

ISRAEL HIGH-TECH & INVESTMENT REPORT

A MONTHLY REPORT COVERING NEWS AND INVESTMENT OPPORTUNITIES
September 1999 Vol. XV Issue No.8

JOSEPH MORGENSTERN, PUBLISHER

You are invited to visit us at our website: <http://www.ishitech.co.il>

Intel's 1/4 of a Century Old Expansion Continues!



Clean Room at Intel's new Kiryat-Gat plant

The US Intel Corporation is the world's largest chip maker and 1999 marked the beginning of its fourth decade of global operations with total sales in 1998 of more than \$26 billion.

Intel designs, manufactures and markets micro-computer components and related products at various levels of integration. Intel's principal components consist of silicon-based semiconductors etched with complex patterns of transistors. The recent auspicious gala opening of Intel Corporation's third and largest facility in Israel--- a \$1.6 billion state-of-the-art manufacturing plant to produce the world's thinnest microprocessors - 0.18 microns - for processors and Internet infrastructure took place recently in the gateway to the desert city Kiryat Gat,. These microprocessors - will be incorporated in the next generation of computers, computer networks and hand held digital devices. The dedication ceremony of Intel's Kiryat Gat plant brought to Israel one of the most influential people in the high tech industry worldwide: Dr. Craig Barrett, president of Intel. "By 2002 I foresee one trillion dollars in industry e-commerce revenues. My vision is of one billion powerful, resilient connected PC's worldwide, based on Intel technology and supported by an infrastructure driven by millions of connected servers," stated Dr. Barrett. As industry statistics are

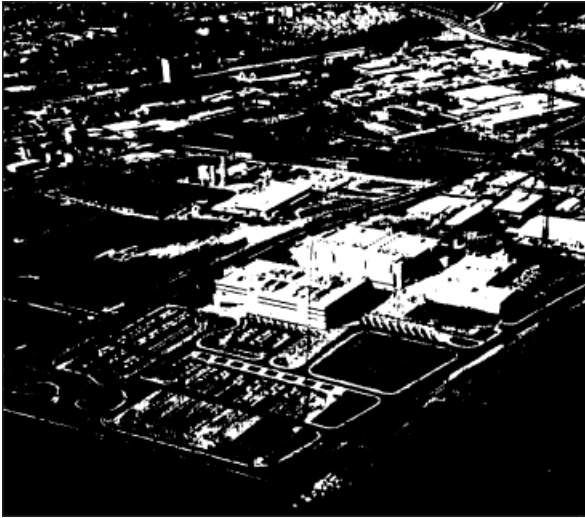
issued monthly Dr. Barrett's predictions seem less visionary and more realistic.

In November 1971, Intel introduced the world's first commercial microprocessor, the 4004, invented by three Intel engineers. Primitive by today's standards, it contained a mere 2300 transistors and performed about 60,000 calculations in a second. Twenty eight years later, the microprocessor is the most complex mass-produced product ever, with more than 5.5 million transistors performing hundreds of millions of calculations each second. The Intel-Israel story is 25 years old. Intel set up its first operation-- a development facility in Haifa. The popular Pentium II was developed there and became a major component of Intel chips. An additional facility exists in Jerusalem.

In this Issue

www.ishitech.co.il

Israel's 1/4 of a Century Old Expansion Continues
Giveaway or the Best Investment Ever
Ireland and Israel: a New Era Opens Up, Sign Letter of Intent
Tech Firms Obtain Record Venture Capital Investments
Visit to the Weizmann Institute of Science
Gad Line Lands US Partners
Israel Defense Forces Chooses ECI
CommTouch Software Rises 50% in IPO
New Fund Based on Israeli Securities
Record Results from BackWeb
National Security Agency Certifies the 2in1PC
New Molecule Boosts Stem Cell Survival
Commerce Study: Net Goosed GDP
ISRAEL HIGH-TECH MODEL PORTFOLIO:
Comverse Technology, CheckPoint, Gilat Communications, Gilat Satellite, Point of Sale
\$3.0 billion in Foreign Investments at Mid-Year Sets New Record
PoS Automates Israel's Largest Book Chain



The sparkling Kiryat Gat plant will produce the new Pentium III whose development is being completed in the Haifa facility. Intel President Craig Barrett said he expects the factory to produce \$1 billion worth of components a year beginning in 2000. Production began in August, with the first microchips currently coming off the assembly line. Construction of the factory began in 1996. Intel invested \$1 billion, and the Israeli government put up some \$600 million. Intel expects to produce \$1 billion worth of exports annually from its new Gat plant, said Dr. Barrett. That figure would approximately be one sixth of all of Israel's electronics-industry exports in today's terms. Intel is to employ 1,500 full-time workers at the state-of-the-art facility and expects to create an additional 2,000 to 3,000 jobs in the future, including another 1,500 at the plant itself. "In addition to providing jobs, the plant has generated hundreds of millions of dollars in payments for goods and services to Israeli companies and supplier development," said plant director Alex Kornhauser.

