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EXECUTIVE SUMMARY

ALTERNATIVE PENSION PRODUCTS FOR LONGEVITY RISK

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The Koret-Milken Institute Fellows Program accelerates Israel's economic growth through innovative, market-based solutions for long-term economic, social, and environmental issues. The program focuses on connecting government, philanthropic, and business resources that are vital to national growth and development.

Directed by the Milken Institute Israel Center, the Koret-Milken Institute Fellows Program awards annual fellowships to outstanding graduates of Israeli and international institutes of higher education. Fellows serve yearlong internships at the center of the nation's decision-making—the Knesset, government ministries, and other Israeli agencies—and aid policymakers by researching and developing solutions for various economic and social challenges.

In addition, fellows craft their own policy studies aimed at identifying barriers to economic and employment growth in Israel. The fellows' studies, carried out under the guidance of an experienced academic and professional staff, support legislators and regulators who shape the economic reality in Israel. The program offers the ultimate educational exercise, combining real-life work experience with applied research five days a week.

Throughout the year, fellows receive intensive training in economic policy, government processes, and research methods. They acquire tools for writing memorandums, presentations, and policy papers, and they develop management, marketing, and communication skills. The fellows participate in a weekly workshop, where they meet senior economic and government professionals, business leaders, and top academics from Israel and abroad. They also participate in an accredited MBA course that awards three graduate-level academic credits that are transferable to other universities in Israel. The course, which focuses on financial and economic innovations, is taught at the Hebrew University of Jerusalem's School of Business Administration by Professor Glenn Yago, Director of the Milken Institute Israel Center and Director of Capital Studies at the Milken Institute in California.

Fellows Program alumni can be found in senior positions in the public and private sectors. Some serve as advisers to government ministries while others work at private-sector companies or go on to advanced studies at leading universities in Israel, the United States, and Great Britain. Within the program's framework, more than 80 research papers have been published, catalyzing reforms, reducing barriers, bringing about economic growth, and improving the quality of life for Israeli citizens.

The Koret-Milken Institute Fellows Program is nonpolitical and nonpartisan. It is funded by the Koret Foundation, the Milken Institute, and other leading philanthropic organizations and individuals in the United States and Israel.

More about the program: www.kmifellows.org
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Executive Summary

Countries around the world have overhauled their retirement-savings markets in recent years with the changes in Israel among the most dramatic. The main change for Israeli savers is the transition from the old Defined Benefits pension funds (DB) to new Defined Contribution pension funds (DC). Because the change is relatively new, systems have not reached equilibrium so there is no consensus on how to build a sustainable system for retirement security.

Under the old DB pension funds, savers received benefits upon withdrawal that were greater than the amounts they actually saved. This forced the government to subsidize the funds with about NIS 90 billion of guarantees and special, higher-yielding bonds, leaving future generations to foot the bill. Because the new DC system eliminates guarantees and pays benefits based only on contributions, uncertainty was created in the pension market regarding possible funding gaps for individual coverage during the withdrawal stage of the process.

Improving the process requires a focus on products that provide for the most basic needs, namely those that supply protection against longevity risk (the risk that individuals will outlive their savings), cognitive biases, and the irrational nature of savers in an effort to maximize income and replacement rate.[1]

This paper examines the needs and risks associated with the benefits-withdrawal phase of the new DC plans, including products for individuals with low-life expectancy, insurance coverage, financial solutions to improve yields, and stability. It also addresses the importance of financial education. It does not focus on the asset-accumulation phase of the plans.

Withdrawal Products

This research discusses lump-sum withdrawal, periodic withdrawal,[2] fixed-term annuities, and life-time annuities. These products provide protection from different risks and answer different needs. Each has advantages and shortcomings. None gives protection from all risks or answers all needs.

For instance, lump-sum withdrawals offer a high level of liquidity and personal management, but very low protection against longevity risk. Life-time annuities provide strong protection against longevity risk, but offer very low liquidity and no option for personal management. Periodic withdrawals fall in

1 The replacement rate is the ratio retirement income of the retiree out of the pre-retirement income. Replacement rates lower than 70% are considered to harm an individual's welfare. It also is claimed that people of low socioeconomic status need a higher replacement rate, closer to 100%, to maintain an adequate standard of living.

2 Periodic withdrawal is a product in which the individual manages his own savings. The saver has an annual/monthly withdrawal rate that is regulated. The withdrawal rate can be set in order to protect against longevity risk. Periodic withdrawal is sometimes known as income withdrawal or programmed withdrawal.

