International Section News

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Chairperson's Corner

by Michelle Chong Tai-Bell

The pace of globalization is accelerating. At the recent Summit of the Americas held in Chile, leaders of 34 nations affirmed their commitment to the establishment of a single, free-trade area by the year 2005. As the economic and political barriers fall, our companies must contend with the challenges of megamergers, global acquisitions by previously national players, and competition from global financial services groups.

Are we equipped with the global mindset to provide our employers with insightful advice as they attempt to craft solutions to the competitive and risk-management challenges of the new millennium? Have we begun to develop an informal network of international contacts? The International Section will sponsor nine sessions at the two 1998 Spring Meetings in Hawaii with just this in mind. For the first meeting the sessions are:

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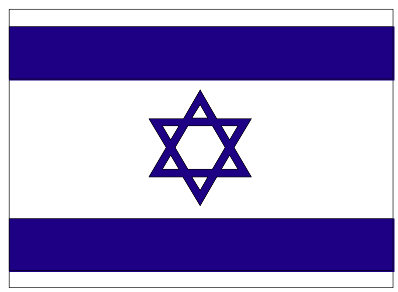
Israel's Life Insurance Industry

by Akiva Zohar

Israel has an active and rapidly growing life insurance industry that has been favorably influenced by attractive tax incentives given to savings through life insurance. Insurance revenue places Israel on a par with many of the Western European nations.

Background

Before pursuing an actuarial career, I lived in Israel for six years. Three years ago, I had an opportunity to return and work as an actuary for Gabbay and Company. Gabbay and Company is the auditor for approximately 60% of the insurers in Israel. My family and I lived in Tel Aviv for that summer. Since returning to the U.S., I have kept in regular contact with Israeli actuaries and other professionals in the insurance industry.



This article attempts to introduce actuaries to the Israeli life insurance industry and is an outgrowth of my working notes from that period and updates thereafter. Benjamin Gabbay has helped me a great deal in obtaining background information and clarifying various concepts.

Israel had a socialist economy until the late 1970s. With the first non-Labor government, a dismantling of socialist systems began and is continuing today. These changes have had a considerable impact on all sectors of the economy, including insurance.

Inflation, as always, has a major influence on the insurance industry. While inflation has been below 15% per annum for the last five years, there have been periods that experienced more than that rate per month.

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Israel's Life Insurance Industry
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Insurance Industry

The Israeli insurance industry began in the 1920s and 1930s. Israel was part of a British mandate, and local companies along with branches of European companies began operations there.

The insurance industry generated more than 8 billion NIS ($2.5 billion U.S.) of gross life premiums and was holding more than 35 billion NIS ($11 billion U.S.) of life reserves in 1996. In Israel, the level of premiums is 3% of GNP compared to 4.9% in the U.S., but is growing at a rate of more than 7% per year (after inflation) as compared to 1.7% in the U.S.

Swiss Re's Sigma produced a study, "World Insurance in 1995" (April 1997). Within this study are a number of measures of a country's or region's insurance market. These measures examine premium, premium growth, premium per capita, and premium as a percentage of gross domestic product. Israel's insurance density (total life premium per capita) placed twenty-first in the world (between Singapore and Hong Kong), and its insurance penetration (life premiums as a share of gross-domestic product) fifteenth in the world (between Germany and Taiwan). Its total life insurance premium ranks it twenty-eighth (between Portugal and the People's Republic of China)—not bad for a country of 5.863 million (as of 9/30/97).

In a study by Deloitte & Touche Consulting Group, "The Global Insurance Market: Surviving in a Competitive Environment," 12 market attractiveness criteria were identified. While Israel was not singled out in this article, its insurance market scores "highly attractive" or "very highly attractive" on 10 of these 12. The two areas that were scored low were population ("highly attractive," with more than 25 million) and size of insurance market ("highly attractive" with more than $5 billion (U.S.) of premium income).

The Israeli life insurance industry is dominated by five groups that account for 92% of the total gross premium and reserves. These groups are (by size): Migdal, Clal Israel, Israel Phoenix, Harel, and Menora and include 18 separate companies. In addition, there is one medium-sized independent company (Zion) and a few smaller independent companies. Most companies deal in both life and general (property and casualty) insurance.

While these companies have been domestically owned, a recent change in the banking laws now limits the investments in nonbanking institutions by banks. The two largest insurance company groups were majority-owned by banks, so this put sizable blocks of insurance company stock on the market. Generali (Italy), which had been a minority shareholder, now owns 64% of Migdal. The additional 37% that Generali acquired cost $370 million (U.S.). Allianz (Germany) acquired 25% of Clal Insurance for $150–$170 million (U.S.). In addition, AIG had already established a limited position in the industry.

