



SOCIETY OF ACTUARIES

Article from:

# International Section News

July 2006 – Issue No. 39

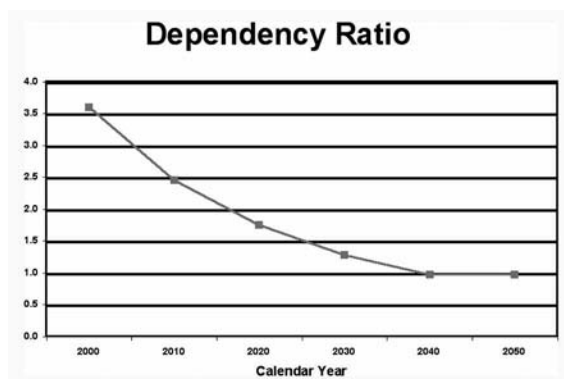
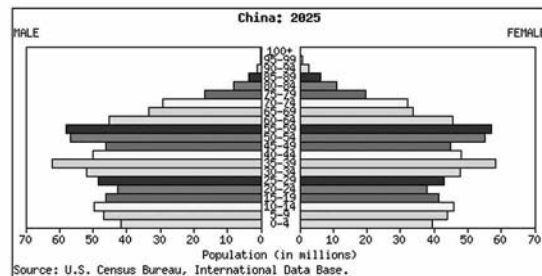
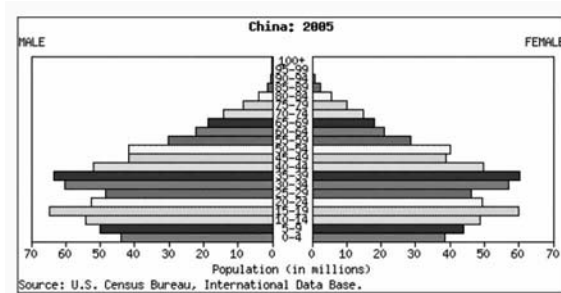
# Enterprise Annuity in China

by Michael Sze

## Introduction

Because of the one-child policy introduced at the end of 1970, and the rapid increase in life expectancy of the Chinese population (increasing from less than 40 years before 1949 to 71.4 years in 2004), China's demographic characteristics have changed radically in the last 30 years. During this period, China's demography has changed from one of "high birth rate, low death rate, and high growth rate" to that of "low birth rate, low death rate, and low growth rate," a transformation that took many developed countries nearly a century to complete.

This demographic trend has tremendous impact on the projected population in China.



The two graphs in the lower left column summarize the population in 2005 and the projected one in 2025.

In the next 20 years, the bulge in the population graph of 2005, representing the working population between ages 15 and 34, is expected to move upwards to pre retirement ages between 35 and 54. The proportion of retired population is also expected to increase substantially. If the low retirement age policy described in the next paragraph is not changed, this aging trend will result in a steady decrease in the dependency ratio (defined as the ratio of the number of workers for each retiree) from 3.1 in 2000 to 1.0 in 2040.

These changes have led to the introduction of a new retirement system, one element of which is the Enterprise Annuity Plan. This is a defined-contribution plan, that supplements the employee's basic pension.

## Retirement System

The retirement system before 1997 (often termed "the iron bowl") provided generous pensions of 80 percent of pay before retirement to employees of state-owned enterprises retiring on age 60 for males, and 50 or 55 for females after 15 years of service. The pensions for retirees from the civil service and public institutions are higher than 90 percent of pay. Such pensions are indexed according to the average national wage increase every year. The pensions are financed on a PAYGO (pay as you go) basis. With a rapidly aging population and decreasing dependency ratios, such generous pensions are clearly not sustainable.

The State Council Decree 26 of July 1997 introduced a three-pillar retirement system.

- *Pillar 1* (Basic pension) consists of two mandatory components:
  - Pillar 1A provides a defined benefit of 20 percent average provincial wage;
  - Pillar 1B credits a notional defined contribution of 11 percent of wage to each individual account (IA). On retirement, a defined-benefit pension equal to IA balance / 120 is paid to the retiree.
- The required contribution for the employer is 20 percent of pay (with 17 percent intended for the Social Pooled

Fund (SPF) of Pillar 1A, and 3 percent for IA of Pillar 1B). The required contribution for the employee is 8 percent of pay for IA.

