Investment of Pension Funds and Sovereign Wealth Funds in China

BY

CHAIRMAN, STIRLING FINANCE LIMITED

TEL: (852) 2147 9998
FAX: (852) 2147 2822
E-mail: stuart.leckie@stirlingfinance.com

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  - China Investment Corporation (CIC)
  - State Administration of Foreign Exchange (SAFE)
  - China-Africa Development Fund

- Investment Opportunities and Future Outlook
Demographic Dynamics in China
PRC Population

- Total: 1.37bn
- Rural Population: 674mn
- Urban Population: 666mn

**Population Ages:**

- 0-14: 222mn - 16.6%
- 15-59: 940mn - 70.1%
- 60+: 178mn - 13.3%

*Source: The Sixth National Population Census (2010)*

Consider:

- One child policy
- Greatly improved life expectancy
- Dependency ratio deteriorating rapidly
- Population Sex Ratio up to currently 118 males born for each 100 females
- Solve population problem through migration? - NO!
- 400mn people over age 60 in 2040
Demographic Changes Pose Challenges

**Life Expectancy**

- **World**:
  - 1970: 56.2
  - 2005: 64.7
  - 2040: 72.7

- **Asia**:
  - 1970: 53.8
  - 2005: 65.4
  - 2040: 75.5

- **China**:
  - 1970: 59.6
  - 2005: 71.5
  - 2040: 77.1

Source: UN Population Division

**Total Fertility Rate**

- **World**:
  - 1970: 4.9
  - 2005: 2.7
  - 2040: 2.1

- **Asia**:
  - 1970: 2.5
  - 2005: 2.0
  - 2040: 1.7

- **China**:
  - 1970: 2.0
  - 2005: 1.7
  - 2040: 1.9

Source: UN Population Division
Demographic Changes Pose Challenges (Cont’d)

60 & over as % of Total Population

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>2005</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>8.4</td>
<td>10.4</td>
<td>19.1</td>
</tr>
<tr>
<td>Asia</td>
<td>6.5</td>
<td>9.3</td>
<td>20.4</td>
</tr>
<tr>
<td>China</td>
<td>6.8</td>
<td>10.9</td>
<td>28.2</td>
</tr>
</tbody>
</table>

Source: UN Population Division

Old-age Dependency Ratio

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>2005</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>6.4</td>
<td>5.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Asia</td>
<td>3.1</td>
<td>3.0</td>
<td>6.7</td>
</tr>
<tr>
<td>China</td>
<td>2.0</td>
<td>2.0</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Source: UN Population Division
Pension Reforms

and

Enterprise Annuities
Old Pension System

- Unban employees typically worked for SOE for life
- Wages very low, but total security
- Retirement at 60 (males), 55/50 (females)
- Pension from SOE of 80-90% of final salary
- Pension increases each year
- Pensions paid out of cash flow alongside wages
- In 1950s not many pensioners, low life expectancy
- By 1980s very many pensioners, improved life expectancy
- Then SOEs became under pressure to downsize and get efficient
Pension Reform

- New unified pension system reform
  - Document 26 – July 1997
  - Document 38 – December 2005
  - Expand coverage to all urban employees

- National Social Security Fund (NSSF) established in 2000 as a strategic reserve

- Regulations for Enterprise Annuity (EA) plans in 2004

- Rural population to be covered by 2020
## Urban Pension System

<table>
<thead>
<tr>
<th>Pillars (World Bank)</th>
<th>Chinese Terminology</th>
<th>Contributions</th>
<th>Benefits</th>
<th>Funded Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero</td>
<td>Zero: Minimum guarantee (Di Bao)</td>
<td>n/a</td>
<td>Varies</td>
<td>From Government</td>
</tr>
<tr>
<td>I</td>
<td>Ia: Mandatory Social Pool Old Age Pension</td>
<td>ER: ≈20% of salaries</td>
<td>Monthly pension based on average local monthly wage, indexed individual wage and years of employment</td>
<td>PAYG</td>
</tr>
<tr>
<td>II</td>
<td>Ib: Mandatory Individual Account (IA) Pension</td>
<td>EE: 8% of salary</td>
<td>Monthly pension of 1/139 of IA balance at the time of retirement provided at least 15 years’ contributions</td>
<td>Should be funded</td>
</tr>
<tr>
<td><strong>Private</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>II: Voluntary Enterprise Annuity (set up by eligible employers)</td>
<td>ER; EE</td>
<td>Lump sum or annuity benefit</td>
<td>Funded</td>
</tr>
<tr>
<td></td>
<td>III: Other Voluntary Benefits, e.g. Insured Group Pension Plans</td>
<td>ER; EE</td>
<td>Lump sum or annuity benefit</td>
<td>Funded</td>
</tr>
<tr>
<td><strong>Private &amp; State</strong></td>
<td>IV: Family support; subsidised healthcare and housing</td>
<td>n/a</td>
<td>Varies</td>
<td>From Government or Family</td>
</tr>
</tbody>
</table>