Financial Results from Israeli Life Insurance

Tables 1–4 illustrate some indicators of the Israeli life insurance industry. All figures are based on 1996 price levels. At mid-year 1996, the exchange rate was 3.2 NIS per $1 U.S.

Actuarial Field

The Israel Actuarial Association celebrated its 50th anniversary in 1996. When the association was established, two years before the establishment of the state, there were nine members.

On a visit to Israel in 1988, a listing of all of the actuaries in Israel fit on one side of a typewritten sheet. A number of those listed were, in fact, semi-retired. At that time, when I inquired about the state of the industry in Israel, I was told that it was a very staid environment. Most products were endowment and limited-pay life and the government handled all investments. Under this system, the companies were almost guaranteed a profit.

In 1990, the Israel Association of Actuaries (IlAA) began testing procedures with the grandfathering of all practicing actuaries. There has been an active actuarial science program at the University of Haifa since 1989. Israel is also one of the overseas sites available for SOA exams, and the IlAA recognizes foreign designations. A Fellow of the Society may become an Associate of the IlAA by applying and, after one year of practice in Israel, becomes an IlAA Fellow. I have been an Associate of the IlAA since 1995.

The IlAA is a full member of the International Forum of Actuarial Associations. Most of its Fellows are members of the International Association of Actuaries. The IlAA holds regular meetings of both professional and social nature throughout the year. Currently, there are more than 125 Fellows, Associates, and students.

Types of Coverage

Israeli life insurance more closely resembles the British variations than North American. Many of the more senior actuaries in Israel are accredited by the Institute, and much of the insurance terminology is British-based.

Insurance coverage of war risk is required. It is differentiated as active (deaths occurring while in military service) and passive (deaths of civilians caused by war or terrorist action). Charges for this additional mortality were set at a flat rate of 0.5 per million for both active and passive. This has been used historically, but newly designed products do not use a specific load and reinsurers regularly factor in about 0.2 per mil for this risk.

An Israeli taxpayer is able to shelter up to 5% of his salary up to a maximum of 70,000 NIS ($20,000 U.S.) in cash-value insurance products.

Gross premiums and nonforfeiture values are set by government-approved formula. The government must approve premium rates for life business and automobile. The gross premiums, cash-surrender values, and paid-up insurance are computed using standardized sets of assumptions. Thus, each company charges the same premiums for the same type of policy. New policies currently being introduced are starting to use more current mortality assumptions, resulting in more competitive products.

Premiums are primarily paid on a monthly basis by automatic deduction from the policyholder's bank account. The premiums are computed on a monthly basis and the annual premium is simply 12 times this amount (modal factors are not usually encountered).

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TABLE 1
Premium—Gross Israeli Life Insurance Premiums by Group (000,000 NIS)
1996 Price Levels

	1996	1995	1994	1993	1992	1991	1990
Migdal	2,632	2,311	2,080	1,822	1,403	1,112	1,055
Clal	1,809	1,688	1,561	1,438	959	819	797
Israel Phoenix	1,303	1,421	1,492	1,189	888	799	642
Harel	751	683	613	544	486	443	440
Menora	742	678	648	580	547	504	501
Hasnei	(Entered Receivership in 1992)				375	451	489
Zion	304	283	260	232	215	214	212
Not in Groups	523	462	378	247	212	406	320
Total	**8,064**	**7,528**	**7,030**	**6,053**	**5,084**	**4,750**	**4,457**

TABLE 2
Premium Growth
Rates of Premium Growth Net of Inflation

	1996	1995	1994	1993	1992	1991	1990
Migdal	13.9%	15.0%	13.7%	30.6%	26.0%	5.5%	34.7%
Clal	7.2	10.7	9.1	50.9	16.9	2.8	15.2
Israel Phoenix	−8.3	−2.2	25.3	30.5	11.8	24.5	9.0
Harel	10.0	13.9	12.5	12.7	9.4	0.8	4.4
Menora	9.4	7.0	11.5	6.6	8.4	0.7	8.2
Hasnei	(Entered Receivership in 1992)				−17.1	−7.9	4.7
Zion	7.2	11.3	11.9	8.8	0.0	1.1	1.6
Not in Groups	13.1	−28.7	54.9	17.0	−47.8	26.2	−18.7
Total	**7.1%**	**7.1%**	**16.2%**	**19.1%**	**7.0%**	**6.6%**	**10.9%**
Average Annual Growth, 1990–1996							10.4%
Comparable Increases in U.S. Insurance Premiums after Adjustment by the CPI							
	1995	**1994**	**1993**	**1992**	**1991**	**1990**	**1990–95**
U.S. Life	0.5%	−1.6%	10.5%	1.6%	0.5%	−1.2%	1.7%
U.S. Annuity	−6.9	2.3	21.9	15.2	−7.6	3.1	4.1
U.S. Total	**−3.3%**	**0.4%**	**16.0%**	**7.8%**	**−3.3%**	**0.8%**	**2.8%**