Giveaway or the Best Investment Ever

Great Giveaway or the Best Investment Ever was the caption of the editorial in our January 1996 issue. The thrust of the editorial was an overview of the the now 40 year old Law for Encouragement of Capital Investments. Companies considering a major investment in this country are offered tax and financial benefits as well as liberal grants. An

Approved Enterprise is entitled to a Government of Israel grant covering investments in capital equipment and facilities, located in priority areas in Israel where the creation of employment is desirable. The 38% investment grant, calculated as a percentage of the fixed assets for which an Approved Enterprise status was granted was a powerful incentive.

In our 1996 editorial, we came out in favour of lowering the percentage of the investment grant. Our logic was compelling in that we foresaw that the positive experience and performance of the Israeli high-tech industries, matched by a superb and entrepreneurial work and management force, the prospect of movement towards an eventual comprehensive peace settlement, complemented by an enlightened Encouragement of Capital Investments law would continue to serve as Israel's Best Investment Ever. In January 1996 we cast our vote for reducing the size of the grant. Since then Law of Encouragement of Capital Investments has been amended and the grant has been reduced to the current 24%.

Intel was among the last of the foreign investors to obtain the 38%, which translated itself into a \$608 million commitment to Intel on the part of the State of Israel. At the time a public debate and a wave of criticism was voiced as there were many who considered a \$400,000 outlay for the creation of a new job, as excessive.

Investment in Israel, since 1996, has been impressive but it has not had the positive employment impact of an Intel since the investment has been in the form of venture capital, joint ventures and participation in Internet related companies whose software expertise does not require a large working force.

Ireland and Israel a New Era Opens up

The recent visit to Israel by Ms. Mary Harney, Deputy Prime Minister of Ireland, and holder of the portfolio of Minister for Enterprise, Trade and Employment created an opportunity for me to get an insight into that country's economy and its

unparalleled economic growth in recent years. In the 1994-1998 period Ireland has recorded an average annual real growth in GDP of 7.4%. Annual exports, as a percentage of Ireland's GDP, exceed 80% and in US dollar terms exceed \$30 billion per year. The Irish "success story" has been underpinned by the more than 1,000 foreign companies who have set up shop in Ireland. The Government of Ireland offers incentives which include a 10% cap on income tax. The country's telecommunication infrastructure is the envy of Europeans. Incidentally, Intel is among the foreign companies operating in Ireland. It has invested \$1.5 billion in a second wafer fabrications facility which brought Intel's total investment in Ireland to \$2.5 billion. Intel employs 4,500 in Ireland and can serve as an example for the forecast that Intel's work force in Israel could reach similar levels.

I was sure, ahead of Ms. Mary Harney's visit that its purpose was aimed exclusively at exposing Israelis to investment and import opportunities. In discussions with Ireland's Ambassador to Israel Brendan Scannell I learned that there was a second agenda which centered on the high degree of curiosity and an intense desire to understand the secret of Israel's continuous flow of technology startups which today may exceed 3,000. During Ms. Harney's visit to the Weizmann Institute she heard how even a pure fundamental scientific institute cannot resist converting its research into practical projects. She met numerous individuals connected to Israel's high tech scene

How do Ireland and Israel Differ

Actually there are more similarities than dissimilarities but there is a fundamental difference. Ireland's highly trained manpower continues to opt for finding employment in businesses set up by foreign companies who establish themselves in Ireland.. Israelis while still doing their compulsory army service dream of setting up their own companies. If they are employed they harbor secret thoughts of leaving to set up their own business.

The entrepreneurial drive is both strong and well here and it continues to get a boost as the Israeli

entrepreneurs, after only a few years of operation, sell their companies for what we all see as astronomical prices.

Success obviously breeds success and it sows the seeds of emulation.

Ireland/Israel Sign Letter of Intent

For more than two years efforts to establish an Ireland/Israel Bi-National Industrial Research & Development Fund, for one reason or other, have not resulted in such an agreement. In discussions with Ireland's Ambassador to Israel I suggested that consideration be given to the drafting of a letter of intent specifying the desirability of such cooperation. The recent visit to Israel by Ms. Mary Harney, Deputy Prime Minister of Ireland, and holder of the portfolio of Minister for Enterprise, Trade and Employment created an opportunity for that to come about.

