1 \%$ |  |
| $12 / 17 / 02$ | Sunkwang <br> Electronics Co <br> Ltd [6409.ks] <br> (Kosdaq) | Manufactures closed-circuit <br> televisions | $\$ 3.6$ | KRW3,400 | KRW3,880 | $12.8 \%$ |  |

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Weekly Highlights

## International

## Venture Capital / Investments

- Lehman Brothers raises stake in the U.S. equity market to $\mathbf{5 0}$ percent from 39 percent. Lehman shifted more heavily into U.S. technology, media and telecommunications stocks, at the expense of similar European sectors. Lehman's global technology exposure increases to 14 percent from 12 percent. Its financials weighting fell to 29 percent from 31 percent and health care to 12 percent from 13 percent.
- Intel making additional but undisclosed investments in two privately held wireless companies. Intel Communications Fund previously invested in STSN and TeleSym, but did not disclose the terms of the investments. STSN provides wired and wireless high-speed connectivity to hotels and conference centers. TeleSym develops telephony software for use on mobile PCs and personal digital assistants.


## Hardware

- Global semiconductor market estimated to have grown only $1.4 \%$ this year after a record fall last year, showing the recovery in sales has been very fragile without a strong pickup in demand for key products such as personal computers and mobile phone handsets, says a Gartner Japan survey. But select manufacturers, led by Samsung Electronics, succeeded in increasing sales in specific products.


## Japan

Life Sciences

- NS Solutions to enter bio-informatics market in an alliance with MediBic, a bio-science start-up. The companies will initially provide technical cooperation to a genome analysis center established by Takeda Chemical Industries, Shimadzu and six other firms. MediBic will provide know-how in building analytical systems, while NS Solutions will develop the necessary software.


## Telecommunications

- Retail outlets forced to delay the start of sales of J-Phone 3G mobile phone service due to a lack of products. J-Phone, a unit of Britain's Vodafone Group, was unable to deliver the handsets in time for the official launch date, a development which retailers blamed on the inability to fine-tune the handsets and telecommunications networks to enable the 3G service in time for the launch day.
- Locus meets standards for the E911 law for mobile phone handsets during field testing in the U.S. Using TDMA (time division multiple access) mobile phones, AT\&T Wireless Services's communications network, and its own proprietary technology that determines a mobile phone's position from the strength of electromagnetic waves from the handset, Locus conducted 1,000 tests in Florida.
- Sharp to begin offering an IP telephone service on its Zaurus PDA using wireless LANs set up at hotels, stations and other locations. Sharp will start an experimental IP telephone service on its Zaurus device using 300 of NTT Communications's wireless LANs. Wireless LANs enable users to send and receive a large volume of data, such as video and music, at high-speed.


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Internet

- Rakuten to take $\mathbf{9 0 \%}$ stake in Lycos Japan for $\mathbf{\$ 9 . 9}$ million in an effort to strengthen its online retail business. The move follows Rakuten's acquisition of major search-engine operator Infoseek Japan KK in late 2000. For the six months through June 30, Lycos Japan's earnings are estimated at a net loss of $\$ 7.3$ million on an unaudited basis, with revenue at $\$ 4.4$ million.
- Nippon Telegraph \& Telephone denies a report that it will boost financial aid to Verio and said plans to restructure the subsidiary are on track. The NTT group acquired the U.S. Internet unit for about $\$ 4.97$ billion in 2000 . The Nihon Keizai Shimbun reported Friday that NTT would boost its financial aid to Verio to about $¥ 20$ billion from an initial plan of $¥ 12$ billion next year.
- Rakuten and Sumitomo are considering allying in broadband-related business, including the possible purchase of new shares in AlphaBridge, a broadband content distribution subsidiary of Sumitomo. Sumitomo is Lycos Japan's current majority shareholder.


## Software

- Sony Matsushita Electric Industrial to jointly develop an operating system for digital consumerelectronic products. The Japanese consumer-electronic giants aim to develop the operating system by the spring. The system would be based on the Linux open-source operating system. Sony and Matsushita said they mainly plan to use the Linux-based software for audiovisual equipment.
- Sumitomo teams up with ArcSight, a U.S. security technology start-up and will begin domestic sales of integrated monitoring systems that will protect corporate information networks from cyberterrorism. Sumitomo will begin Japanese sales as early as this month of software from ArcSight. Sumitomo has obtained exclusive sales rights in Japan to ArcSight monitoring software for $\$ 1$ million.


