# ISRAEL HIGH TECH & INVESTMENT REPORT

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# The Secret of High-Tech Success

Much has been written and said about Israel's high-tech success. Essentially there are two factors that lie behind the success. One is the Technion Institute of Technology, which produces no fewer that 75% of the country's engineers. The Technion offers a broad range of studies that include aeronautical engineering, computer sciences, chemical engineering, among others. The Technion, to this date, has produced two Nobel Prize winners.

Most important is that the Technion has produced the personnel that run the country's high-tech companies. There is not a single company that does not employ Technion engineers.

While Israel's success story in developing state-of-the-art technology, the Israel Defense Force (IDF), in which service is mandatory for most Israelis, is a useful path for "wannabe" entrepreneurs.

It provides young Israelis with the opportunity to develop a wide array of skills and contacts in an environment where creativity is highly appreciated and encouraged.

Yet, the education is not the only factor underlying high-tech success. The other is the experience gathered during army service. The young soldiers are put work on highly technical subjects.

The experience thus gained during the period of army service is sufficient for them to later form start-up companies. It has been likened to several years of practical experience in industry.

Lichtman, Shani to raise \$100-150m VC fund

The former Microsoft Israel R&D president and former NICE CEO want to invest in late-stage start ups seeking growth rather than a quick exit.

Relia sources inform that former NICE Systems Ltd. (Nasdaq: NICE; TASE: NICE) CEO Haim Shani, who served a stint as Ministry of Finance director general, and former Microsoft



The Secret of High-Tech Success Lichtman, Shani to raise \$100-150m VC fund

the 64th birthday

of the

State of Israel

Israel R&D president Moshe Lichtman will try to raise \$100-150 million for a venture capital fund. The fund will make investments of a few million dollars into late-stage start ups.

The fund is one of several venture capital funds that are planned to launch in the coming year amid rising reports about the difficulties facing Israeli high-tech start-ups face in raising capital.

Lichtman and Shani are two of Israel's most prominent high tech executives of the past decade, and switching to venture capital is a natural move. They operate in the same milieu, have seniority in the industry, and diversified and rich track records in technology and business that suits them to lead a large venture capital fund that will focus on Israel. In addition, one of Shani's legacies from his brief spell at the Ministry of Finance (from which he quit in July 2011), is the Relative Advantage Plan, which includes government incentives for Israeli financial institutions to invest in Israeli start-ups.

Statistics about the establishment of large Israeli high tech companies are not encouraging. No large company has emerged in the past 15 years, with the exception of Mellanox Technologies Ltd. (Nasdaq:MLNX; TASE:MLNX), despite the surfeit of start-ups sold to global giants. One of the reasons for the dearth is the shortage of capital for late-stage investment, which is fundamentally different from standard venture capital, and characterized by greater conservatism and consequently has lower rates of return.

Figures indicate that Israel has several hundred late-stage companies with more than \$20 million in annual sales. These companies often hit the glass ceiling at this size. To reach the next order of magnitude in terms of sales requires an effort that is unfamiliar in local high tech, which specializes in the sale of companies in the earlier stages of their development.

Shani and Lichtman are two Israeli executives who, in theory at least, have this skill. Before his appointment as the Ministry of Finance

Director General in mid-2009, Shani was the CEO of NICE Systems, one high-tech company that succeeded in growing here. He has experience in managing large workforces, mergers and acquisitions, global sales, and company turnaround. These are all skills that are needed when thinking about companies in the long term.

Lichtman has more than 20 years experience at Microsoft, including in top executive positions, during which he has accumulated critical skills in managing large companies. He has also been an investor for years, both through Microsoft and privately. In the past, he has spoken out against the culture of exits in Israeli high tech, saying, "Entrepreneurship is a wonderful thing, but it isn't astonishing, at least not among people for whom this is already they're second or third venture. It's also the incentive obtained from the environment, from all Israeli companies, which see a fast exit as a success."

In an interview a year ago, Lichtman said that Israeli high tech did not lack managerial experience to grow companies here, but

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Israeli residents add 17% VAT

Web Edition and Achives http://ishitech.co.il that that this was simply not on the agenda of entrepreneurs and investors. "People in Israel aren't challenged in thinking to found a great company," he said. "There are 120,000 people in Israeli high tech, and it's not possible that we lack the people who can grow great companies."

Lichtman now plans to play an active role in changing this culture.

Lichtman said in response today, "Haim Shani and I have known each other for a very long time, and we both have many years in high tech. The future of the industry in Israel is close to our hearts, especially the ability of the industry to create large companies. We're in the very advanced stages of figuring out ways to help create large Israeli high tech companies."

Israeli company advertises on eggs Dorot begins using its innovative technology to promote frozen herbs for omelettes

Dorot, which manufactures fresh frozen garlic and herbs, is the first Israeli company to advertise its products on fresh eggs.

The company is using an innovative technology developed in the United States for printing on fresh eggs. The technology and equipment were brought to Israel by the Farm Eggs company from Petah Tikva, which suggested that Dorot print its logo on the top of the egg alongside the caption, "Onion and parsley cubes for omelettes."