We were pleased to obtain a copy of the document signed by Ms Harney and Mr. Ran Cohen, the newly appointed Ministry of Trade Industry. It confirmed the two countries "plan to cooperate in technical activities of mutual benefit, also to develop a plan for working together to facilitate enhanced cooperation in industrial science and technology, research and development of industrial relevance".

Specific areas to be followed up include the development of partnerships between organizations in the two countries in the context of the European Fifth Framework Agreement for RTD, to enhance collaboration in mutually beneficial technologies with commercial and market potential. Israel's bilateral trade with Ireland exceeded \$400 mil in 1998. Israel's Minister of Industry and Trade has accepted an invitation to visit Ireland, along with a group of Israeli industrialists.

We all experience a Walter Mitty like feeling of excitement as a brace of Israeli companies ready for Wall Street or if Cable and Wireless buys into our telecom or John Sculley invests in Israeli internet related companies.

However, following on Ireland's example we could well give thought to continue to improve our infrastructure in telecommunications, roads and transport and plan policies which will attract to Israel other multinationals a la the Intel example.

Tech Firms Obtain Record Venture Capital Investments

Israeli "high-techies" continue to draw record investment amounts from venture capital firms. In the three months ending June 30, Israeli companies garnered a record one quarter high of \$229 million.. The total represents a 76% increase over the preceding quarter and an impressive 44% increase over the previously established record of \$159 million set in the quarter ending September 30, 1998. Eighty companies, also a record figure, benefited from the spending bonanza by the investment funds. Forty-five Israeli and five American venture capital firms participated in Kesselman & Kesselman PricewaterhouseCoopers Money Tree™ Survey. These figures are far from reflecting the real amounts invested by foreign venture capital funds. Some European and Far East based venture capital funds invest directly into Israeli companies, thus are excluded from investment statistics based on Israeli venture capital funds. The survey does not include amounts directly invested but our own estimates based on our own sources as well as those reported in the local business press could add as much as an additional \$55 million.

The communications and the software industries, accounted , on a fifty/fifty basis for 70% of the total invested. In October 1998 we predicted that "greater investment opportunities are ahead for venture capital funds. Large sums are likely to be invested in later stages of a company's development. In fact this later stage investment may replace, for the foreseeable future, the IPO financing option." The survey noted that the second quarter was marked by a large number of big-sum deals, with 60% of the total invested directed to nineteen companies, each picking up \$5 to \$10 million. Maturing companies, require larger sums the Survey pointed out. The average investment in communications companies climbed in the June 30 quarter to \$5.1 million, compared to the averages of \$3.1 million and \$2.4 million in 1998 and 1997, respectively.

The software group which includes Internet, multimedia and information technologies companies accounted for an all-time record of \$80 million or 35% of the total investment. Twenty million dollars was invested in Internet companies, with an average investment of \$2.5 million. Internet-related companies accounted for 31% of the total investment.

Israel lags in attracting Internet-related investments. In the United States the level of Internet-related investment over the last two years has tripled. In the medical devices group, twelve companies attracted a total of \$23 million, representing just 10% of the total investment. Computers and electronics investments increased and accounted nearly \$32 million, representing an increase of more than three times the amount invested in the first quarter of 1999 and almost 40% more than that invested in the comparable quarter in 1998. \$5 million was invested in the biotechnology sector. It would seem that venture capital funds keep avoiding this sector and therefore, funds for these companies must be coming from other sources.

The venture capital firms surveyed, disappointed small companies seeking seed investments. Seed

investments accounted a miserly 3% of the total venture backed investment, with the average investment falling from \$1.91 million and \$1.16 million, in 1997 and 1998 respectively, to \$0.6 million. However startup companies could look forward to an emerging trend of new venture capital funds being established that specialize in early stage and seed investments.

A Visit to the Weizmann Institute

Beginning in November of this year the Weizmann Institute of Science will celebrate its 50th birthday. Over the years, the Institute founded by the Sieff family and Dr. Chaim Weizmann, inventor of acetone and a major player in the establishment of the State, has developed into a globally recognized institute for basic scientific research. "At Weizmann we ask why and not what for?," says Dr. Hanan Alon, the Institute's VP for International Affairs. The Institute totals 2,400 individuals and at any given point in time there are 1,000 research programs in progress. There are five faculties which include seventeen scientific departments. "Applied research is viewed as positive externalism," states Dr. Alon. The Institute's budget currently is at \$180 mil. Of the total 50% is covered by the Government of Israel and the balance by fund raising, scientist winning grants and a small amount from royalties from research transferred to industry. Recently the Paamot Venture Capital Fund, with a total capital of \$20 mil has committed \$15 million to the Institute for a "first view of any patent". Paamot invests in startups.