## Information Technology

- Five companies including NTT Data and IBM Japan to begin field-testing a grid-computing system that links several hundred thousand personal computers over the Internet and employs idle processing capacity to provide the number-crunching power of a supercomputer. The system will initially be used to perform the calculations required for genetic analysis and photonic-crystal research.


## Korea

## Life Sciences

- Macrogen to market a new mouse DNA chip called Magic Oligo-Mouse 11K. The oligonucleotide DNA Chip has 11,520 mouse genes on a $20 \mathrm{~mm} \times 50 \mathrm{~mm}$ slide with scientists knowing the function of 8,996 genes. The more functionally examined genes the mouse chip has, the easier researchers can comprehend the cell functions and the cause of illnesses.


## Telecommunications

- KT signs a deal valued at $\$ 73$ million with PT Prima Infokom Indonesia to participate in a project to boost Indonesia's digitalization of its government. South Korea's largest fixed-line carrier said it will provide network infrastructure as well as e-government and e-finance platforms in a three year deal that will begin 2003.


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- Dacom continues negotiations to raise cash from foreign investors to fund its operations and pay maturing debt after purchasing Korea Electric Power's Powercomm unit for $\$ 680$ million. The company continues to negotiate with Japan's Softbank Asia Infrastructure Fund, Canadian pension fund Caisse de Depot et Placement du Quebec, or CDP, as well as other foreign investors.
- KTF raises $\$ 436$ million won by issuing asset-backed securities, thus securing more stable funding sources. The deal, engineered by Dongwon Securities and Bridge Securities, is the first for the mobile phone operator. The debt will be backed by installment payments of handset terminals sales.


## Hardware

- Global market for digital TV and set-top boxes is expanding, as are export markets abroad for Korea's latest high-tech products. Stock analysts also said a surge in domestic demand and export of digital TV sets will boost the share price of the manufacturers in the near future. A total of 456,000 units of digital TV sets have been sold in the year to end-September in the domestic market.


## China

## Telecommunications

- Mobile phone users in China exceeded 200 million by the end of November, the official Xinhua news agency reported, recording a largely symbolic milestone for what is already the world's largest mobile market. That implies a net increase of 4.48 million users from the 195.8 million reported in October.
- China Telecom shares trade at about 5 per cent below its HK\$1.48 issue price, stabilizing the share's performance in the month after the share offer. Its investment banks had issued an extra 471 million shares as part of the exercise of their 15 per cent over-allotment option. They had been forced to slash its offer size by 55 per cent to ensure the deal was fully subscribed.


## Software

- BEA Systems to open its first offshore software development laboratory in China next year and starts transferring key technology to developers. The company intended to shift the research, development and manufacture of one of its major software product lines to the mainland.


## Internet

- NetEase.com, Sina, Sohu.com and Chinadotcom show significant share price gains, as did Internet software firm AsiaInfo and phone provider Qiao Xing Universal Telephone. Conal SaturnoSanjana, vice president of equity sales for Auerbach Grayson, said there was no publicly available news to explain why the stocks were moving forward on Tuesday.
- New guidelines by the China Internet Network Information Center to jump-start registrations of ".cn" names, which have been relatively anemic by global standards. Since 1997, CNNIC has registered a scant 145,000 domain names ending with ".cn" - miniscule compared with the 27.3 million ".com", ".org" and ".net" addresses logged by leading US domain registrar VeriSign.


## Hardware

- Fujitsu opening local sales and maintenance bases in China. The Japanese computer giant said it aims to raise its PC sales in China to roughly 100,000 units in the fiscal year starting April 2005 from


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10,000 units last year, which ended in March 2002. Fujitsu will focus on selling notebook models to corporate customers.

- Finnish electronics contract manufacturer Elcoteq to pay IBM $\$ 37.3$ million for stakes in two Chinese companies that assemble electronic components. Elcoteq, Europe's largest contract manufacturer in terms of sales, plans to buy IBM's 70 per cent stakes in its Shenzhen- and Beijing-based manufacturing joint ventures for cash and expects the deal to close by year end.
- Culturecom Holdings to offer computer chip capable of processing Chinese characters. According to the loss-making technology firm's chairman Cheung Wai-tung, the SCS 3210 is a Chinese version of an Intel processor, but the chip's memory is embedded with code capable of generating Chinese fonts.


