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## Overview

- The Government of Israel priced an offering of €1.5 billion ten-year bonds, priced at 130 basis points above the German mid-swap curve. This issue marked Israel's largest bond offering ever and was issued after an almost five-year absence from the European market. Total tenders received reached €13 billion from almost 400 investors in 35 countries.
- The State of Israel listed a \$1.5 billion sovereign bond on the NYSE, making the Israeli government-backed debt securities available for trading on the NYSE bond market. The Israel sovereign bond matures March 26, 2019. The new listing will make the bonds available to additional investors and will amplify the trade volume. This marks the first time an Israeli bond has been listed on a regulated market in the United States. The bond will be traded under the ticker symbol "Israel."
- Growth rate exceeded expectations and ended 2009 at 0.7 percent. Both private and public consumption led the expansion, gaining 1.5 percent and 2.1 percent for the year.
- The current account ended the year with a surplus of \$7.2 billion, 3.7 percent of total GDP. The surplus can be attributed to a significant decrease in the deficit of the goods account and from an increase in the surplus of the services account.
- The TA-25 Index rose more than 71 percent during 2009 and has added another 5 percent since the beginning of 2010.
- Total unemployment for the year was 7.6 percent, only 1.5 percent more than the unemployment rate in 2008. Participation in the labor force ended the year reaching 56.6 percent, 0.1 percent greater than last year's figures.
- Debt to GDP ratio ended the year at 79.9 percent, only 2.8 percent higher than the year-end percentage for 2008. This achievement can be attributed to the well-planned and disciplined fiscal policy implemented by the government.

## Editor's Review

### Israel: A Bright Spot Amidst Grey Economic Skies

During the second week of March, the Government of Israel priced an offering of €1.5 billion ten-year bonds. This issue marked Israel's largest bond offering ever and was issued after an almost five-year absence from the European market. Lead underwriters for the deal were Barclays Capital, Goldman Sachs and Morgan Stanley. Israel's risk premium, as reflected in the offering, was 130 basis points above the German mid-swap curve. Interest in the issue was very strong and reflected the confidence of the investment community in Israel's economy. The State of Israel's original intention was to raise €750 million, but due to high demand and an attractive price, the offering was increased to €1.5 billion. Total tenders received reached €13 billion, from almost 400 investors in 35 countries including the United Kingdom, Switzerland, Germany, Austria, Denmark, Spain, Portugal, Italy, Belgium and others. This enthusiastic reaction of the market is well founded, based on the good news about Israel's economic fundamentals.

2009 exceeded expectations and ended with a 0.7 percent growth rate following 4.0 percent for 2008 and 5.2 percent for 2007. The business sector, which was the most affected sector by the global economic slowdown, lost only 0.2 percent, following expansions of 4.5 percent and 5.6 percent in 2008 and 2007, respectively. Compared to the average growth rate of OECD member countries, which was negative 3.5 percent, Israel is definitely a bright spot amidst grey economic skies.

GDP components differed in their year-end outcomes. Private and public consumption rose by 1.5 percent and 2.1 percent

respectively, leading the positive growth. Contrary to these positive numbers, capital formation shed 6.0 percent and exports of goods and services declined by 12.5 percent compared with 2008. On the bright side, from July to December both exports and capital formation increased, gaining 11.2 percent and 1.9 percent, and in the fourth quarter of 2009, exports were at the same levels posted prior to the economic slowdown.

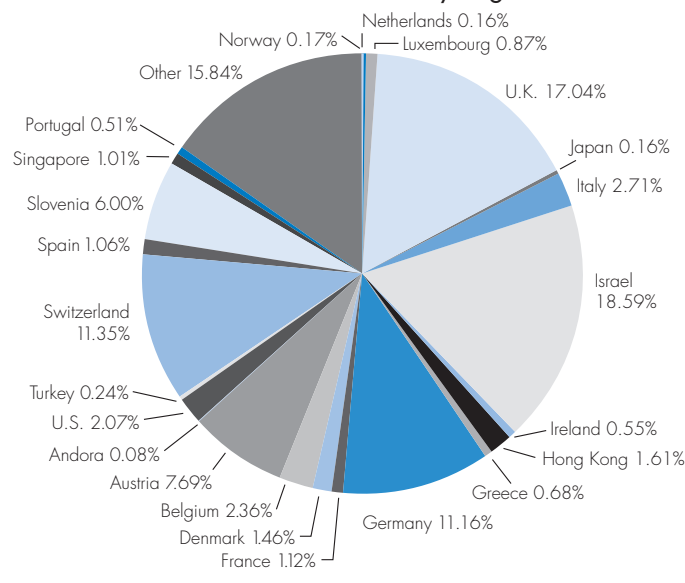
Imports of good and services did not fully overcome the 25.4 percent loss of the first six months of the year. Although rising by 8.5 percent from July to December, imports ended the year losing 14.0 percent.