Prof. Leah Eisenbach, of the Institute's Department of Immunology is active in research in gene modified tumor cells to ascertain their ability to stop metastasis. They have defined antigens to be incorporated into a vaccine aimed at preventing the occurrence of colon, bladder, prostate and liver cancer, all major killers. We concluded that mention of a US biotechnology company most of whose activity is at the Weizmann Science Based Industries Park, in Ness Ziona, adjacent to the Weizmann Institute could only be BioTechnology General (Nasdaq:BTGC). It is expected that clinical

trials of the vaccine will begin within two years. "Basic science leads to commercial advantage," states Pro. Zvi Artstein, a mathematician who also serves as the Institute's V-P for Technology Transfer. Yeda R&D plays the role of the technology transfer arm which chooses projects for patent application, sifts scientific work for feasibility and applicability issues and liaisons with industries which interact with the Institute.

Gad Line Lands US Partners

The high-tech company GAD Line recently completed raising \$9 million. Two US companies, Aredsley and Green Cay - acquired 4.2 percent and 4.8 percent of GAD Line's share capital, respectively. At a company valuation of about \$80 million. The rest of the company's share capital is divided up among Telrad Telecommunications (13.8 percent), Tzeadim of the Arison group (9.2 percent), the American investment bank GKM (25 percent) and founders David Cohen and Gideon Tahan, each with 21 percent.

GAD Line was founded in 1991 as a manufacturer of CATV head end equipment -broadcast equipment for the cable television industry. By 1994 the company had shifted its core business to developing and installing advanced communication systems over high frequency communications networks.

Israel Defense Forces Chooses ECI

ECI Telecom Ltd. (NASDAQ:ECIL) announced the receipt of a new contract from the Israeli Defense Forces, to deliver a comprehensive SDH network solution for a large scale network project. Under the terms of the contract, valued at \$6.8 million, ECI Telecom will supply SDH network solutions for a specific project to be completed in 3 years time.

This endeavor is the Israeli Defense Forces' major telecommunications project. ECI Telecom's SDH solutions will be deployed in a fully redundant multi-ring topology which covers the entire state of Israel. The new optical based transport network

will enable the Israeli Defense Force to deliver a broad range of quality services. ECI Telecom's SDH solutions will additionally enable the army to expand its services and capacity for future needs. ECI Telecom's sophisticated management solutions will centrally monitor and manage the entire backbone network.

CommTouch Software Rises 50% in First Day's Trading

CommTouch a leading Israeli provider of e-mail and other messaging services recently concluded its initial Public Offering. The company's customizable solutions enable it to satisfy the different e-mail and messaging needs of a wide range of business partners. CommTouch provide a full-featured, branded CommTouch-based e-mail service that enhances online brand image and creates the opportunity to generate additional revenues from advertising and direct marketing online. For businesses, CommTouch provide e-mail and communication services to employees and online customers, thereby increasing communication, brand awareness and revenue opportunities.

E-mail is one of the most widely used applications on the Internet and has become a significant communications medium. International Data Corporation, or IDC, projects that e-mail traffic in the United States will increase from 1.2 billion messages per day in 1997 to 8.0 billion messages per day in 2002. Further, CommTouch-based e-mail, which is e-mail accessed over the Internet using a browser program, is one of the fastest growing categories of e-mail. With the dramatic growth of international Internet usage, CommTouch and businesses worldwide are seeking to differentiate themselves online. CommTouch have been providing its CommTouch-based e-mail and other messaging services since January 1998. As of May 16, 1999, CommTouch had over 100 business partners employing CommTouch-based e-mail from their sites. Its business partners include Excite, LookSmart, FortuneCity, Talk City and Nippon Telephone and Telegraph. Through its business partners' sites CommTouch serve approximately 4.5 million e-

mailboxes. In November 1998, CommTouch launched its ZapZone Network service, which enables sites to provide e-mail to their end users at no cost.

As of May 1999, CommTouch had registered approximately 75,000 sites through the ZapZone Network service, and CommTouch serving approximately 480,000 ZapZone Network e-mailboxes.

New Fund Based on Israeli Securities

TransNations Investments LLC. (TNI) announced the launch of the AMIDEX35(TM) mutual fund, a no-load fund based on the new AMIDEX35 Index. The fund will invest in the common stocks of the companies comprising the AMIDEX35 Index.

The AMIDEX35 Index is the first published index combining the largest Israeli companies traded in both the U.S. and Israel.