## Information Technology

- China's banks to more than double 2001 spending levels on information technology to $\$ 10.50$ billion by 2005 to boost competitiveness ahead of a World Trade Organization-mandated opening of the sector to foreign competition, according to a research report by Celent Communications LLC. Celent is a consulting and research provider to the financial-services industry.


## Taiwan

## Telecommunications

- Taiwan's government sells $13.5 \%$ stake valued at $\$ 1.88$ billion in Chunghwa Telecom to an unlikely group of domestic bidders. Units of Cathay Financial and Fubon Financial, two of Taiwan's biggest financial groups, and Taiwan Cellular and its affiliates, which are Chunghwa's biggest competitors, jointly submitted the only bid in an auction that ended Tuesday.
- Taiwan Ratings places Taiwan Cellular Corp. (TCC) on CreditWatch with negative implications. The CreditWatch placement follows the participation of TCC, along with its subsidiary, Trans Asia Telecom, and its parent, Taiwan Fixed Line Corp. in acquiring 6.7\% of Chunghwa Telecom's shares sold by the government, with total costs of NT $\$ 32.7$ billion.


## Singapore / Malaysia

## Telecommunications

- Singapore Telecommunications could divest wholly owned Singapore Post next year, said SingPost Chief Executive William Tan. The divestment would help SingTel cut its $\$ 6.1$ billion debt. The postal services unit, estimated to be worth about $\$ 860$ million, could be spun off from its parent, but whether this would take the form of an initial public offering or a private sale is still unclear.
- Singapore Technologies Telemedia expected to win bid for a stake in PT Indonesian Satellite, a source close to the matter told Dow Jones Newswires. The source said that Singapore Technologies Telemedia would pay $\$ 633$ million for the $41.9 \%$ stake.


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## Hong Kong

Telecommunications

- Hutchison Whampoa denies reports that it is in talks to buy the stake in Xfera that is owned by Vivendi Universal. Expansion business paper reported that Hutchison was in talks with Vivendi and Spanish construction group Fomento de Construcciones y Contratas SA (E.FCC), or FCC. These two companies control over $30 \%$ of Xfera.
- PCCW makes an early payment of $\$ 118$ million on a $\$ 4.7$ billion loan it took out in 2001, after last month repaying US $\$ 233$ million that wasn't due until 2006. But investors seem less than convinced that PCCW has completely abandoned its former grand plans to dominate the convergence of the telephone and the computer in Asia.
Media, Entertainment and Gaming
- i-Cable Communications to broadcast United States National Football League (NFL) over its online portal. For a monthly fee of $\$ 25$, subscribers are offered two live NFL games and two archive games every Monday night. I-Cable will also show eight post-season play-off games, divisional play-offs and conference championships, as well as some NFL highlights.


## Internet

- HSBC and subsidiary Hang Seng Bank unveil enhanced online B2B banking services targeting smaller enterprises features for the service in hopes of attracting more business customers. Many of the 300,000 SMEs in Hong Kong have complained that they have not received their share of attention from local financial institutions because of their size.


## United States / Canada

## Telecommunications

- WorldCom CEO Michael D. Capellas asks six directors to resign. They included Carl J. Aycock, longtime friend and business partner of ousted CEO Bernard Ebbers; Max E. Bobbitt, a former Alltel executive; and real-estate magnate Francesco Galesi. Former Nasdaq President Gordon S. Macklin also resigned, as did WorldCom's former CEO, John W. Sidgmore, and former chairman Bert C. Roberts Jr.
- WorldCom receives a 10 -year contract valued as much as $\$ 360$ million from the U.S. State Department. Under terms of the deal, WorldCom will provide services to State Department facilities as part of the so-called Spectrum program, which will deliver international private lines, satellite, Internet Protocols and ATM protocols to State Department agencies world-wide.
- Global Crossing Chairman Gary Winnick funds a $\mathbf{\$ 2 5}$ million pledge made to company employees 11 weeks ago. Mr. Winnick's pledge represents the money contributed by Global Crossing employees to their $401(\mathrm{k})$ retirement-savings plan from the time of the firm's merger with Frontier in October 1999 to Global's Chapter 11 bankruptcy filing in January 2002.
- CoSine Communications board rejects an offer from Wyndcrest Holdings LLC to acquire CoSine for $\$ 91.6$ million, or about $\$ 9.11$ a share. Wyndcrest, a closely held investment holding company, said the offer price was equal to CoSine's Aug. 30 cash balance of $\$ 113.6$ million, minus the $\$ 22$ million "that will likely deplete" during the fourth quarter of 2002 and the first quarter of 2003.