The decrease in global demand, which affected Israeli exports, also affected industrial production, which lost 5.9 percent. Production began picking up only toward the end of 2009, posting an increase of 6.9 percent in the third quarter and 7.5 percent in the fourth. High-technology industries were the least affected by the global slowdown, dropping only 0.6 percent for the year. Other industries including low technology, semi high technology and semi low technology, decreased by 9.6 percent.

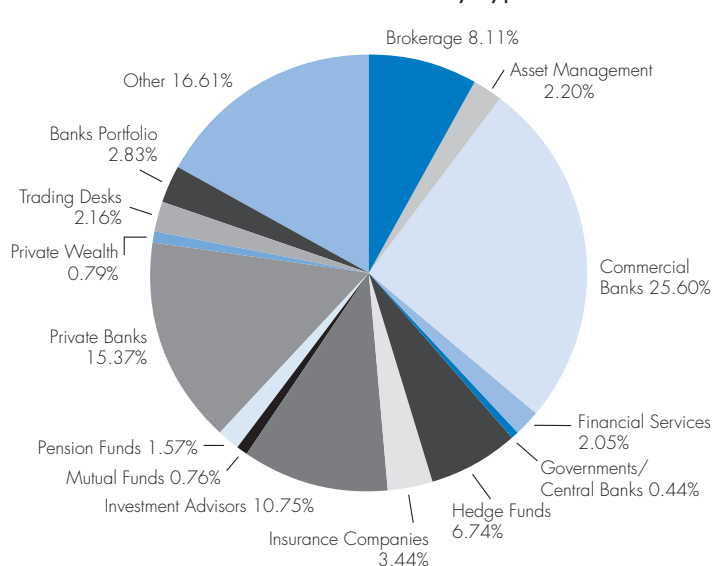
The fact that imports recovered relatively late when compared to exports can also be seen in the balance of payments. Despite a relatively weak performance of exports, the current account ended the year with a surplus of \$7.2 billion, 3.7 percent of the total GDP. The surplus can be attributed to a significant decrease in the deficit of the goods account and from an increase in the surplus of the services account.