Included in the Index are U.S. traded shares of high-tech companies such as Amdocs, Comverse, ECI, Galileo, and Checkpoint. The Tel Aviv traded banking stocks include Bank Leumi, Bank Hapoalim and First International Bank. The Index is Weighted based on the market capitalization of the included companies.

"The AMIDEX35 Index balances the more mature, blue chip TASE-traded companies with the growth oriented high-tech companies traded in the U.S.," said Boaz Rahav, fund Manager.

From January 1, 1999, when the AMIDEX35 Index was first calculated, through June 10, 1999, the Index rose over 27%, outpacing major U.S. indices (Dow up 16.5%; NASDAQ up 14.66%; S&P500 up 7.27%) and also ahead of major global indices (DJ World Index up 6.24%; Lipper International Index up 5.92%; Morgan Stanley World Index up 5.58%)(2). The daily index value is reported on the Bloomberg system at the symbol AMIDEX35.

The AMIDEX35 Mutual Fund is a no-load, open-end mutual fund that seeks to track the AMIDEX35 Index.

Citing increasing investor interest in index based funds, Cliff Goldstein, President of AMIDEX

AMIDEX35 INDEX

Over 1000 Israeli securities trade on the Tel Aviv Stock Exchange (TASE). In addition to the Israeli shares traded on the TASE, more than 100 Israeli companies trade on the major U.S. exchanges (NYSE, Nasdaq, AMEX). More Israeli companies trade on Wall Street than those of any other foreign nation, except Canada. Many of Israel's hi-tech companies are traded in the U.S., while stocks of companies in more traditional industries such as banking, chemicals and real estate are traded primarily on the TASE. The AMIDEX35 Index is the first published index combining the largest Israeli companies traded in both the U.S. and Israel.

Included in the Index are U.S. traded shares of hi-tech companies such as Amdocs, Comverse, ECI, Galileo, and Checkpoint. The Tel Aviv traded banking stocks include Bank Leumi, Bank Hapoalim and First International Bank.

Funds, Inc. noted that "Investors finally have a convenient vehicle for investing in a broad array of Israeli equities."

Micah Harish, former Israeli Minister of Trade and Industry, and the Chair of the Fund's Israeli Board, commented that "This fund is being launched at an exceptional time. There is an air of optimism in Israel, and Israeli companies, especially hi-tech companies, are capturing attention worldwide." Over 200 new high-tech start-ups open for business in Israel each year, more than any other foreign nation.

"I believe that because the Fund is based on a bi-national index, it can be an attractive investment option for both individuals and institutions. Index based mutual funds make a lot of sense, and they should continue to attract investor attention," said Dr. Moshe Porat, Dean of Temple University's Fox School of Business and Management, and a Member of the Fund's Board of Directors.

TNI plans to use the Internet as a primary market-

ing tool for sales to individuals. "Our goal is to make comprehensive investment in Israel as easy as possible. That's why we will take advantage of the convenience of the Internet," said Goldstein. The daily NAV, Index performance, links to relevant investment and company sites, and profiles of selected companies in the Index will be available to investors who will be able to obtain the Fund's Prospectus, account application and additional information about the Fund on line.

Record Results from BackWeb

BackWeb Technologies(Nasdaq: BWEB), a leading provider of Priority Internet communication infrastructure for the extended enterprise, announced record results for the second quarter ended June 30, 1999.

Revenues for the period were \$5.1 million, a 150% increase over those of the prior year and a 24% advance over the quarter ended March 31, 1999.

BackWeb's operating net loss for second-quarter

How Long Can it Last ?

Company officers are not allowed to sell their shares for several months after the offering, and stock options granted employees may not vest for years even if they can be exercised below current market price. Right now the market for Web stocks is sizzling. Of the 126 initial public offerings of Internet stocks priced this year, 73 are trading above the price they closed on their first day of trading, according to CommScan, a market research company in New York. And after 30 days the stocks had gained an average of 126 percent. Still, 53 of the offerings have failed to live up to their fabulous first-day billings, and 17 are below the initial offering price.

1999 was \$2.4 million, or (\$0.09) per share, compared to the \$3.5 million, or (\$0.18) per share, reported for second quarter of 1998.