According to Dorot, recipes using the company's products will be printed on three million eggs.

"Our goal is to promote vegetable omelettes with Dorot products, and we are engaging in every possible activity with the egg market to link fresh eggs to our frozen herbs," says Dorot Marketing Manager Zohar Shalev. "This is a new medium and we are the first to use it."

The cost of advertising on eggs is about 1.5

agorot per egg. American company HPT, owned by Meyhen, which distributes equipment and products for the egg and poultry industry, brought the egg-printing patent to Israel.

HPT owns the rights to the patent which makes it possible to print any graphic shape, as well as letters and numbers, on an uneven elliptical surface, without optical distortions. So far, the expiration date and name of the manufacturer have only been printed on the sides of the egg and not on the top.

Israel Sarel, the Israeli CEO of New Jerseybased HPT told Yedioth Ahronoth that the patent allows clear and extended exposure to the ad as soon as the carton of eggs is opened.

"The advertising catches one's eye, and in addition one is exposed to it every time an egg is picked up," he said. "This method also allows market segmentation according to audiences and areas.

"We believe this method will become popular in Israel as the price for printing on one million eggs is cheaper than advertising on television for 15 second not at prime time."

Kibbutz Dorot has 3,700 acres of field crops – garlic and herbs – which are picked and immediately cut, packed and frozen in a unique process that maintains their taste, freshness and nutritive value compared to dried herbs.

The company has controlled Israel's frozen herbs market for many years, but now Sunfrost has begun producing frozen herbs as well, which will compete against Dorot's product.

This is one of the reasons Dorot is making an effort to stand out and reach customers through the eggs they buy at the supermarket.

SingTel buys mobile ads company Amobee for \$321m

Singapore Telecom will develop Amobee as

an independent company and is expected to expand R&D operations in Herzliya.

Singapore Telecommunications Ltd. (SGX: Z74, ASX: SGT; Pink Sheets: SGAPY) (Singtel) announced today that it has acquired mobile advertising solutions provider Amobee Inc. for \$321 million in cash. Since it was founded in 2005, Amobee has raised \$54 million from Sequoia Capital, Accel Partners, Globespan Capital Partners, and strategic investors Motorola Ventures, Cisco Systems Inc. (Nasdaq: CSCO), Telefonica SA (IBEX; NYSE: TEF; Euronext: TFA; LSE: TFE), and Vodafone plc (LSE; Nasdaq: VOD).

Amobee vice chairman Zohar Levkovitz, Gil Shulman, and Saul Rurka founded the company. It is headquartered in Silicon Valley and has its R&D offices in Herzliya. The company's software customizes ads to users of mobile phone media, such as video clips, MMS, SMS, and games. Amobee was named the "Globes" most promising start-up for 2008-09.

Levkovitz resigned as Amobee CEO in July 2011, and was succeeded by Trevor Healy. His appointment appeared right in view of his resume in telecommunications at Telefonica and Jajah, but behind the scenes, it was clear that his main job was to achieve a quick and honorable exit. It can be said that he impressively fulfilled his mission.

Levkovitz will make \$22 million for his 7% stake in Amobee, which will be added to previous sales of shares. Sequoia, Amobee's largest shareholder with a 20% stake, is another big winner; it will receive \$65 million. Accel will receive \$35 million for its 10% stake, Globespan will get \$50 million for its 15% stake, and Cisco and Motorola Ventures will get \$15-30 million for their stakes, estimated at 5-10% each.

SingTel said that it will not greatly change Amobee's operations, and that it will operate as an independent unit under its current management. "SingTel will partner Amobee to build a strong independent company that will serve operators, publishers, advertisers and agencies with leading edge mobile advertising technology and services," it said. Amobee has 120 employees, including 55 in Herzliya.

Amobee VP engineering Gil Sheinfeld, who runs the R&D center, said that future operations could include major hiring.

Amobee is SingTel's first major overseas acquisition since 2007. The company, the largest telecom services provider in the Asia Pacific region, has 434 million subscribers in 25 countries. It had \$14 billion revenue in 2011 and has a market cap of \$40 billion on Singapore Stock Exchange.

The acquisition of Amobee is part of a major restructuring of SingTel, under which it will operate through business divisions, rather than on a geographical basis. It said that it plans to use the acquisition to expand into mobile advertising technology and services.

At the press conference following the announcement, SingTel Group Digital L!fe head Allen Lew said, "The way we value this company is not based on just the net tangible assets. We value this company based on what we think eventually it will be worth. The mobile marketing industry is embryonic, it has huge growth potential."

At a conference call, SingTel said that the restructuring was needed to adapt to market opportunities, and that it was necessary to acquire Amobee to utilize its technology, as it believes that the mobile advertising industry is on the verge of a revolution. "We see a \$7 billion opportunity in entering this industry." \*

High tech glasses to offer WiFi connection Call it "blue tooth" for your eyes. Researchers are developing eye glasses that will be able to go wireless connecting the consumer with their smart phone and other digital devices.