#### Israel 10Y Euro Bond Offering, March 2010, Order Book Statistics

##### Investors Distribution by Region

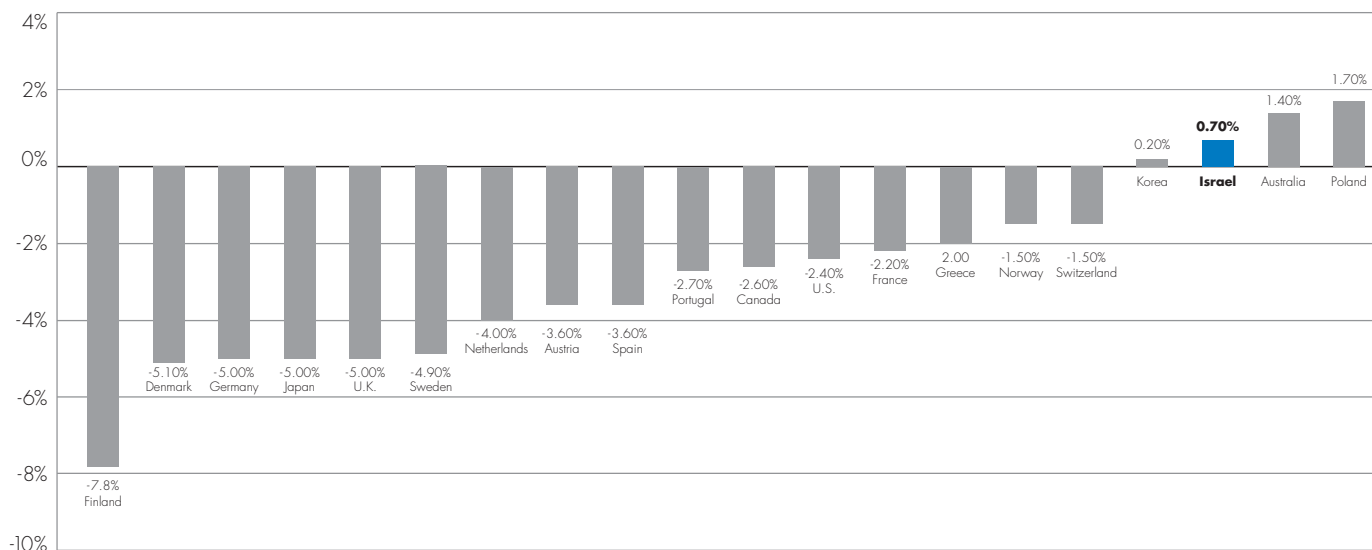


##### Investors Distribution by Type



Source: Goldman Sachs' "Deal Insights"

## 2009 Annual Growth Rate, Israel and Selected OECD Member Countries



Source: OECD

In services, just like in goods, there was a slowdown at the beginning of the year but an increase at the end of it. The tourism industry is a good example, although in January-February 2009 there was a decrease of 25 percent in the number of visitors entering Israel compared with the same period the year before. In July through December numbers reached levels posted in 2008. The year as a whole ended only 10 percent lower than 2008. On top of that, October 2009 was a record month, recording 330 thousand visitors to Israel.

Recovery is also reflected in flows of investments into Israel. Despite being lower than in past years, foreign investment reached an impressive \$9.3 billion, out of which \$3.77 billion were foreign direct investments. A significant achievement this year was maintaining positive foreign investments despite the fact that many foreigners pulled money out of deposit accounts.

Funds also entered Israel through the Tel Aviv Stock Exchange. Rising more than 71 percent during 2009 and adding another 5 percent since the beginning of the year, the TA-25 Index is a perfect example of the confidence investors have in Israel's financial sector.

The labor market was a reflection of the recovering Israeli economy. Unemployment rose in the second and third quarters of 2009 but dropped sharply to 7.4 percent in the fourth quarter. Total unemployment for the year was 7.6 percent, a mere 1.5 percent more than the unemployment rate in 2008. Participation in the labor force also ended the year on a positive note, reaching 56.6 percent, 0.1 percent greater than last year's figures.

The lack of demand during most of 2009 did not have a major deflationary effect. Despite almost no change in monthly CPI figures from September until the end of the year, year-end inflation was

3.9 percent, higher than the target range of 1 percent to 3 percent set by the government. In January and February 2010, when the CPI lost 0.7 percent and 0.3 percent, prices dropped bringing the total inflation rate to the level of 3.6 percent for the last twelve months.

The Bank of Israel, trying to balance the need to keep inflation within the target range and the need to react to the rebounding economy, raised the interest rate three times since September 2009, bringing it to 1.25 percent. This level, according to officials at the Bank, is the level under which inflation will be controlled and growth will not be curbed, for now. (*See Goldman Sachs review in this issue.*)

The monetary policy enhanced by the Bank of Israel was accompanied by a fiscal policy applied by the government in the form of a stimulus plan (which was described in past issues of the *Shekel*). While boosting the markets, this plan did not drag the public sector into an uncontrolled spending spree. The year-end budget deficit was NIS 39.3 billion, 5.2 percent of the GDP, lower than the 6.0 percent approved by the government. The 2010 approved budget deficit is 5.5 percent, but according to forecasts, the actual deficit will be much lower. To help maintain fiscal discipline in the coming years, the government has already approved the law binding it to set a two-year budget for 2011-2012. Other evidence for the cautious financial management of the government is the debt to GDP ratio, which ended the year at 79.9 percent, only 2.8 percent higher than the year-end percentage for 2008.

They say: "All good things come to he who waits." Israel does not need to wait any more.