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- AT\&T plans to cut an unspecified number of jobs in its business-services division next year. AT\&T spokesman Dan Lawler said that "a variety of organizations" in AT\&T Business Services would be reducing their work forces next year as part of the company's efforts to cut costs. Various groups in the division sent letters to employees Thursday and Friday saying that they will be cutting jobs next year.


## Mobile / Wireless

- Verizon Wireless signs agreement with Northcoast Communications LLC, a venture backed by Cablevision Systems, to purchase 50 radio wave spectrum licenses for roughly $\$ 750$ million. The all-cash deal is expected to close during the second quarter of 2003. Cablevision said it plans to use its share of the proceeds, roughly $\$ 635$ million, to pay down bank debt.


## Software

- Applied Microsystems board unanimously recommended liquidation as the best option for shareholder value. In a press release Monday, the software and systems development company said the board's vote follows the sale of its embedded systems development assets and the company's failure to adequately finance its Libra Networks operations.
- Sun Microsystems to distribute BEA Systems' flagship software product WebLogic with its computers, giving the two companies a stronger hand against shared rival IBM. Sun, a maker of computers that manage networks, said starting on January 3 it would ship an evaluation copy of the application server WebLogic in software kits that the company provided with its computers.


## Venture Capital / Investments

- Venture capital funding slides $\mathbf{6 0 \%}$ for the first three quarters of 2002 , but historically the year will still rank high, a survey shows. Nearly $\$ 19$ billion was invested in some 2,500 venture-capital transactions in the U.S., Europe and Israel through September, based on investments recorded jointly by Ernst \& Young LLP and research company VentureOne.


## Hardware

- Handspring drops price of one of its combination phone and digital organizers to $\mathbf{\$ 9 9}$ after rebates. The Mountain View, California-based firm said it would offer a mail-in rebate of US $\$ 150$ to buyers of its $\$ 249$ Treo 180 or 180 g devices from Handspring's Web site, with a GPRS service contract from T-Mobile, a unit of Deutsche Telecom.
- Agilent expects Asia could account for nearly half its revenue in five years and plans to increase its staff in the region, the company's chief executive said. Ned Barnholt, who is also chairman and president of the company said in an interview that he "wouldn't be surprised" to see revenue in Asia up five to 10 percentage points in five years. At present, Asia accounts for about $35 \%$ of revenue.


## Media, Entertainment and Gaming

- Cable and electronics companies reach agreement on a digital television (DTV) standard. The agreement sets the stage for a national "plug-and-play" standard that would allow most DTV sets to connect easily with most digital cable providers. No set-top box would be required. 14 consumer electronics companies and 7 major cable companies representing over $75 \%$ of cable subscribers signed the deal.


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Information Technology

- EDS $\$ 187$ million payment to WorldCom to have a minor effect on earnings. The terms of the settlement "would have a slightly positive, but not material, effect on EDS earnings for the remainder of 2002," spokesperson Kristin Dobrowolski told Dow Jones Newswires Monday. The payments under the proposed settlement aren't expected to have an impact on earnings in 2003, she added.


## Europe

e-Commerce

- HotBot tries to claim more of the paid-listings market. Parent Terra Lycos SA of Spain is updating HotBot for the first time since early 2001, and will launch a print and online advertising campaign. A beta version can be seen now at redesign.hotbot.lycos.com. The company won't disclose its investment and ad costs, but called it a "multimillion dollar" ad campaign.


## Telecommunications

- Disney Internet group to provide branded wireless content to French and Italian consumers. Disney said it would target French consumers through an agreement with France's Bouygues Telecom. Disney Mobile will initially include two services, ring tones and graphics based on Disney characters, available through a monthly subscription. Telecom Italia Mobile SPA will be the first distributor in Italy.
- Murdoch meets with General Motors officials in New York regarding News Corp and Liberty Media's joint bid for GM's stake in Hughes Electronics, which owns DirecTV. The partnership would marry a rich mix of programming assets with a distribution system equivalent to the third-largest cableTV system in the country.


## Hardware

- Philips Electronics to turn China into one of three main centers for global product R\&D. The R\&D initiative in China will focus on two cities: Shanghai, the country's commercial capital, and Xian. R\&D operations in those two cities, currently focusing on areas such as optical storage, digital televisions and wireless-communication products, will expand them in the coming years.