It will actually turn an ordinary lens into a projection screen. a prototype that allows users to view social media applications, entertainment, GPS and more through their own spectacles.

Attached to the ear is a small black box. When the wearer clicks the button a mini video projector turns the lenses into a personal video screen.

"The principle of this device is quite simple. A video image is created inside this black box. This image is then insert inside this thin glass then coupled out into the eyes of the user in such a way that he sees a gigantic screen having a three dimensional image floating in the air," explained Yaacov Amitay, the Chief Executive Officer of LUMUS LTD.

In less technical terms, your digital device will talk to glasses in a blue tooth sort of way. Suddenly, you're watching videos, games, even reading e-mails without looking down at your device.

And developers say that's just the beginning

"The other thing is as you will notice it's actually see-through so that enables you to overlay information over reality. Think of all types of basic heads-up information, simple navigation information or even more advanced," Amitay said. "Talk about augmented reality where I can actually overlay specific direction like how to get to Starbucks or if I have friend of mine in the area it could actually highlight them over my field of view."

Sounds like distracted driving, plus distracted walking, could equal very distracted living, but the key apparently is the off button which will turn the spectacles back to regular eyeglasses instantly.

The developers say they're planning to integrate fashion and design into the Wi-Fi glasses and bring them to the consumer market by 2014. They'll be available in both prescription and non-prescription models.

Israel named world's second-best cleantech innovator

Cleantech Group, World Wildlife Fund release first-ever global cleantech innovation ranking. Denmark, Israel and Sweden dominate topthree slots Going green, going strong: Israel is among the top-three nations worldwide that provide the best conditions for clean technology startup companies, a recent ranking by the CleanTech Group stated. Topping the list was Denmark, followed by Israel, Sweden, Finland and the United States.

"Coming Clean: The Global Cleantech Innovation Index 2012," is a first-of-its-kind ranking, complied by the CleanTech Group and the World Wildlife Fund. It listed the top 38 countries worldwide to offer clean energy projects the most favorable conditions.

The report explored clean energy opportunities in each of the 38 countries. The evaluation was based on a 15-indicators scale, which reviewed the creation and commercialization of cleantech start-ups according their potential in relation to their economic size, and innovation projections for the next 10 years.

In 2011, Israel was ranked the world's fourth-leading nation in cleantech investments.

"Israel leads the pack in its capacity to produce new innovative cleantech companies per capita," The report said.

According to the report, the two factors that kept Israel out of the top spot are its small domestic market, and "the lack of government support for cleantech development."

"The global macro-economic landscape is shifting; fostering entrepreneurial start-ups and growth companies with clean technology solutions will be an increasingly important part of countries' competitiveness on the world stage," Richard Youngman, of the Cleantech Group said.

"This index shows that several countries are on the right track, but clearly much more needs to be done if we are to properly address climate change and achieve a transition towards a global 100% renewable future," Samantha Smith of the WWF's Global Climate and Energy Initiative, said.

Israel in \$1.6 billion arms deal with Azerbaijan Israeli defense officials confirmed \$1.6 billion in deals to sell drones as well as anti-aircraft and missile defense systems to Azerbaijan, bringing sophisticated Israeli technology to the doorstep of archenemy Iran.

The sales by state-run Israel Aerospace Industries come at a delicate time. Israel has been laboring hard to form diplomatic alliances in a region that seems to be growing increasingly hostile to the Jewish state.

Its most pressing concern is Iran's nuclear program, and Israeli leaders have hinted broadly that they would be prepared to attack Iranian nuclear facilities if they see no other way to keep Tehran from building bombs.

Israel to sell \$300m in water tech to China Israel has signed a deal to sell China water technology valued at \$300 million for use in the agriculture sector. The deal was signed by both countries' finance ministers in Beijing during a visit to China by Israeli Finance Minister Yuval Steinitz.

Israel is a world leader in water technology products and has pioneered drip irrigation that was developed for arid Middle Eastern conditions. No details of the companies or technology involved in the deal were in the statement.

It has been increasing its exports to China in recent years as its two largest trading partners, Europe and the United States, have been in the throes of an economic slowdown.

"Israel considers the deepening of economic ties with China to be a very important strategic target for both countries," Steinitz said in the statement.

The statement also said officials from the two countries had discussed possible natural gas exports by Israel to China the Finance Minister Xie Xuren said.

Israel has made several huge offshore natural gas discoveries over the past three years

that will ensure its energy independence for decades and even make it an exporter, although the first field will be online in the second quarter of 2013.

Israel has signed a deal to sell water technology to China, the Finance Ministry said. The technology, for use in agriculture, is valued at \$300 million. Finance Minister Yuval Steinitz signed the deal in Beijing during a visit. The ministry's statement gave no details about the companies or technology involved in the deal. But Israel is a world leader in water technology and pioneered drip irrigation, which was developed for arid conditions and would thus suit large parts of China. Israel's exports to China have increased in recent years as its two largest trading partners, Europe and the United States, slow spending because of their financial travails. "Israel considers the deepening of economic ties with China to be a very important strategic target for both countries,' Steinitz said in the statement.