## Israel: Bank of Israel, Out of Quantitative Easing and Back to Inflation Targeting

Ahmet Akarli, VP, New Markets Economics, Global Investment Research Division, Goldman Sachs

Israel's economic downturn during the crisis has been much milder than for its peers in the New Markets region, thanks in part to the aggressive and timely policy response of the Bank of Israel (BoI). The economy has already reclaimed output losses and is set to grow steadily in the coming few years. Inflation pressures remain relatively subdued and the likelihood of a large inflation overshoot from targets remains low, given the BoI's commitment to ensuring price stability. We expect the Bank to continue to unwind its quantitative easing measures this year and bring rates to a more neutral 3 percent level by the end of 2010. We expect further Shekel appreciation as the Bank loosens its grip over the currency, consistent with recovery in the global and domestic economy.

The severe contraction in global credit and liquidity conditions, along with the collapse in external demand, have put a sharp brake on Israel's economy. But the ensuing recession proved to be considerably milder than what we have seen in similar small open economies. The peak-to-trough GDP contraction was only 1.2 percent, which stands well below the -5.3 percent posted in the Czech Republic, -9.1 percent in Hungary and 14 percent in Turkey. There were two reasons for this. First, Israel's macro fundamentals going into the crisis were considerably stronger: Israel had a strong external position, underpinned by a structural current account surplus and a positive Net International Investment position (a net surplus of \$17.7 billion) so it could absorb the immediate credit and liquidity shocks relatively well. Second, the policy response in Israel was strong. The Bank of Israel (BoI) swiftly introduced extensive quantitative easing measures, aiming to ease domestic financial conditions and improve Israel's terms of trade. This not only helped avoid more serious output losses but also supported the ensuing recovery. In 2009Q2 the economy snapped out of recession and grew about 1 percent, annualized. In the second half of 2009, GDP growth accelerated further, to 2.9 percent, annualized. In other words, in just three quarters, Israel more than reclaimed all the output losses registered during the crisis.

This year and next, we expect the Israeli economy to return gradually to trend growth. We are forecasting GDP growth at 3 percent in 2010 and 4 percent in 2011. We believe that Israel will benefit from the strong recovery in global growth and will also generate some endogenous demand growth, supported by the strong monetary stimulus provided by the BoI. We are showing only a gradual return to the trend growth rate, in view of the fact that Israel remains predominantly exposed to the European and U.S. economies, where we expect sub-trend growth for the coming two years. But, overall, Israel's main story remains one of steady recovery, which may well

produce upside surprises if global growth, especially the recovery in core economies, turns out to be stronger than we currently expect. In that case, Israel could comfortably grow above the 3.5 percent - 4 percent trend growth rate in 2010.

In view of the ongoing global and domestic economic recovery, the BoI has started removing the extreme policy measures it introduced during the crisis. During the summer, it stopped its bond purchases and slowed the pace of FX interventions. And recently it started hiking rates, while at the same time mopping up some of the excess liquidity left in the system through Makam bond issuances. It also delivered 25bp hikes in August, November and December.

However, the BoI continues to see some global uncertainty and is intent on keeping monetary policy fairly loose to ensure that recovery remains uninterrupted. In the short term, headline CPI will be quite volatile and is temporarily breaching the ceiling of the BoI's 1 percent to 3 percent target range at the moment—due to a combination of rising commodity prices and adverse base effects coming from last year. However, from mid-2010 onwards, inflation will fall sharply as the high base effect created by last year's administered price hikes and sharp rent increases subside. We see inflation peaking near 4 percent around February 2010 and then falling to stabilize around 2 percent. Accordingly, we expect the Bank to tighten more steadily throughout 2010, mainly to anchor inflation expectations and bring rates to a more neutral 3 percent level by the end of 2010. Note that this would still imply a fairly accommodative policy stance, reinforcing an ex-ante real rate of about 1 percent, up from current -1 percent but well below the historical 3 percent seen at the trough of previous policy cycles. This will exert appreciation pressure on the Shekel, especially against the background of a strong external position. In 2010, we expect the current account to be in surplus, to the tune of about 2.5 percent of GDP. We also expect the capital account to remain strong, supported by widening growth and interest differentials (vis-à-vis Israel's main trading partners, the U.S. and the EU), which means the underlying Broad Balance of Payments will remain in fairly large surplus. Currently, the BoI is absorbing the appreciation pressure through discretionary FX interventions, but ultimately this is an unsustainable policy stance and, with the capital account fully open, the BoI will eventually have to let go of its grip of the Shekel, as it moves deeper into the tightening cycle. Accordingly, we forecast \$/ILS at 3.70, 3.60 and 3.70 in three, six and twelve months, respectively.