Agricultural Technology Flourishes

More than 8,000 buyers from around the world will arrive here for the "Agritech 99" exhibition, compared to some 7,000 that took part in the exhibition in 1999, according to the Director of the Israel Export Institute, Amir Hayek. In addition, more than 40 delegations of international VIPs, including Foreign, Economic and Agriculture Ministers, will participate in "Agritech '99", the largest agricultural exhibition ever held in Israel, in Haifa from September 5 - 9, 1999. Yitzhak Kiryati, the Director of the Agricultural Department of the Export Institute, adds that agricultural exports for the year 1999 will top \$1.5 billion, of which half of the exports are chemicals and fertilizers. The other 50% are comprised of irrigation equipment and greenhouses, the cultivation of flowers, seeds and saplings, the raising of poultry and cattle, and advanced computer and automation technology. Mr. Kiryati indicated that these are the areas that most interest the wide range of business and agriculture buyers arriving for the exhibition.

Mr. Kiryati added that the Export Institute has produced explanatory material, including inventions and innovations, in all relevant languages, including Chinese, Thai, Russian, Polish, and more. The explanatory material has been of assistance to Israeli economic attaches throughout the world, in their dealings with agriculture in general and the "Agritech" exhibition in particular.

US National Security Agency Certifies the 2in1PC

The NSA formally certified that the 2in1 PC developed by Israeli Voltaire Advanced Data Security Ltd. has been evaluated to meet the requirements of EAL-2 (Evaluation Assurance Level Two), of the Common Criteria for Information Technology Security.

The Common Criteria is a new international standard for information security that has been jointly developed by the authorities in the U.S, the United Kingdom, Germany, France, Canada and the Netherlands and published in May 1998. In June 1999, it achieved formalization as ISO 15408.

Common Criteria evaluation provides an objective rating of the security functionality and assurance level of a product. This is achieved by evaluating the product's design and the internal development practices used by the developers, and by performing independent testing of the product by a certified laboratory.

Certification coincides with a HYPERLINK "Info-tech. HTML" highly complimentary review published by the influential Info-Tech Research Group that stated:

"The bottom line is that the only solution to safe connectivity to the Internet is to physically separate an organization's secured and public networks. By doing this, Voltaire is one of the only solutions we've seen that can realistically promise 100% secure network connectivity".

The 2in1 PC is the fourth product added to the formal NSA Evaluated Products List (EPL), joining offerings from Cisco Systems, ITT Industries and Lucent Technologies.

The 2in1 PC provides this protection, as it allows users to connect to the Internet with total security by turning a single PC into two completely separate workstations.

NEW MOLECULE BOOSTS STEM CELL SURVIVAL

Weizmann Institute researchers have developed a molecule that allows blood stem cells—the body's most primitive, immature cells that originate in the bone marrow—to multiply without maturation in the test tube.

This achievement, described in the August issue of the journal *Blood*, may improve bone marrow transplantation, in which stem cells are infused into a patient to replace defective or malignant marrow. The study may also advance gene therapy research. The new molecule was developed by Prof. Michel

Revel of the Immunology Department.

Most stem cells originating in the bone marrow daily mature to replenish our blood. A small number of stem cells, however, survive and renew themselves without maturation thanks to a natural mechanism in which the cells receive signals from molecules called cytokines. Among these molecules is interleukin-6, a chemical messenger discovered in the 1980s in Revel's laboratory. In order to respond to interleukin-6, the stem cells form a cluster with this cytokine, consisting of a receptor molecule on their surface known as gp130, and another molecule called the interleukin-6 receptor, which the cells pick up from surrounding fluids.

In contrast, when isolated in the test tube, the stem cells do not efficiently form the cluster with interleukin-6 and fail to survive: They start to mature into various types of blood cells and lose their original properties within three to five days. This has caused the greatest difficulty in studying stem cells and using them for therapeutic purposes

In their study, Weizmann Institute scientists used a so-called "chimera" recombinant molecule, consisting of interleukin-6 and its receptor fused together. The "chimera" proved extremely efficient in spurring on the formation of clusters with gp130 on the surface of stem cells purified from human bone marrow or from human umbilical cord blood. When the chimera was added to isolated stem cells together with other cytokines, the cells were able to survive in the test tube for two weeks and their numbers increased significantly. In the future, this new approach may make it possible to keep the stem cells proliferating without maturation for much longer.

By transplanting the treated human stem cells to mice with severe combined immunodeficiency, the scientists verified their ability to repopulate the bone marrow and produce all types of blood cells, demonstrating that the stem cells had indeed remained immature. A large increase in the efficacy of transplantation was observed with the stem cells that had received the chimera treatment compared with untreated cells.

If the Weizmann Institute molecule is adopted for

clinical use, allowing stem cells to survive longer and increasing their numbers, the success of bone marrow transplantation can be improved. Such transplantation is currently used to treat an increasing number of diseases, including different types of leukemia and cancerous tumors, several blood cell disorders and even autoimmune diseases such as multiple sclerosis. The Institute study may also provide a boost to gene therapy research by giving scientists a larger window of opportunity for inserting genes into human stem cells maintained in the laboratory. If scientists manage to do that, they may be able to develop gene therapy for various genetic disorders such as thalassemia, severe combined immunodeficiency, Gaucher's or other diseases.