#### AdOM

Prof. Alon Harris is a leading researcher in diseases of the retina and is running a start-up called AdOM. "After spending 20 years in the US absorbed in my work, but always connected to Israel, I received an email from the founders of AdOM: engineer Yossi Weitzman and physicist Dr. Yoel Arieli. They developed the signal processing method on which the company's product is based. They reached me due to my work in this area, without even knowing that I was Israeli," Harris says. The company's name hints at the technology the company uses - a wavelength close to infrared - but it is also the initials of Advanced Optical Methods.

Diseases of the retina, including Glaucoma, AMD (age-related macular degeneration) and diabetic macular degeneration, are the leading cause of blindness in the developed world, and are a serious problem in developing countries as well.

Treatment of these diseases is considerably more effective when they are diagnosed at an early stage, before irreparable damage has occurred.

It is possible today to perform a high-resolution 3D scan of the eye with a laser using extremely expensive equipment (\$90,000-130,000) that is also complicated to operate. On the other hand, an x-ray of the eye can be taken using visible light, which can produce an inadequately low-resolution 2D picture.

Recently, a new technology has been developed that can do a 3D scan of the eye using light, at a wavelength that is close to infrared. The technology enables 3D imaging of the eye without the use of lasers, which are still too expensive and complicated to operate. In the US, there are currently 33,000 ophthalmology treatment centers, at which 110 million eye exams are carried out every year, which are indemnified by insurance companies at well under a hundred dollars, making profitability low.

AdOM's product

AdOM developed an improved technology based on infrared light by different readings of a letter reflected from the eye. AdOM's software analyzes light interferometers (the interference of waves on each other) and its color, which is reflected differently in different tissues. This technology is simpler and cheaper than those currently in use.

AdOM's method can also analyze the eye's metabolic activity, or the rate at which eye cells consume energy. This capability enables the differentiation between types of cells, such as healthy cells from sick cells, or cancerous cells from regular ones. "Metabolic analysis of the eye is considered the next thing in eye diseases diagnostics field, but until now the equipment was too expensive and complicated for clinics to use," Harris says.

The company is currently in advanced stages of product development, and hopes to begin sales in the US within a year, based on existing insurance companies reimbursement policies.

AdOM's main challenge will be to convince clinics that already have equipment to upgrade, and to convince clinics that do not yet have equipment to purchase AdOM's technology.

So far, AdOM has raised \$1 million from US investors, and is interested in raising another \$3.5 million.

AdOM is currently engaged in the development of additional ophthalmic products that do not require high initial investment, some of which are even appropriate for the end-user, such as a device that measures intraocular pressure, the leading cause of damage from Glaucoma. The product is based on an eye scan technology.

GE Healthcare invests \$13.8m in Insightec Insightec develops MRI-guided focused ultrasound devices for the treatment of uterine fibroids, tumors, and neurological disorders.

GE Healthcare has invested \$13.75 million in InSightec Image Guided Treatment Ltd. in the form of a convertible loan. GE Healthcare owns 64.3% of Insightec, which develops MRI-guided focused ultrasound devices for the treatment of uterine fibroids, tumors, and neurological disorders, such as essential tremor, neuropathic pain and Parkinson's disease.

Insightec has been marketing its non-invasive device for the treatment of uterine fibroids for years, but the company is still not profitable, and sales are stagnant. Insightec said that it would use the proceeds to finance its development plan for 2012 in R&D, sales and marketing, customer support, and financing legal costs in cases filed against it.

The loan will bear 6% interest, and can be converted into equity at a price set when a new partner invests in Insightec, or when the loan matures in 2016. Given that Elbit Medical Technologies Ltd. (TASE:EMTC), controlled by Mordechay Zisser, have tried to keep their stakes in the company, the loan will apparently be converted in the event of an exit or strategic marketing agreement, possibly by GE Healthcare itself. It is also possible that the companies believe that such an event will happen before 2016.

Insightec and GE Healthcare have been col-

laborating since the 1990s. Until 2007, GE held a minority stake in Insightec through GE Capital, and, together with Elbit Medical, made regular investments in the company to maintain its stake. Insightec's devices were adapted to GE's MRI devices, and marketed as a complete product.

GE Healthcare last invested in Insightec in 2008. The new investment is directly into the company, rather than through Elbit Medical, suggesting the strategic importance that GE attaches to the investment.

The investment comes as Zisser faces problems. Zisser's real estate company, Elbit Imaging Ltd. (Nasdaq: EMITF; TASE: EMIT), which owns 90% of Elbit Medical, faces severe liquidity problems. Although Elbit Imaging has promised a NIS 39 million credit line to Elbit Medical, which has promised a NIS 58 million credit line to Insightec, it is convenient for them if the loans are not requested. Elbit Medical had just \$658,000 in cash at the end of September 2011.