The main risk to our forecast would be an unexpected dip in global economic activity, which would prompt the BoI to prolong the tightening cycle and cap Shekel upside. Otherwise, directionally, the Shekel rates curve should flatten while the Shekel continues to appreciate.

## BSF: The Engine That Drives Theory Into Reality

Mona Abramson, Regional Development Director  
United States–Israel Binational Science Foundation (BSF)

While Israel's technological accomplishments in the commercial world are well known, many medical and scientific breakthroughs attributable to Israeli and American scientists have an origin that is not nearly as well known. They stem from collaborative non-profit R&D projects, conducted jointly by Israeli and American scientists that are funded by the United States – Israel Binational Science Foundation (BSF).

Formed in 1972 by a joint initiative between the governments of the U.S. and Israel, the BSF brings together premier American and Israeli researchers to confront the scientific challenges of our times. BSF maintains and distributes earnings from an endowment of \$100 million, to which each country contributed \$50 million. The interest on that endowment has funded 4,500 projects, totaling about \$480 million in current values.

For many years, BSF was the primary source of funding for Israeli basic research. To this day, it remains an important resource for new projects. It provides Israeli scientists with access to sophisticated, costly facilities not available in Israel, and introduces American scientists to innovative Israelis with a unique approach to problem solving. Together they create a synergy for important breakthroughs that impact the lives of people worldwide.

Through a competitive peer review process that is juried by select scientists from around the world, joint collaborative research projects of American and Israeli scientists are selected for their scientific merit. Over the years, the BSF has awarded funding to research in several key areas including: health and life sciences, natural sciences, social sciences and exact sciences.

By providing initial funding to meritorious collaborative projects of young American and Israeli researchers, BSF has prepared the next generation of U.S. and Israeli scientists for leadership roles in the scientific community. So far, BSF has funded the work of 37 Nobel Laureates, whose partnerships resulted in a highly productive exchange of new ideas and innovative problem-solving. In 2004 alone, of the eight science laureates, six were prior BSF grant recipients. The 2009 Nobel Laureate for Chemistry, Professor Ada Yonath, was also awarded two BSF grants early in her career.

Avram Hershko, Professor of Biochemistry at the Technion, who along with Professors Aaron Ciechanover (Technion) and Irwin Rose (UC-Irvine), was awarded the 2004 Nobel Prize in Chemistry, states that the “support of BSF for over 23 years was essential for the discoveries that brought me the Nobel Prize.” The collaborative work of these three scientists has produced the life-saving drug for the treatment of multiple myeloma, the second most prevalent blood cancer. Further applications of their work are anticipated for asthma, arthritis, multiple sclerosis, Alzheimer's and Parkinson's.



Mona Abramson serves as Northeast Regional Director of Development for the U.S. – Israel Binational Science Foundation (BSF). Prior to that, Mona was the Executive Director of the Overseas Affairs Division of the New York-UJA Federation and Executive Director of the Greenwich Jewish Federation in Connecticut. She was also the professional leader for the American Physicians Fellowship, and Executive Director of the American Friends of the Soroka Medical Center of the Negev.

A few examples of BSF-funded projects include the development of a laser-catheter fiber optic system to guide and focus laser beams within the human body, the discovery of a mechanism for healthy nerve development, leading to treatment for neurodegenerative diseases by restoring normal function to damaged nerve fibers, the launch of the world's first comprehensive gene-mapping project of the Jewish People, and a revolutionary electrochemical battery that can supply thousands of hours of power.

Recent statistics reflect Israel's unique position in the world: its R&D expenditure as a percentage of GDP and its percentage of internationally co-authored scientific articles are the highest in the world. It is not surprising that American companies are increasingly buying up Israeli R&D companies, and benefiting from Israeli academic training and accomplishments.

By supporting high level research, BSF has been instrumental in building the infrastructure upon which the engine of the Israeli economy, its high-tech industry, has developed. Continuing to advance scientific excellence by providing encouragement to the best scientists is of paramount importance in sustaining economic success and fueling breakthroughs in the future. With that in mind, BSF has recently announced a call for proposals that reflect transformative science research driven by new ideas that will have the potential to change our understanding of an important scientific concept, or lead to the creation of a new paradigm or a new field of science. Such research will be characterized by its challenge to current understanding or by opening the way to explore new frontiers.