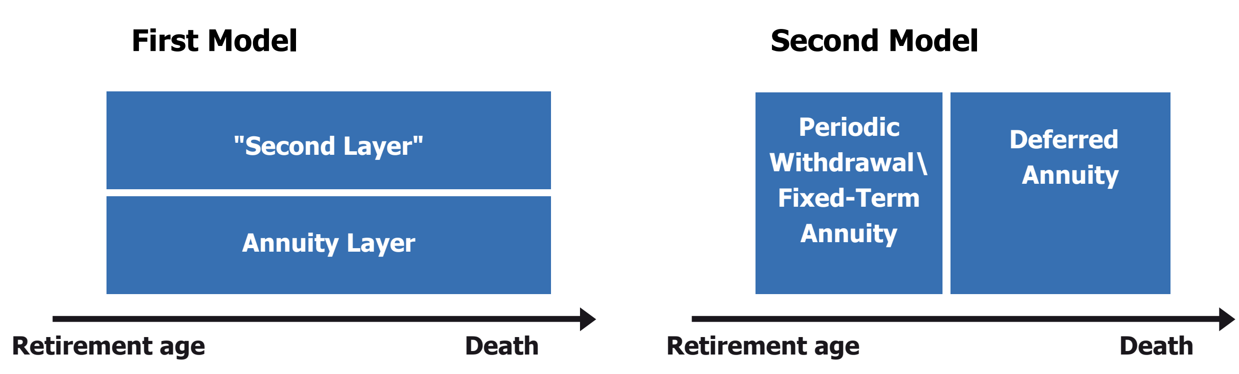
the middle, but reliance on products that do not provide strong protection against longevity risk is not recommended.

Withdrawal models

An optimal withdrawal model for long-term retirement savings should balance different needs and risks. Two withdrawal models for long-term retirement savings are considered optimal by the OECD, the World Bank and extensive academic research on longevity risk and its impact on retirement security. The first includes an annuity layer and a "second layer" (consisting of the funds left over after the annuity is taken) where the withdrawal choice is more lax. In this model, the annuity taken is larger, leaving a smaller sum available for a possible bequest upon death.

The second model divides the retirement period into two parts. In the first part, the retiree has many benefit-withdrawal options, all resulting in a higher bequest. In the second part, a life-time annuity is the only choice. In some product configurations, the bequest and annuity can be identical in both models.

FIGURE 1: GRAPHICAL PRESENTATION OF MODEL 1 & 2



Source: Milken Institute, 2012.

Israel is now using the first model. We recommend that it continue to do so, but with changes. Currently, the first layer is a life-time annuity and the second layer can be withdrawn as a lump sum. Keeping the annuity layer is important because it provides the strongest defense against longevity risk, while also paying a monthly income and allowing for a monthly allowance bequest. The remaining layer, however, should be developed.

After enough protection against longevity risk is attained from the life-time annuity, withdrawal of saving funds through complementary products should be allowed. The recommendation is to develop periodic withdrawal, limited-period annuities, and deferred life-time annuities products for the remaining layer. These products have features that help preserve monthly income level, protect against longevity risk and provide high bequest and liquidity. It is important that the withdrawal phase system is simple and easily understood.

Offering the second model as an option is not necessary. Savers already have a hard time making decisions about their long-term retirement and adding options may confuse or even paralyze them (Schwartz 2004). In fact, in Israel, aspects of the second model can be found within the first model since it is possible to withdraw a life-time annuity that includes "assured income for a limited period[3]." This allows individuals to receive income that imitates the fixed-term annuity and deferred life-time annuity of the second model.

Periodic withdrawal differs from a life-time annuity because it entails the risk of misunderstanding and asymmetrical information. England's Financial Service Authority emphasizes the risks of periodic withdrawal compared with a life-time annuity. In a 2007 report, it stated that ``While recognizing that income withdrawal is a useful product for some consumers, we consider this market to be more risky than the annuity market. We take this view because of the complexity, the need for active management and the risk of consumers eroding their capital to the extent that it does not give enough income for the duration of their life." (FSA, 2007).

Another problem with the second model is that it creates cognitive bias as individuals enjoy the fact that they can manage their own money, which leads them to believe they are "millionaires" (money illusion). This bias can reduce overall welfare for retirement security.

Recommendations

We recommend that after attaining sufficient protection against longevity risk with the life-time annuity, withdrawal through complementary products such as periodic withdrawal, and limited-period annuities together with deferred life-time annuities should be allowed. These products have features that help preserve monthly income levels and provide some protection against longevity risk, high bequest potential, and liquidity.

The periodic withdrawal option allows the retiree to manage the money, but caps the monthly withdrawal rate, while the combined fixed-term plus deferred annuity option provides the retiree with a fixed-monthly income for a limited period and a life-time annuity that starts when the limited period ends.

Occasionally retirees elect to take a lump-sum payment, but receiving a large lump-sum could cause irrational behavior and damage an individual's economic future. This risk is not so high in Israel where only as much as 25% of the annuity layer can be capitalized for up to five years. This preserves the

[3] Assured income for a limited period is a feature provided in many of the new pension funds and insurance companies' annuities (it is even a default feature in annuities from insurance companies). With this feature the full annuity will be provided to the retiree or his survivors for a specified period of time, even upon the retiree's death. "Regular" annuities with survivor's benefits provide a percentage of the full annuity to survivors and not a full allowance.

survivor benefits during retirement, and provides for liquidity when needed. This flexibility feature of the annuity should be kept.

The need for bequest is an important factor and regulation should put an emphasis on life-time annuity bequest that provides the best social protection and insures monthly retirement income for the surviving spouse. A lump-sum bequest, however, should be restricted since regulation should not encourage behavior that has high levels of risk for the retiree and his survivors.

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