GE Healthcare's loan is at the same terms as in loans by Elbit Medical to Insightec. The loans are secured by a floating lien on Insightec's assets. Elbit Imaging has lent Insightec NIS 130 million in loans over the years, and it will probably maintain its stake in Insightec, even if GE Healthcare converts its loan into equity

Buffett: Iscar continues to amaze us

"Iscar's managers - Eitan Wertheimer, Jacob Harpaz and Danny Goldman - are brilliant strategists and operators."

Warren Buffett heaped praise on Iscar Ltd. (IMC Metalworking Companies), calling it one of "the fabulous five" in his annual letter to Berkshire Hathaway Inc. (NYSE: BRK.A; BRK.B) shareholders, published as part of the company's financial report for 2011. "Iscar, our 80%-owned cutting-tools operation, continues to amaze us," he says.

Buffett adds, "Its sales growth and overall performance are unique in its industry. Iscar's

managers - Eitan Wertheimer, Jacob Harpaz and Danny Goldman - are brilliant strategists and operators. When the economic world was cratering in November 2008, they stepped up to buy Tungaloy, a leading Japanese cuttingtool manufacturer. Tungaloy suffered significant damage when the tsunami hit north of Tokyo last spring. But you wouldn't know that now: Tungaloy went on to set a sales record in 2011. I visited the lwaki plant in November and was inspired by the dedication and enthusiasm of Tungaloy's management, as well as its staff. They are a wonderful group and deserve your admiration and thanks."

Iscar is one of Berkshire's five largest non-insurance companies, alongside railroad Burlington Northern Santa Fe Corporation, Lubrizol Corporation, Marmon Group, and MidAmerican Energy Holdings Inc., which delivered record operating earnings. Their aggregate revenue was \$9 billion pretax revenue in 2011. "Unless the economy weakens in 2012, each of our fabulous five should again set a record, with aggregate earnings comfortably topping \$10 billion."

In the review of Berkshire's manufacturing operations, of which Iscar is a part, Buffett said that Iscar saw strong demand for its products. The company helped drive the 11% increase in the manufacturing activities' \$17.7 billion revenue in 2010, along with Forest River, CTB and Johns Manville,

Iscar had 11,067 employees at the end of 2011.

Israel's gas reserves worth \$130b

Israel's natural gas reserves are worth \$100-130 billion, in non-capitalized values, a senior official who accompanies Prime Minister Benjamin Netanyahu on Thursday's visit to Cyprus said in a press conference. This valuation is the basis for the sovereign fund for oil and gas royalties that will be set up.

He added that that the gas discoveries in Israeli waters could be double the known discoveries to date.

The official said, "Israelis still don't realize the significance of the change the natural gas will

cause. Obviously, we are inclined towards exports. We have enough gas for our domestic needs, and even assuming GDP growth, we'll have very large surpluses. Gas is our strategic interest. It is also an economic tool for developing Israel, and a diplomatic tool for creating new partnerships, first in our region, as well as with the great powers of India and China. The US is already in through Noble Energy Inc. (NYSE: NBL), but we have the option to think about relations other great powers. We want great power interest in Israel."

The senior official added that the closer relations that Israel is building with Cyprus are part of its Western arc - a coalition that Israel has built with countries such as Romania, Bulgaria, and Greece. He added that the agreements Israel has signed include no commitment to defend Cyprus or even to defend Israeli economic interests in Cyprus.

He said, "You are required to defend your sovereign territory; elsewhere, if you have no military alliance, you are not required to defend. We have interests, but no obligations."

Netanyahu and Cyprus President Demetris Christofias discussed cooperation on natural gas, including joint exports. Cyprus wants Israel to join in its planned \$10 billion lique-fied natural gas (LNG) plant, but Israel is still deliberating between the Cypriot plant and building a LNG in Eilat. A final decision is due in two months, when the inter-ministerial committee on the project completes its work.

The official added that natural gas's advantages include that it is a cleaner fuel than oil, and that it will replace imports. Israel could save \$8 billion a year on the difference in price between natural gas and oil

# Israeli stocks the best investment of past decade

Israel, under threat of war from its neighbors since being founded in 1948, produced better risk-adjusted returns than all other developed stock markets in the past decade as the technology-driven economy attracted global investors.

The Bloomberg Riskless Return Ranking shows the Tel Aviv TA-25 Index (TA-25) returned 7.6 percent in the 10 years ended February 17, after adjusting for volatility, the highest among 24 developed- nation benchmark indexes. Israel beat Hong Kong's Hang Seng Index (HSI), the next-best market with a risk-adjusted gain of 6.7%, and Norway, which had the highest total return.

Related: Steinitz: I can't promise 5% growth in coming years Cabinet outlines plan for sovereign wealth fund Israel outperformed as it fought a month-long battle against Hezbollah in 2006, was involved in a similar conflict with Hamas two years later and is now threatened by Iran's nuclear program. International investors including Warren Buffett bought local companies and the economy, steered by Bank of Israel Governor Stanley Fischer, grew more than twice as fast as the US last year. Israel's stocks may extend gains as Apple Inc. and IBM acquire the country's technology startups.