For more information in the Northeast please contact the Regional Development Director, Mona Abramson at (914) 645-2380 or at [mona@bsf.org](mailto:mona@bsf.org), or elsewhere, by contacting the National Director of Development, Gary Leo at (310) 251-0033 or at [gary@bsf.org](mailto:gary@bsf.org).

# Public Private Partnerships: An Effective Model of Project Financing

Yehuda Raveh and Ron Vered, Yehuda Raveh & Co. – Law Offices, Tel Aviv, Israel

## Project Finance

For many years project finance has been and still remains the preferred form of financing for large-scale industrial and infrastructure projects worldwide. The availability of infrastructure facilities is imperative for the overall development and economic growth of any country, especially for emerging economies. Therefore the long-term need for infrastructure financing in both developing and industrialized countries is very high and of major importance. However, almost every country faces the problem that its actual infrastructure requirements are far in excess of the funding allocated for this purpose. The recognition of this financial deficit has led to a nearly universal acknowledgment that the private sector should play a larger role in the financing of infrastructure in partnership with the public sector.

## Public-Private Partnership (PPP) in Israel

PPP represents a successful policy option available to a government for the provision of basic services (e.g., health, transportation, energy, water desalination, education facilities), which seeks to involve the private sector. As such, PPP is an alternative to traditional full public provision of such services, particularly where the services are private in their nature and the government's resources are limited. Thus, for the public sector, PPP provides a level of certainty for schedule and cost. For the private sector it offers a unique business opportunity, allowing private companies to deliver a wide range of services over a long contract period (usually between 20-30 years).

In recent years, there have been a number of major projects in Israel, in which the private sector has been substantially involved in the construction and funding of public infrastructure. These are long-term and large-scale contractual partnerships between public and private sector agencies are specially targeted towards financing, designing, implementing and operating infrastructure facilities services.



Yehuda Raveh, left, is the founder and senior partner of Yehuda Raveh & Co., one of the leading commercial law firms in Israel, employing 70 lawyers in Jerusalem, Tel Aviv, Haifa and Beer Sheba. The firm renders service to many infrastructure projects in Israel and Europe. Mr. Raveh is a specialist in the field of International Project Finance, with a special emphasis on energy and other infrastructure projects. He is also the co-founder and the chairman of the board of the Israel Infrastructure Fund, which invests in major infrastructure projects in Israel, and is looking to expand its activities outside the country.

A partner at Yehuda Raveh & Co. law firm in Israel, Ron Vered, right, leads the PPP and Project Finance team in the Tel Aviv office.

The surge of such project finance transactions in Israel, based on PPP models, coincides with the creation of the extensive and long-term government programs aimed at fostering the development of infrastructure in the country. The involvement of private equity funds in such projects as the construction of toll roads, desalination facilities and other infrastructure facilities represents evidence of the maturing PPP market in Israel.

Moreover, witnessing success of the strategy, the Israeli PPP market is expanding the scope of projects to areas that were

previously considered unsuitable. Whereas the traditional perception had been that PPP was suitable mainly for large infrastructure projects initiated by governments, today's perception is that PPP is also appropriate for middle-sized projects (not necessarily in the field of infrastructure and/or initiated by government) such as municipal and non-profit organizations' (NPOs) projects. In fact, an NPO which holds real estate is most suitable to enter into PPP projects, since it, inter alia, possesses appropriate land, faces fewer red-tape and regulatory obstacles and enables leverage of real-estate assets in order to enhance and develop projects.

Regarding the municipal sector, a few major Israeli PPP projects which are currently in different stages include tenders for sewage-treatment facilities (Jerusalem, Akko and Hadera), Nation Square Complex in Jerusalem (parking and commercial project), a municipality building in Jerusalem, and office complexes. The Light Rail projects in Tel Aviv and Jerusalem (joint venture with the government) also have many municipal aspects.

In effect, the involvement of the private sector in the development of infrastructure in Israel in the framework of PPP projects appears to be a challenging exercise for a few reasons. First, PPP projects require the establishment of a solid financial and legal base. Second, a large number of parties involved in the PPP projects, together with the diversity of interrelated contracts, constitute an essential complication as well. Third, their development and embedded negotiations are extremely time-consuming.