*Source: Stirling Finance research. ER - employer; EE - employee.*
### Urban Pension System (Cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Equities/ Linked products</th>
<th>Financial/ Corporate Bonds</th>
<th>G-bonds / Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar 1a (state)</td>
<td>-</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Pillar 1b (state) (IA)</td>
<td>-</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Pillar II (EA)</td>
<td>&lt; 30%</td>
<td>&lt; 50%</td>
<td>&gt; 20%</td>
</tr>
<tr>
<td>Pillar III (non-EA)</td>
<td>&lt; 20%</td>
<td>&lt; 20%</td>
<td>&lt; 100%</td>
</tr>
</tbody>
</table>

Source: Stirling Finance research

Notes:
- State pensions increase each year by an amount between price inflation and earnings escalation
- Investment return for IA: 2% p.a. in the past 10 years
Enterprise Annuities (EAs)

- Voluntary supplementary plans set up by employers according to MoHRSS Regulations

- Tax regulations (December 2009) and supplementary regulations (January 2011)
  - EE contribution - not tax deductible when calculating personal income tax
  - ER contribution - subject to personal income tax

- Conversion of non-EA supplementary plans to EA format, e.g.: after Shanghai Scandal

- Total of 58 licenses have been awarded to 38 institutions in two batches (in 2005 and 2007)

- Rapid expansion (as at end-2010)
  - total # of EA plans: 35,000
  - total # of members: 14mn
  - total AUM: RMB300bn
## EA Service Providers– Who Can Do What?

<table>
<thead>
<tr>
<th>Provider</th>
<th>Regulatory Body</th>
<th>Trustee</th>
<th>Administrator</th>
<th>Investment Manager</th>
<th>Custodian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust company</td>
<td>CBRC</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Commercial bank</td>
<td>CBRC</td>
<td>√</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Fund management subsidiary of commercial bank</td>
<td>CBRC</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Fund management co.</td>
<td>CSRC</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Securities co.</td>
<td>CSRC</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Life insurance co.</td>
<td>CIRC</td>
<td>-</td>
<td>√</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pension insurance co.</td>
<td>CIRC</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Fund management subsidiary of insurance co.</td>
<td>CIRC</td>
<td>-</td>
<td>√</td>
<td>√</td>
<td>-</td>
</tr>
<tr>
<td>Non-financial services co.</td>
<td>N.A.</td>
<td>-</td>
<td>√</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: Stirling Finance research*
EA Investments

- All domestic
- Investment return
  - 2006-2008: 10.5% p.a. on average
  - 2009: 7.8%
  - 2010: 3.6%
- New Investment Measures take effect on 1 May 2011

<table>
<thead>
<tr>
<th></th>
<th>Old Rules</th>
<th>New Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid assets</td>
<td>≥20%</td>
<td>≥ 5%</td>
</tr>
<tr>
<td>Fixed income</td>
<td>≥20%</td>
<td>≤95%</td>
</tr>
<tr>
<td>Equity products</td>
<td>≤30%</td>
<td>≤30%</td>
</tr>
<tr>
<td>- stocks</td>
<td>≤20%</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Stirling Finance research*
EA Investment Performance

- Reuters China Pension Index (RCPI)
  - Designed to provide performance benchmarks for China’s Enterprise Annuities
  - Launched on 31 March 2006
- 3 versions reflecting different asset proportions between cash: fixed income: equities.

Source: Reuters. Dated as of 29 July 2011
New Rural Pension System

- Over 50% of residents in China are rural (674mn population)

- New rural pension system introduced in late 2008
  - Initially on a voluntary basis
  - **Eligibility:** Rural residents aged 16 and above who are neither students nor currently participating in the urban system
  - **Pension age:** 60 for M & F
  - **Achievement:** Scheme introduced to 23% of counties by end-2010;
    Aiming to cover 50% by end-2011
  - To cover entire rural population by 2020 on compulsory basis
## New Rural Pension System (Cont’d)

<table>
<thead>
<tr>
<th>Terminology</th>
<th>Contributions</th>
<th>Benefits</th>
<th>Funded Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Social Pool</td>
<td>100% from government budget</td>
<td>No less than RMB 55 per month</td>
<td>Unfunded</td>
</tr>
<tr>
<td>Individual Account</td>
<td>Individuals: RMB 100 / 200 / 300 / 400 / 500 per year; Government: No less than RMB 30 each year</td>
<td>Monthly pension benefit of 1/139 of IA balance at pension age assuming at least 15 years’ contribution; otherwise, lump sum payable</td>
<td>Funded (accumulated in accordance with 1-year bank deposit rate)</td>
</tr>
<tr>
<td></td>
<td>Other sources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Stirling Finance research
Sovereign Wealth Funds
National Social Security Fund (NSSF)