"Israel is an exciting place to invest," Michael Steinhardt, the former hedge fund manager who produced returns averaging 24% a year over almost three decades until he retired in 1995, said in a telephone interview from Fisher Island, Florida. "The country is surrounded by enemies, it's always on the edge of extinction, but it expands and prospers."

## Beating Norway

The Israeli gauge returned 161% including dividends over the last decade, the third-best performance among developed markets after Norway's OBX Index and the Hang Seng.

The TA-25's biggest members are Bank Leumi and Teva Pharmaceutical Industries, each with an 11% share.

#### Fischer's Role

Bank of Israel's Fischer, a former thesis adviser to Ben S. Bernanke, helped steer the economy back to growth after the worst global recession since World War II. Fischer, who is serving his second term as governor,

began buying foreign currency in 2008 after the shekel reached a 12-year high. That more than doubled the central bank's reserves in an effort to help exports, which are equal to 40 percent of gross domestic product.

Israel's economy probably expanded 4.8% in 2011, according to the International Monetary Fund, compared with 1.7% growth for the US, data from the Bureau of Economic Analysis show. That follows five years of average annual growth in Israel of 4.2%, boosted by foreign investment in local companiews.

90% detection rate in clinical tests for multiple types of cancers

A simple blood test is being developed by researchers at Ben-Gurion University of the Negev (BGU) and Soroka University Medical Center in Beersheba Israel that may provide early detection of many types of cancer.

Prof. Joseph Kapelushnik of BGU's Faculty of Health Sciences and his team developed a device that illuminates cancer cells with less than a teaspoon of blood. The test uses infrared light to detect miniscule changes in the blood of a person who has a cancerous growth somewhere, even before the disease has spread. Various molecules released into the bloodstream cause it to absorb infrared light slightly differently compared to that of healthy people.

In the latest clinical trial with 200 patients and a control group, the test identified specific cancers in 90 percent of the patients and found other types of cancer, as well. The researchers are focused on detection of common cancers, such as lung and ovarian cancer.

Doctors believe that it is critical to increase cancer detection in early stages to prevent the need for long, difficult and costly treatments in more advanced stages.

"This is still research in the early stages of clinical trals," clarifies Prof. Joseph Kapelushnik, who is also head of the Department of Pediatric Hemato-Oncology at Soroka hospital

"But the purpose is to develop an efficient,

cheap and simple method to detect as many types of cancers as possible. We want to be able to detect cancer while a patient is still feeling good, before it has a chance to metastasize, meaning fewer treatments, less suffering and many more lives saved."

More clinical trials will be conducted in the next 18 months.

Goldman Sachs Holdings Inc. (NYSE: GS) has acquired 10% of Viola Group for \$20 million, giving a company value of \$200 million. The investment is solely financial; Goldman Sachs will not participate in Viola Group's management.

Viola Group will remain in the hands of Shlomo Dovrat, Avi Zeevi, and Harel Beit-On. The company's partners will share the proceeds of the deal.

Goldman Sachs is one of the biggest foreign investors in Israel. It acquires stakes in companies, mostly in high tech, and has made ten investments in Israeli companies to date. Sources inform "Globes" that it has invested over \$250 million in Israeli companies in the past few years.

Investments include Powermat Technologies Ltd., Mobileye Inc., and Cyber-Ark Ltd. (the last was a joint investment with Jerusalem Venture Partners (JVP)). Most of the investments were not announced. Goldman Sachs is traditionally closed-lipped, and declines to comment in any way about its acquisitions and transactions.

Viola Group incorporates several firms, which manage \$2 billion between them: Carmel Ventures, which manages \$600 million; Plenus Venture Lending Fund, which manages \$300 million; Vintage Investment Partners, a fund of funds which manages \$350 million; Viola Private Equity, which manages \$150 million; and Vpartners, which manages \$280 million.

Viola was briefly in talks last month with Nochi Danker to acquire control of Clal Industries

and Investments Ltd. (TASE: CII) from IDB Holding Corp. Ltd. (TASE:IDBH) for NIS 1.52 billion, but the talks were broken off, and Dankner reached a deal with the Livnat family instead.

Goldman Sachs buys 10% of Viola Group Goldman Sachs paid \$20 million for the stake in Viola Group, which manages \$2 billion in investments.

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Viola Group will remain in the hands of Shlomo Dovrat, Avi Zeevi, and Harel Beit-On. The company's partners will share the proceeds of the deal.

Goldman Sachs is one of the biggest foreign investors in Israel. It acquires stakes in companies, mostly in high tech, and has made ten investments in Israeli companies to date. Sources inform "Globes" that it has invested over \$250 million in Israeli companies in the past few years.

Investments include Powermat Technologies Ltd., Mobileye Inc., and Cyber-Ark Ltd. (the last was a joint investment with Jerusalem Venture Partners (JVP)). Most of the investments were not announced. Goldman Sachs is traditionally closed-lipped, and declines to comment in any way about its acquisitions and transactions.