Linkage

The original policies once issued were either in a set level of local currency (wiped out by inflation) or linked to the U.S. dollar (or some other stable currency). Most of these no longer exist, and since the later 1960s, there has been linkage between policy values (face amount, premium, and cash-surrender value) and price levels.

Linkage is carried out through the implementation of the Basic Shekel. The Israeli currency is the New Shekel (NIS). Policy values are computed in Basic Shekel terms with the CPI set at 100. As of August 1997 the CPI was at 8,308. Since 1975, policy values have been linked on a monthly basis (prior to that a semi-annual determination was used). Each month the applicable CPI factor is multiplied by the policy values (expressed in Basic Shekel) to arrive at the nominal values.

With the advent of participating policies (explained below), the operation of linkage changed. The premium and face amount continue to be linked as described above, but the account value or cash value depends on the investment performance of the underlying fund. Most products have as a benefit the face amount *plus* the accumulated fund (bonus).

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TABLE 3
Net Profit—Israeli Life Insurance Net Profit by Group (000,000 NIS)
1996 Price Levels

	1996	1995	1994	1993	1992	1991	1990
Migdal	173	153	131	150	161	114	81
Clal	190	155	154	120	105	80	55
Israel Phoenix	−41	−91	105	149	124	78	66
Harel	56	51	46	40	33	42	43
Menora	52	48	38	45	43	40	34
Hasnei	(Entered Receivership in 1992)				72	98	56
Zion	22	23	25	26	34	26	25
Not in Groups	103	4	2	0	9	19	12
Total	**556**	**344**	**502**	**530**	**580**	**498**	**372**

TABLE 4
Profit Margin—Israeli Life Insurance Net Profit as a Percentage of Premium

	1996	1995	1994	1993	1992	1991	1990
Migdal	6.6%	6.6%	6.3%	8.3%	11.5%	10.3%	7.6%
Clal	10.5	9.2	9.8	8.3	10.9	9.7	6.9
Israel Phoenix	−3.2	−6.4	7.1	12.5	13.9	9.8	10.3
Harel	7.5	7.5	7.6	7.3	6.7	9.5	9.8
Menora	6.9	7.1	5.9	7.8	7.8	7.9	6.7
Hasnei	(Entered Receivership in 1992)				19.1	21.8	11.4
Zion	7.4	8.2	9.7	11.3	15.9	12.2	12.0
Not in Groups	19.6	0.8	0.4	0.2	4.4	4.8	3.9
Total	**6.9%**	**4.6%**	**7.1%**	**8.8%**	**11.4%**	**10.5%**	**8.4%**

Policies

Historically, the most common types of life coverage have been:

- Endowment (most often at age 65)
- Whole life
- Whole life paid up at 65
- Term insurance (5/10/12 years with renewability)
- Annuity with period certain of 10 years. Of these, the most common categories are:
  - Death benefit prior to annuitization is basically return of premium
  - Death benefit prior to annuitization is 50 or 75 monthly annuity payments
  - SPDA.

The more common riders are:

- Accidental-death benefits
- Loss-of-limb paid as a lump-sum based on a schedule
- Disability income with 3/6 months elimination for life.

Adif

Adif is a local variation, begun in 1983, with some similarities to UL, but more similar to the U.K.'s unit-linked products. There are a variety of products or options under this calculation method. Commissions are fast approaching the levels paid on whole life. Calculations are performed monthly and premiums can be changed at the discretion of the policyholder. The risk rates are select and ultimate but are set at policy inception and are not subject to change. The standard benefit paid at death corresponds to Option B under U.S. UL, that is, payment of face plus account value. There is no minimum-death benefit, and it could be zero.

The usual calculation methodology is to start with a premium (net of any riders) and then to divide this into three parts: about 18% to cover expenses, 10% to purchase term insurance coverage, and the remaining 72% going into the savings pool. Dump-ins are placed into different savings pools, depending on the year deposited. The savings pool is increased by the unit value increase in the corresponding investment portfolio. The "standard" working of the policy is to have an amount of term coverage that decreases each

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year with a benefit equal to that term coverage plus the accumulated fund. The largest use of these products is as a vehicle for employee savings plans (similar to our 401(k)).