## Media, Entertainment and Gaming

- Vivendi Universal to sell $10 \%$ stake in EchoStar back to the satellite-television operator for $\$ 1.07$ billion. The investment in EchoStar is another legacy of the tenure of former Vivendi Chairman JeanMarie Messier. The December 2001 purchase of the EchoStar stake was part of Mr. Messier's effort to boost Vivendi's distribution reach in the U.S.


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## Other Economic Data

| Currency Exchange Rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Currency | Units | Current Rate <br> $\mathbf{( 1 2 / 2 0 / 2 0 0 2 )}$ | \% Change <br> 1 Week Ago | \% Change <br> $\mathbf{1 / 1 / 2 0 0 1}$ | \% Change <br> $\mathbf{1 / 1 / 2 0 0 2}$ | \% Change <br> Last 12 Mth. |
| Japanese yen | $¥ /$ US\$ | 120.3850 | $-1.4 \%$ | $5.3 \%$ | $-8.6 \%$ | $-2.8 \%$ |
| Hong Kong dollar | HK\$/ US\$ | 7.7985 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Chinese renmenbi | RMB/ US\$ | 8.2774 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Singapore dollar | S\$/ US\$ | 1.7440 | $-1.4 \%$ | $0.6 \%$ | $-5.6 \%$ | $-4.9 \%$ |
| South Korean won | KRW/ US\$ | 1204.7000 | $-0.6 \%$ | $-4.6 \%$ | $-8.3 \%$ | $-4.8 \%$ |
| New Taiwan dollar | NT\$/ US\$ | 34.8500 | $0.6 \%$ | $5.3 \%$ | $-0.4 \%$ | $1.3 \%$ |
| Australian dollar | US\$/A\$ | 0.5638 | $0.7 \%$ | $0.8 \%$ | $10.6 \%$ | $8.8 \%$ |
| New Zealand dollar | US\$/NZ\$ | 0.5169 | $3.6 \%$ | $16.4 \%$ | $24.2 \%$ | $25.3 \%$ |
| Philippine peso | PHP/ US\$ | 53.6500 | $-0.4 \%$ | $7.3 \%$ | $3.9 \%$ | $3.4 \%$ |
| Euro | US\$/€ | 1.0276 | $3.6 \%$ | $9.1 \%$ | $15.5 \%$ | $15.8 \%$ |
| British pound | US\$/£ | 1.6032 | $2.4 \%$ | $7.2 \%$ | $10.3 \%$ | $12.4 \%$ |


| Fixed Income Prices and Yields |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note | Currency | Current (12/20/2002) |  | 1 Week Ago |  | 4 Weeks Ago |  |
|  |  | Price | Yield | Price | Yield | Price | Yield |
| US 30-year | US\$ | 107.3125 | 5.01\% | 106.4219 | 4.95\% | 105.2031 | 5.03\% |
| Japan 30-year | $¥$ | 109.7225 | 2.01\% | 109.3085 | 1.71\% | 108.4910 | 1.75\% |
| Hong Kong 10-year | HK\$ | 121.3753 | 6.15\% | 121.3272 | 3.99\% | 121.3648 | 4.01\% |
| China (10/2027) | US\$ | 115.7785 | 6.48\% | 115.3816 | 6.27\% | 113.9560 | 6.37\% |
| Singapore 10-year | S\$ | 114.3530 | 4.04\% | 113.6972 | 2.61\% | 113.3833 | 2.67\% |
| South Korea 10-year | US\$ | 123.1382 | 7.21\% | 122.8580 | 4.06\% | 122.2591 | 4.21\% |
| Australia 15-year | A\$ | 110.2465 | 5.90\% | 108.8980 | 5.37\% | 107.7110 | 5.52\% |
| New Zealand (07/2009) | NZ\$ | 104.7513 | 6.68\% | 104.1465 | 6.22\% | 104.2341 | 6.21\% |
| Philippines 20-year | PHP | 128.7181 | 14.18\% | 129.3002 | 13.96\% | 121.5185 | 14.92\% |
| India 20-year | INR | 140.3422 | 7.62\% | 138.4697 | 6.87\% | 136.8632 | 7.00\% |
| UK 30-year | £ | 95.6030 | 4.44\% | 95.3324 | 4.54\% | 94.6743 | 4.58\% |
| Germany 30-year | $€$ | 108.6240 | 5.06\% | 108.4899 | 4.93\% | 105.7206 | 5.11\% |

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