In addition, PPP projects are generally structured on a project basis requiring all parties to share in the risks of the project. The risks are spread between the various parties. Each risk is usually assumed by the party which can most efficiently control or handle it. Project risk sharing is necessary since the sponsor, a joint venture of one sort or another, will possess a limited worth that is substantially less than the aggregate net worth of the equity parties.

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Banks and institutional investors are the essential participants of almost all PPP projects. Traditionally, the perception has been that banks negotiated the financing and served as "Lead Arrangers" whereas institutional investors acted as "Co-Investors."

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Last, PPPs span a spectrum of models that progressively engage the expertise or capital of the private sector. There is no one single PPP model that is suitable for all PPP projects. For this reason, significant efforts and resources have to be invested by both public and private sectors in structuring a successful PPP deal.

#### Innovative Financing Opportunities

Banks and institutional investors are the essential participants of almost all PPP projects. Traditionally, the perception has been that banks negotiated the financing and served as "Lead Arrangers" whereas institutional investors acted as "Co-Investors." However, in recent years a new perception has emerged where both join together in the financing (including the process of negotiations). In such cases, banks negotiate and finance the short-term construction facilities, while the institutional investors participate in the long-term credit facilities.

An example of this innovative financing is the financial close of Highway 431, a private finance initiative (PFI) contract for the construction and maintenance of a 22km three-lane suburban highway that was designed for the purpose of reducing the traffic from the main entry routes to Tel Aviv. In this project, the banks funded the short-term construction loans while the institutional lenders committed to fund the long-term loans. Highway 431 was awarded *Project Finance Deal of the Year 2006*.

**National Account, 2006-2009** (Halves Are Seasonally Adjusted)

Rate of Change (Annual Terms, Percent), Compared With Preceding Period

	2006	2007	2008	2009	2008		2009	
					I	II	I	II
GDP	5.3	5.2	4.0	0.7	5.3	0.8	-1.6	2.9
GDP per Capita	3.4	3.4	2.2	-1.1	3.5	-1.0	-3.4	1.1
Business Sector Product	6.4	5.6	4.5	-0.2	6.2	0.3	-3.1	2.5
Private Consumption	4.3	6.3	3.6	1.5	4.9	-0.8	0.1	6.1
Public Consumption	3.0	3.4	2.1	2.1	3.5	-0.6	0.2	3.2
Fixed Capital Formation	11.3	15.3	4.4	-6.0	4.4	-10.7	-7.9	1.9
Exports	6.0	9.3	5.2	-12.5	12.8	-11.9	-23.4	11.2
Imports	3.3	11.9	2.4	-14.0	8.2	-14.0	-25.4	8.5

Source: Central Bureau of Statistics

**Web Sites of Interest****Bank of Israel:**<http://www.bankisrael.gov.il/firsteng.htm>**Central Bureau of Statistics:**<http://www.cbs.gov.il/engindex.htm>**Dun & Bradstreet's Israel:**<http://www.dunb.co.il/english/index.asp>**Investment Promotion Center:**<http://www.investinIsrael.gov.il>**Israel Economic Mission:**<http://www.israeconomicmission.com>**Israel Government Portal:**<http://www.israel.gov.il/firstgov/english>**Israel Ministry of Finance:**[http://www.mof.gov.il/mainpage\\_eng.asp](http://www.mof.gov.il/mainpage_eng.asp)**Israel Ministry of Foreign Affairs:**[www.mfa.gov.il/mfa](http://www.mfa.gov.il/mfa)**Israel Ministry of Industry, Trade & Labor:**<http://www.moit.gov.il>**Israel Ministry of Tourism:**<http://www.goisrael.com>**Israel Science and Technology Home Page:**<http://www.science.co.il>**Israel Venture Association:**<http://www.iva.co.il>**Israel Venture Capital Research Center:**<http://www.ivc-online.com>**MATIMOP: Israeli Industry Center for R&D:**<http://www.matimop.org.il>**Standard & Poor's Israel:**<http://www.standardpoors.co.il>**State of Israel Bonds Organization:**<http://www.israelbonds.com>**Tel Aviv Stock Exchange:**<http://www.tase.co.il/taseeng/homepage.htm>

# SHEKEL



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