Since transplanted stem cells repopulate the bone marrow of the recipient and daily produce billions of blood cells, inserting a gene in these cells prior to transplantation would ensure a steady supply of the protein made by this gene, compensating for the genetic defect causing the disease.

Commerce study: Net goosed GDP

The Internet was credited for one-third of the nation's real economic growth in the past three years by a Commerce Department report on the digital economy. Released in Washington, the report pointed out early-1998 estimates were that Internet retailing would total \$7 billion by 2000. However, the government analysts said, by the end of 1998, e-sales were estimated at between \$7-\$15 billion.

The report did not make specific estimates of the value of the various digital economy segments such as software, hardware, and consulting services.

The report said it's likely that by 2006, almost half of all workers in the US will be working in industries related to information technology.

ISRAEL HIGH-TECH MODEL PORTFOLIO

Quantity	Commission	Open Amount	Current Value	Gain/Loss	
<i>Israeli Growth Compani</i>					
Check Point Software Tech Total: 1,000	CHKP	Price as of 8/23/99: 69.9375 \$0.00	\$45,375.00	\$69,937.50	\$24,562.50
Comverse Technology, Inc. Total: 1,000	CMVT	Price as of 8/23/99: 78.00 \$0.00	\$46,250.00	\$78,000.00	\$31,750.00
Gilat ComSat Total: 5,000	GICOF	Price as of 8/23/99: 15.125 \$0.00	\$49,375.00	\$75,625.00	\$26,250.00
Gilate Satellite Networks Total: 1,000	GILTF	Price as of 8/23/99: 48.00 \$0.00	\$56,125.00	\$48,000.00	(\$8,125.00)
Point of Sale Ltd. Total: 7,800	POSI	Price as of 8/23/99: 12.375 \$0.00	\$49,725.00	\$96,525.00	\$46,800.00
<i>Israeli Growth Compani</i>		\$0.00	\$246,850.00	\$368,087.50	\$121,237.50

Comverse Technology Inc. **Nasdaq:CMVT**

Comverse technology designs, develops, manufactures and markets computer and telecommunications system and software for communications and information processing applications. The growth for CMVT's computer and telecommunications systems and software for communications and information processing applications is driven by the growing wireless networks and the deregulated wireline telecommunications industries.

Comverse is now a full-fledged global leader in digital recording technology and a market leader in providing Intelligent Recording(TM) solutions for call centers.

Investment Considerations

CMVT is ranked 11h among 134 public telecommunications equipment companies. CMVT's product line is known as Enhanced Services Platforms [ESP].

The ESP market is projected to grow at a 30% rate, for the foreseeable future.

CMVT's dominant and expanding presence in this market should allow, in the foreseeable future, the continuation of the more than five-year 35% annual growth in earnings.

Earnings for 1999 are estimated by consensus analysis at \$1.97 and to be followed by \$2.36 next year.

CheckPoint Software Technology Ltd.
Nasdaq:CHKP

CHKP has leading position in developing, marketing and supporting network security software products enabling connectivity with security and manageability. Its FireWall technology provides easy to use software that enables system administrators to define and enforce an integrated centrally managed enterprise-wide network security policy.

A recently published International Data Corp. (IDC) report Internet Security Software: 1999 Worldwide Market and Trends" validates Check Point's worldwide leadership in the firewall market with the number one market shareposition. In addition to Check Point Software's success in the firewall market, the IDC report notes that Check Point Software has "expanded into virtual private networks (VPNs) and bandwidth management."

We see Check Point continuing to benefit from strong growth in the market segment, which will have revenues approaching \$1.5 billion by 2003, according to IDC forecasts."

The company's integrated architecture includes network security (FireWall-1, VPN-1, Provider-1 and Check Point RealSecure), traffic control (FloodGate-1 and ConnectControl), and IP address management (meta IP). Check Point Software solutions enable customers to implement centralized policy-based management with enterprise-wide distributed deployment. Check Point Software's products seamlessly integrate with "best-of-breed" products from more than 200 leading industry partners. The company has U.S. headquarters in Redwood City, California and international headquarters in Ramat-Gan, Israel.

Investment Considerations

Check Point Software Technologies Ltd. is the worldwide leader in secure enterprise networking solutions.

CheckPoint is ranked 40th among 261 companies in the computer software industry

An annual growth in earnings in excess of 25% is expected over the next two years and an even more accelerated pace in the the following two years.