The investments are in the commingled general investments of the life insurance company. In the U.K., unit-linked policies often have a selection of choices in which savings portions are invested. There are often a number of mutual funds as well as the general investment account of the insurer.

It is standard practice to include an annuity settlement option in the policy. There is concern that this option is too generous in that it does not take into account future mortality improvements.

The two common variations of the standard Adif form are:

- Increasing the savings portion (with a decrease in the term insurance portion). This additional savings is placed in a different savings pool and can have the effect of being a savings account or mutual fund if the term insurance portion were reduced to zero.
- Less common is to pay an additional amount to maintain a level death benefit. The term rates charged with this method will be different than risk rates charged on the underlying policy.

Health Insurance

Disability-income products are structured with level premiums set and subject to linkage only. This payment of a "level" premium is recognized in the reserves but the policy carries no cash value. Elimination periods may be very short. Because of the gains on surrenders, this has been a profitable product.

- A lump-sum version of the above DI product
- An ART version of DI insurance. This is far less profitable. There could also be some concern that in situations with aging work forces the premiums could ultimately pierce the limitation on the deductibility of premium payments by employers.
- Short-term disability (up to three years) products are sold with a double-indemnity feature for the amount of scheduled benefits.
- Disability is covered in both stand-alone policies and riders. Occupational causes are excluded because the benefits offered under National Insurance are richer than those offered on most policies. Economic cycles do not seem to have an impact on experience. Pre-existing conditions are dealt with on the basis of a reduction in benefits during the first five years.
- Some interesting highlights are displayed in the differences between riders and stand-alones. Stand-alones have an AIDS exclusion and are not issued on a rated basis. They can also have their premiums changed on a class basis. The definition of disability for the stand-alone policy is "unable to do any work," because this is more appropriate for the blue-collar market to which it is aimed. The riders are marketed to a higher economic group and use the professional definition of disability (unable to do work appropriate to training and education).
- Dread disease is issued as both a stand-alone policy paying a separate benefit and as a rider that pays out the policy proceeds at dread-disease occurrence.
- Medical insurance is available as an indemnity coverage but is not common. Until recently, Israel had a system similar to that of Britain, that is, a clinic-based national health plan with some providers in private practice. This has now changed to allow private medical plans to be formed. These plans are allowed to underwrite their selections (with guaranteed renewability) and have flourished. The original plan remains as a government-backed provider of last resort.
- A more important coverage is operations insurance, which gives the policyholder the right to choose the when, by whom, and where of a necessary operation. Under medical plans, there is a queue system with assigned surgeons and hospitals. These policies are sold on a 5-year term basis with guaranteed renewability.
- Additional types of coverage are long-term care and organ insurance (which pays a scheduled benefit for organ transplants).

Marketing

Marketing is done in a brokerage environment that seems very similar to that of the U.S. In a survey of insureds, the majority identified their broker as their insurer. The competition in the insurance industry is for brokers, so the main selling point is the level of commissions. Like the U.S, new product development is driven by the marketing function.

There has been limited movement toward direct marketing. Direct insurance, founded in 1994, has been very successful and there are several newer insurers being established to service this market. Until 1998 this was limited to nonlife products. Direct Insurance providers have now entered the life insurance market with competitive term insurance. As in the U.S., use of the Internet has been used to market insurance products. Zion Insurance Company (*http://www.zion.co.il/ezion.html*) supplies online quotes for term insurance and annuities. Several other insurers have a presence on the Internet and that avenue is growing rapidly.

Commissions

There are no expense limitations as per §4228. There is a standard base commission paid on standard (non-Adif) policies of 20% per year for years 1–3, followed by a collection fee of 4%. For Adif policies, there is no standard and initial commissions may be spread over a period of up to six years.

In addition to the base commission there are commission overrides, which are based on the agreement with the individual brokerage and are in the range of 60% to 90% of first year premiums. Commission overrides do not apply to Adif policies.

Investments

Funds

As mentioned above, until 1990, insurance company investments were controlled by the government and returned a guaranteed rate of return in excess of inflation.

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The investments of insurance companies are divided into funds. Each fund covers a generational issue of policies and guarantees a specified rate of interest plus linkage. Thus the investment performance of different companies relative to the amounts in each fund is identical. The government restricts or limits the amount of investments in these funds to an amount not greater than 85% of their reserves. The insurance companies maintain that level of investments in these funds because these government-controlled funds give better returns than are generally available in the open market.