Viola Group incorporates several firms, which manage \$2 billion between them: Carmel Ventures, which manages \$600 million; Plenus Venture Lending Fund, which manages \$300 million; Vintage Investment Partners, a fund of funds which manages \$350 million; Viola Private Equity, which manages \$150 million; and Vpartners, which manages \$280 million.

Viola was briefly in talks last month with

Nochi Danker to acquire control of Clal Industries and Investments Ltd. (TASE: CII) from IDB Holding Corp. Ltd. (TASE:IDBH) for NIS 1.52 billion, but the talks were broken off, and Dankner reached a deal with the Livnat family instead.

Microsoft Israel launching start up incubator The Windows Azure Accelerator in Herzliya will be Microsoft's first incubator in the world.

Microsoft Israel's R&D center is setting up a start up incubator - Windows Azure Accelerator. After years of passive support for start ups, during which Microsoft Corporation (Nasdaq: MSFT) provided access to development tools and services, the company is joining the growing trend in the high tech industry.

Windows Azure Accelerator is a precedent for Microsoft; it will be the company's first incubator in the world. It will be based at Microsoft Israel's R&D center in Herzliya Pituah.

The incubator's name is derived from the aspect of activities that Microsoft is most interested in - cloud computing, internet, and mobile. The incubator is a four-month program for start ups. Microsoft says that the program will include direction from top industry experts, including its own R&D center, and that it will offer the tools start ups need to get on the path to success.

Microsoft Israel's R&D center said, "Microsoft Israel was chosen by the company to set up the first accelerator incubator in view of Microsoft's widespread activity among startups in Israel, and its wealth of experience and know-how in fostering companies for the global market."

Microsoft Israel VP strategy and business development Zack Weisfeld said that the company wanted to assist, but not acquire, the companies. "Microsoft does not plan to acquire stakes in the participating companies, and it will solely focus on fostering them and the industry."

Microsoft added, "The incubator will have a

designated management team, which we are now recruiting, including a CEO and CTO, whose sole job will be managing the incubator."

Last November, Google Inc. (Nasdaq: GOOG) announced that it plans opening an incubator in Tel Aviv in August 2012.

Avaya buys Radvision for US\$230m

Avaya announced late Thursday that it has signed an agreement to acquire video conferencing company Radvision for US\$230 million (S\$290 million).

Avaya will pay Radvision shareholders \$11.85 per share.

The deal has been approved by both companies' boards and is expected to close in 90 days, Avaya said.

The acquisition will allow Avaya to provide customers with a highly integrated and interoperable suite of video collaboration products, with the ability to plug and play multiple mobile devices including Apple iPad and Google Android.

Most active venture capital funds in Israel - 2011

Foreign VC fund Innovation Endeavors most active in 2011

2011 foreign VC fund share at 52 percent

IVC Research Center has released results of its survey to determine 2011's most active venture capital funds in Israel. IVC ranked Israeli and foreign venture capital funds according to the number of first investments made in Israeli and Israel-related companies in 2011. The data are based on information received directly from the VC funds and from IVC Online Database (www.ivc-online.com). The ranking reflects the number of deals only, not capital invested. Additional details are available in the IVC 2012 Yearbook to be published in April.

In 2011, venture capital funds made 140 first investments in Israeli and Israel-related companies. Seventy-three first investments by 23 foreign VC funds accounted for 52 percent of the total number of investments, while Israeli VC funds accounted for the remaining 48 percent. This compares to 31 percent and 69 percent by foreign and Israeli VC funds in 2010, respectively.

The most active VC fund in 2011 was Innovation Endeavors, a foreign VC fund owned by Google Chairman Eric Schmidt, with eight first investments. Pitango, JVP and Sequoia Israel were next with seven first investments each and Giza and Bessemer followed with six investments. Horizons Ventures, controlled by Li Ka Shing from Hong Kong, and foreign VC funds, Access Medical and CP Lantern made five investments each (see Table).

Six foreign VC funds were included within the top four rankings, compared to just two foreign funds in 2010.

In 2011, foreign VC funds made 21 investments in seed companies (40 percent of seed deals), compared to just four investments in 2010. Access Medical's five investments were all in seed companies. Internet companies attracted 27 investments (37 percent) – the most of any sector investments by foreign VCs, as in 2010. Software followed with 23 investments (32 percent).

Marianna Shapira, IVC's Research Manager, pointed out that "foreign VC fund activity in Israel accelerated significantly in 2011. Foreign VC first investments have doubled since last year. This reflects the general situation in Israeli high-tech capital raising of 2011, where Israeli VC investments reached only 25 percent out of total, the lowest share in the last decade."

Among venture capital funds' first investments in 2011, seed stage companies accounted for

the largest number – 53 deals (38 percent of all first investments). Companies at the initial revenue stage followed with 41 deals (29 percent).

The Internet sector attracted the largest number of first investments in 2011 – 46 deals (33 percent). The software sector followed with 32 deals (23 percent), while the life sciences and communication sectors shared third place with 23 deals each (16 percent).