- Targeted replacement rate is 58.5 percent of City Average Salary (20 percent from SPF, and 38.5 percent from IA).
- All contributions are tax deductible, investment returns in SPF and IA are tax-exempt, and all benefit payments are tax-exempt.
- Participation in Pillar 1 is below 50 percent, and there are severe funding shortfalls requiring diversion of IA contributions to cover SPF cash-flow shortfalls.
- Pilot projects were carried out in Liaoning, Helongjiang, and Jilin, aiming to fully fund the IA. The projects were considered to be very successful, but required substantial subsidy from the State.
- *Pillar 2:* Enterprise Annuity (EA) is a voluntary fully funded defined contribution program for a plan sponsor who has already complied with Pillar 1 contribution requirements. EA will be discussed in greater detail in the rest of the paper.
- *Pillar 3:* This is a voluntary unregistered defined contribution program, which supplements Pillars 1 and 2.

## Key Provisions of Enterprise Annuity

- Employers fulfilling Pillar 1 contribution requirements may establish an EA subject to approval of the employee union or representatives.
- All EA plans must be approved and registered with the Ministry of Labor and Social Security (MOLSS).
- Eligibility:  
Employees may participate in the EA plan after satisfying some eligibility requirements.
- Contributions:
  - Both employer and employees may contribute.
  - Total employer's annual contributions must not exceed 1/12 of the previous year's total payroll.

- Total of employer's and employees' annual contributions must not exceed 1/6 of the previous year's total payroll.

- Allocation of contributions:
  - All contributions are forwarded to the custodian in a lump sum.
  - The record keeper will then allocate the employee contributions to the individual account.
  - Allocation of employee contributions must be equal to the individual's own contributions.
  - There is a great deal of flexibility in the allocation of employer contributions.
- Accrued benefits:
  - Employee accounts are credited with the total of employer and employee contributions plus investment returns.
  - There may be vesting requirements for employer contributions and investment returns thereof.
- Benefit payments:
  - Employees are eligible for benefit payments upon reaching the normal retirement age, emigration from China or death.
  - Benefits, equal to the total accrued benefits, are payable in a lump sum or in monthly payments.
  - Upon employee termination, the vested portion of individual accounts is portable to the EA plan of the new employer, if such a plan is available. If not, the benefit remains with the former employer.

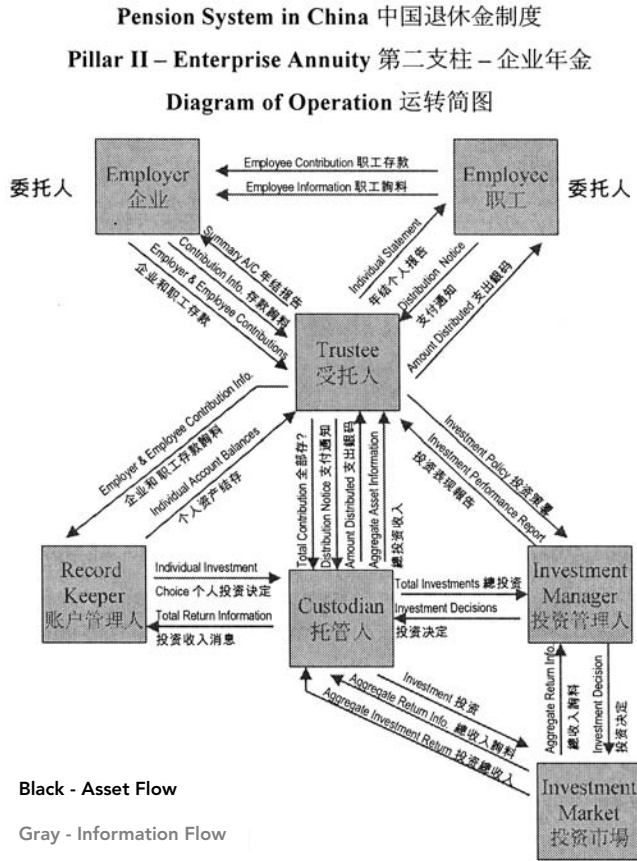
**All EA plans must be approved and registered with the Ministry of Labor and Social Security (MOLSS).**

As shown in the diagram on page 16, the administrative structure of an EA consists of the following major components:

- The employer is the sponsor of the EA plan.
- The employer and the employee union or representatives form the managing council (MC) of the EA. This MC is the administrator of the EA.
- The MC may either be the trustee or delegate a third party professional organization to be the trustee.
- The trustee chooses the record keeper, the custodian, and the investment manager to perform the respective functions of EA operation.

continued on page 16

## Administrative Structure of an Enterprise Annuity Plan



## Criteria for Measuring Success in Enterprise Annuity

The degree of success of EA must be analyzed in relation to the three points mentioned in the paragraph above.