Participation

Participating policies began in 1990. Participation is limited to participation in the investment performance of the funds invested by the company. Investment performance is measured in how the company's investments fared compared to the rise in the CPI During the first year, companies had the option of still taking advantage of the government's fund. In 1991 this option ceased, and all policies issued were participating.

There is usually no participation in the first two policy years, and a guaranteed minimum death benefit exists as long as the cash value is above a certain minimum.

At the time of reporting, the CPI is determined, the earnings on the investment portfolio are calculated, and the difference is divided between the policyholder and the company by a standardized, predetermined formula. These excess returns (losses) are carried in a separate account for the benefit of the policyholder. These accounts could be negative.

Reinsurance

The most common type of reinsurance is YRT. It is placed with the major European reinsurers (Munich, M&G/ SwissRe). There are some pooling arrangements among the Israeli insurers. There was an Israeli reinsurer (Israel Reinsurance), but the firm went into receivership some years ago.

Valuation/Regulation

The mortality table used for life insurance valuation is A49/52 (a U.K. table) with a three-year select (55%, 70%, 85%, 100%, …) period; it is not sex-distinct. This is used for both calculating reserves and setting premiums and nonforfeiture values. This is an old table, which has been kept for many years. Direct Insurance developed a new mortality table based on Israeli insurance experience. This table is very comparable to the current tables being used in the U.K. The tables used for reinsurance are an adjustment to the A49/52, which results in something comparable to the A67/70. For profit studies, a percentage (50%–60%) of this table is normally used. For the valuation of annuities, the A55 table is used. This is a sex-distinct U.K. table.

The most recent population mortality data (9/30/97) shows male life expectancy at 75.5 years (third in the world) and 79.4 years for females (fourteenth in the world).

Reserves are computed on a net-level basis and then may be reduced for statutory purposes by a Zilmer adjustment. The purpose of this is to give some relief for acquisition expenses. Since 1991, the tax authorities have mandated the Zilmer adjustment.

Those involved in U.K. valuation are familiar with the term "Zilmer adjustment" or "Zilmerized reserves." In the U.K., this adjustment is similar to a DAC adjustment. It is set up as the acquisition expenses (subject to statutory limitations) and is run off over an annuity factor. The actual basis of the term is from a nineteenth century Swiss actuary of that name who first developed full preliminary term (FPT) reserves (*Actuarial Mathematics*, p.424).

In Israel, the Zilmer adjustment is the product of the net amount at risk and a factor. This factor varies by product, for example, 30/mil on endowment and 20/mil on whole life. It is interesting to note that net level reserves adjusted by this give a reasonable approximation of FPT.

The insurance industry and regulators have been giving serious consideration to adopting either the British version of the Zilmer adjustment or including a DAC in the valuation process, because this gives much more substantial relief from issue expense. The use of a DAC has been legislated, but no effective date has yet been set. DAC will be amortized on a straight-line basis.

Filing dates for statutory statements with the Controller of Banking and Insurance are April 30 (annual) and for quarterly, two months after the end of the quarter but not later than seven days after approval by the board. The Tel Aviv Stock Exchange (TSAE) requires publicly traded firms to release their statements by March 31 so, for most firms, this date reigns.

Mr. Doron Shorer, CPA, retired as the Director, Insurance and Savings Department, which is the comparable position to Insurance Commissioner in the U.S. His deputy, Tzippi Semet, has been in that position since Shorer's retirement.

Tax rates are high, compared to those of the U.S. The taxes on profit (in place of VAT) and the income tax when combined have a top marginal rate of 45.13%. In addition, there is a tax on salaries paid of 17%. There is no premium tax.

Future

The life insurance industry has always been very profitable and is well capitalized. Premiums are rich, but commission and expense rates (as a percentage of premium) are high by American standards. This points to future opportunities in restructuring both administration and distribution methods. In addition, premiums may be deregulated.

Cash-flow analysis, while not being required, has been instituted by several companies. In addition, there is interest in the adoption of U.S. GAAP or a GAAP-like accounting system. Policy innovation has been rather limited, but this should open up as the market becomes more sophisticated.

I often am asked about safety in Israel. As someone who has worked in both Tel Aviv and New York City (my firm was a tenant in the World Trade Center when it was the target of a terrorist attack), I feel far safer in Tel Aviv. The added attraction is that the headquarters of all the major insurers are within a few blocks of each other in one Tel Aviv neighborhood.

The Israeli insurance industry is still emerging from a government-controlled environment. While gross premiums and policy values are still based on standardized parameters, direct insurance has introduced new standards for the computation of the premiums they are seeking to use. This is a period of great change and the insurance industry will be changing along with the country. With the outlook of increased economic activity with its neighbors, the future of the industry looks bright.

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