In 2011, Israeli VC funds made 67 first investments (48 percent), compared to 52 first investments (69 percent) in 2010. According to the IVC-KPMG 2011 Venture Capital Survey, first investments accounted for 31 percent of the total amount invested by Israeli VC funds, a slight increase from 29 percent in 2010 and 2009.

In 2011, seed stage companies attracted 32 (48 percent) first Israeli VC fund investments, compared to 20 (38 percent) in 2010. JVP made all of its investments (seven) in seed companies, as did Genesis and Magma with two deals each. Of the 23 Israeli venture capital funds with first investments in 2011, 10 did not invest in seed companies at all. The initial revenue stage was second most attractive for Israeli VC funds with 20 deals (27 percent).

Internet companies attracted 19 (28 percent) Israeli VC fund investments, followed by the life sciences with 17 (25 percent) and communications with 10 (15 percent). Pontifax and AccelMed, as life science-dedicated funds, made all their investments in this sector. In 2010, Internet attracted 25 percent of Israeli VC fund first investments, followed by software with 23 percent and the life sciences with 16 percent.

Lool and Glilot are Israeli micro VC funds that made their first investments in 2011, with four and two deals, respectively. Micro-funds manage up to \$30 million, invest relatively small sums and generally focus on early stage Internet and digital media start-ups. Israeli micro VC funds raised a total of \$87 million in 2011, nearly 11 percent of total capital raised by all Israeli VC funds.

Most Active Venture Capital Funds for 2011 will be published in its entirety in the IVC 2012 Yearbook in April. Complete rankings for 2011 and previous year rankings are also available at www.ivc-online.com

may also be paid. Broadcom said that the deal will be closed in the second quarter.

Broadcom added that Broadlight, a developer of highly integrated networking and fiber access PON (Passive Optical Network) processors, will expand its broadband access portfolio to support customer requirements for next-generation fiber networks.

Broadcom EVP and general manager Broadband Communications Group Dan Marotta said, "The need for increased bandwidth for IPTV services, HDTV broadcasting and high speed internet access are driving momentum for deploying fiber networks. Combining Broadlight's PON solutions with the strength of Broadcom's broadband access portfolio will enable us to offer a complete, end-to-end solution for customers - from OLT at the central office to CPE at the home."

This is Broadcom's tenth Israeli acquisition. Founded in 2000, Broadlight has raised \$62 million.

Covidien to buy Oridion Systems for \$300m Irish drug and medical device maker Covidien plc said Thursday it agreed to buy Oridion Systems Ltd., which makes equipment that is used to monitor breathing, for about \$300 million.

Oridion, based in Israel, makes devices that monitor breathing and give early indications that a patient's airway could be compromised. It had \$64 million in revenue in 2011. The deal values Oridion at \$23 per share.

Covidien said the boards of directors of both

Venture

companies have approved the deal, which is expected to close during the second quarter. It doesn't expect the purchase to have a significant effect on its business in 2012.

IAI unveils Rex infantry robot Rex is designed as the robotic

replacement of the llamas that accompanied IDF troops during the 200aa6 Second Lebanon War.

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Israel Aerospace Industries Ltd. (IAI) (TASE: ARSP.B1) today unveiled at the Association for Unmanned Vehicle Systems International (AUVSI) conference in Tel Aviv a device that could be the infantryman's best friend. Meet Rex - a robot that follows infantrymen on the march, responds to commands given by remote control, carries equipment, food, and munitions, and can extricate wounded soldiers from the field.

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Rex is designed as the robotic replacement of the llamas that accompanied IDF troops during the 2006 Second Lebanon War. In contrast to the llamas, Rex is not supposed to panic under fire, and there is no need to feed and water it on the battlefield.

IAI military robotics program head Paz Meidan told "Globes", "The llamas should be praised. They provided a creative solution to the problem of soldiers carrying huge quantities of personal equipment over long distances. Whereas in World War II, an infantryman crossing the Normandy beaches carried an average of 15 kilograms of equipment, the average infantryman now carries almost triple that load."

Rex weighs 200 kilograms, and can carry up to 250 kilograms of equipment, which can be loaded and unloaded quickly. It has a 170-cubic centimeter gasoline engine, and can travel at up to 15 km/h, to move at the speed

of infantrymen in field conditions.

"This was a huge challenge for us," says Meidan. "To make it possible for the vehicle to know to move so slowly, we had to invest in our own development, because all developments in the field to date were directed towards faster speeds to get from one point to another as fast as possible."

Meidan's team defined a series of demands for a vehicle that was designed to accompany infantrymen. It had to be long enough to carry a stretcher for evacuating one wounded soldier, narrow enough to go through a standard door or move down a narrow alley, low enough to be carried by a Blackhawk helicopter, and be able move and function well in difficult terrain.

IAI's engineers solved Rex's problem to get over obstacles by making it easy to unload by two or three soldiers, who can then lift it over the obstacle.



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