Earnings per share for 1999 are estimated at \$2.18 and at \$2.74 in 2000.

Gilat Satellite Networks Ltd.
Nasdaq:GILTF

The company designs, develops and markets and supports very small aperture terminal satellite earth stations It has proved an ability to enlarge its market A positive for the satellite sector is the ability to deliver broadband service to remote areas currently unserved by wireline. The Post Office decided they needed a data network connecting most of the post offices in the U.S. Watts states, "They ran a competitive bid. originally won it, and MCI was going to do frame relay to most of the post offices in the country. When they went out and actually looked at where those post offices were located and how close they were to the MCI fiber backbone, as well as the availability of local frame relay connections from hundreds of local telephone companies, they threw up their hands and went to Gilat. So in fact MCI will only do the top 7,000 post offices, the so-called large area offices, and the next 28,000 they have subcontracted to Gilat, because Gilat can do high speed data, they can do it today, they can do it regardless of where the post office is located, and they don't have to go through a local carrier. They just go out and set up a dish"

Investment Considerations

The company is ranked 23 from 134 public companies in the telecommunications equipment industry. Its earnings are advancing at more than 20% annually.

Gilat Communications Ltd.
Nasdaq:GICOF

The company is rapidly growing with a view of assuming leadership position in providing satellite based interactive learning systems worldwide. Estimates point to EPS of \$2.00 in 2000 to come on the heels of \$1.74 estimated EPS for 1999. The company provides a complete solution for clients as it offers both hardware and software for creating, broadcasting and conducting educational and training operations.

The company's earnings growth in 1999 and in the next year should exceed 35%

Point of Sale Ltd: Nasdaq:POSI

Point of Sale Ltd., with headquarters in Israel, develops and markets enterprise-wide open software solutions predominantly for the food retailing industry. These are targeted at improving store operations, reducing costs and increasing worker productivity. The company's products have been installed in over 9,000 stores worldwide. The company was founded in 1982, and its ordinary shares have been trading on the Tel Aviv Stock Exchange since November 1994. On July 15, 1998, the company and certain selling shareholders completed an initial public offering of 2,750,000 ordinary shares of stock in the U.S. at a price of \$7.00 per share.

Investment Considerations

POSI is viewed as a growth company with earnings advancing annually, over the next five years by more than 25%.

Portfolio Explanations

The above portfolio is based on positions established on January 2, 1999 and is calculated on prices traded during the August 23, 1999 stock market session.

The individual share price performance is :

CMVT	+68.65%
CHKP	+54.13%
GICOF	+53.16%
GILTF	-14.45%
POSI	+94.12%

**Percentage gain of the MODEL PORTFOLIO is:
+49.11%**

\$3.0 b. in Foreign Investments at Mid-Year Set New Record

Total foreign investments in the Israeli economy in the six month period ending June 30, 1999 totalled an all time record of \$3.0 billion.

According to a recent Bank of Israel report \$968 million was accounted by foreigners who invested in

public financing offers on foreign stock markets, primarily On Wall Street.

Investments by foreign residents in real estate and industrial enterprises in Israel amounted in July to \$270 million. Since the beginning of the year, non-financial investments in the economy have amounted to \$2 billion.

Foreign financial investments in securities listed on the Tel Aviv Stock Exchange have declined to \$45 million in July.

Point of Sale Automates Israel's Largest Book Stores Chain

Steimatzky, the largest book store in Israel, was established in 1925. Now operating more than 100 stores with more than 1,000 employees, it serves over one million customers a month. Half of its revenues are derived from book sales and the other half from sales of international newspapers and magazines, music, electronic dictionaries and other multimedia programs. Each year Steimatzky adds 3,500 new titles in Hebrew and more than 6,000 new titles in English, Russian, French, German and Spanish to its inventory. Point of Sale, Ltd. (NASDAQ:POSI) announced that it has been selected by Israel's largest book stores chain, Steimatzky, Ltd., to provide store automation software for their stores and central office. "Because we have more than 200,000 items to track and price, the Point of Sale POSware system is ideally suited to our store automation initiative," said Eri Steimatzky, President of the Steimatzky chain. He continued, "this will enable us to centrally control our inventory and feed our reordering systems."

Point of Sale, Ltd. provides enterprise-wide retailing solutions to the supermarket, convenience store and restaurant industries worldwide. With over 9,000 stores installed across more than 33 countries, Point of Sale's installed base handles more than 30 million retail customers per day.

Point of Sale, Ltd., with more than 200 employees worldwide, is headquartered in Ra'anana, Israel and has a U.S. subsidiary, StorePoint, Inc., in Carlsbad, California.