➤ For point 1, to enhance the security of the retirement system, it is important that there be adequate safety in the investment of the EA funds. For this purpose, conservative investment allocation limits are set:

- Money market instrument must be more than 20 percent of total investment
- Fixed income investment must be between 20 percent to 50 percent, with at least 20 percent in government bonds
- Equity investment must not exceed 30 percent, stocks must not exceed 20 percent
- No foreign investments are allowed
- Investment managers must set aside 20 percent of fees in reserve for excessive investment losses

➤ The degree of success in regard to point 2 depends on the investment return achieved by the EA fund. The results must be analyzed in relation to the retirement benefit expected to be provided by EA, expressed as a percentage of the pay before retirement (called pay replacement ratio PRR). The projected PRR depends on the relation between pay increases and investments returns. For a full career employee with 10 percent contributions into his account each year from age 30 to retirement at age 60, the following table shows some expected results:

**Table 1**

Investment Returns	Pay Increases	Expected PRR
8 percent	5 percent	42 percent
5 percent	5 percent	23 percent
5 percent	8 percent	13 percent

The above table points out that a long-term investment policy must be set in relation to the pay increases expected. Ultra conservative

## Importance of Enterprise Annuity

Success of EA is very important to China for the following reasons:

1. Because of the funding shortfall of Pillar 1 programs, a fully funded Pillar 2 can help ease the pressure on Pillar 1.
2. Pillar 1A and Pillar 1B are meant to provide basic floor benefits for employees. The higher paid employees need EA to supplement the benefits provided by Pillar 1.
3. A successful EA system will induce more savings among the population. The EA funds will be a useful element in financing the capital market economy of China.

investment strategies may lead to an unattractive EA program.

➤ There is a lot of enthusiasm and anticipation about business and investment opportunities in EA. Many banks, insurance companies, trust companies, security companies and mutual companies have competed for registration for various administrative duties related to the EA. We understand that about 40 licenses have already been issued to organizations for these administrative duties. Annual contributions are estimated to range between five and 10 billion dollars. The total EA funds are expected to be between 60 and 120 billion dollars by 2020. EA is expected to produce a considerable amount of assets for the capital market. Thus EA is expected to be successful according to point 3.

## Major Issues for Enterprise Annuity

1. **Governance issue:** It is important for each administrative organization of EA to know its responsibilities. As shown in the Diagram of Operation on page 16, the key administrative organization of the EA system is the Trustee. It has fiduciary responsibilities toward the MC and the employees. It can delegate some work to the other organizations. However the fiduciary responsibilities still rest with it. It is important for the Trustee to satisfy the following requirements:
  - a. To have undergone a stringent licensing process to ensure it has the expertise to perform the work;
  - b. To be bonded or to be covered by surety insurance;
  - c. To be closely supervised by the regulator through regular disclosure requirements;
  - d. To be audited annually by an external auditor.
2. **Taxation issue:** The tax structure of the EA has not been clarified to date. It is important that the tax structure be clearly stated.
3. **Supervision issue:** To encourage greater participation in EA, there must be more flexibility given to those EA programs that are well managed. At the same time those

badly managed EA programs must be closely monitored. This requires a risk-based supervision system, which will distinguish the well-managed EA from the badly managed. To operate such a system, the regulating officers must be well educated in the operation of EA, and in the risk factors in investment and the operation of EA. A comprehensive and robust IT system and an efficient analysis procedure are also essential for risk-based supervision.

4. **Education:** Educating the various organizations administering the EA will enhance the efficiency of the system and reduce unintended errors. Educating the public will enhance appreciation of the EA system and promote better utilization of the EA program.
5. **Investment:** Investment is key to the success of the EA operation since better investment returns should provide larger benefits for a given contribution rate. The objectives, procedures, and limitations must be clearly stated in the investment policy. The investment manager must be chosen carefully and objectively. Furthermore, investments must be monitored carefully through regular reports and meetings. Any necessary corrective action must be taken promptly. In setting the investment policy, there should be a balance between risk and return, which must be analyzed in relation to the objectives and constraints of the EA fund.

## Conclusion

The success of Enterprise Annuity is of vital importance to China. In order to be successful, special attention must be paid to the governance issue, and investment policy must be set in accordance with the objectives and constraints of the EA fund. Risk-based supervision will enhance the efficiency of the EA system. Intensive education is needed at all levels. □



Michael Sze, FSA, EA, FClA, is president of Sze Associates, Ltd. in Willowdale, Ontario. He can be reached at msze@szeassociates.com.