- Established in 2000
  - A strategic reserve fund
  - A solution to the ageing problem
  - Pension fund of last resort - to help provinces with pension financing difficulties

- Source of funds:
  - Allocations from central government
  - State Shares equal to 10% of IPO proceeds
  - Lottery licence fees
  - Investment returns

- Growing significantly in size, stature and influence

- Acting like Sovereign Wealth Fund
NSSF Assets

- **Assets:**
  - Known as the biggest institutional investor in China’s pension sector
  - US$130bn total assets as of end 2010
  - Aiming to reach RMB1.5trn (US$231bn) by 2015

![Graph showing total book assets at year-end (US$bn) from 2000 to 2010.](source: NSSF; Stirling Finance research)
### NSSF Investment Portfolio

- **Well diversified Portfolio**

<table>
<thead>
<tr>
<th>Geographical Allocation</th>
<th>Execution</th>
<th>Permitted investments</th>
<th>Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td>Direct</td>
<td>Bank deposits</td>
<td>&gt;= 50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government bonds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appointment</td>
<td>Equities</td>
<td>&lt;= 40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fixed income</td>
<td>&lt;= 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PE funds</td>
<td>&lt;= 10%</td>
</tr>
<tr>
<td><strong>International</strong></td>
<td>Appointment</td>
<td>Equities</td>
<td>&lt;= 20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fixed income</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Stirling Finance research*
Appointment of Domestic Fund Managers

- 2001 – 2002
  - direct investments only
  - modest returns:
    - 2% - 3%

- Domestic appointments
  - 6 in 2003
  - 4 in 2004
  - 8 in 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Fund Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>China Southern, Boshi (Bosera), Huaxia (China AMC), Penghua, Changsheng, Harvest</td>
</tr>
<tr>
<td>2004</td>
<td>CICC, China Merchants, E Fund, Guotai</td>
</tr>
<tr>
<td>2010</td>
<td>Dacheng, Fullgoal, ICBC Credit Suisse, Guangfa, HFT, China Universal, Yinhua, Citic Securities</td>
</tr>
</tbody>
</table>

Source: NSSF
International Investments

- Permitted by State Council to use its own FX to invest abroad in 2006

- Appointed international investment managers in November 2006
  - 5 mandates
  - 10 winners selected in November 2006
  - Selection of 2 global custodians in July 2006

- Second batch of mandates issued in May 2008
  - 5 mandates
  - 12 fund managers selected in 2009
  - Winners announced in March 2010

- Current allocation: 7%
## First Batch of Overseas Investment Initiatives

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Index</th>
<th>Target Net-of-Fees Excess Return p.a.</th>
<th>Tracking Error</th>
<th>Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global (ex-US) Equities</td>
<td>MSCI World (ex USA)</td>
<td>+ 200 bps</td>
<td>Within 8% p.a.</td>
<td>Allianz; Invesco; UBS/CICC</td>
</tr>
<tr>
<td>US Equities</td>
<td>S&amp;P 500</td>
<td>+ 50bps</td>
<td>Within 2% p.a.</td>
<td>AllianceBernstein; AXA Rosenberg</td>
</tr>
<tr>
<td>Hong Kong Equities</td>
<td>FTSE China Hong Kong</td>
<td>+ 300 bps</td>
<td>Within 8% p.a.</td>
<td>JanusINTECH; T. Rowe Price</td>
</tr>
<tr>
<td>Global Fixed Income</td>
<td>Barclays Capital Global Aggregate Bond</td>
<td>+ 100 bps</td>
<td>Within 2% p.a.</td>
<td>AllianceBernstein; Blackrock; PIMCO</td>
</tr>
<tr>
<td>Cash</td>
<td>6-month LIBOR</td>
<td>0</td>
<td>N/A</td>
<td>Blackrock</td>
</tr>
</tbody>
</table>

Source: NSSF
## Second Batch of Overseas Investment Initiatives

### Mandate

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Benchmark</th>
<th>Appointed Fund Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active China Overseas Equity</td>
<td>MSCI China Index</td>
<td>Schroders; Bosera; Baring</td>
</tr>
<tr>
<td>Active Asia Pacific (ex Japan ) Equity</td>
<td>MSCI All countries Asia Pacific ex Japan Index</td>
<td>Martin Currie; JF; Principal</td>
</tr>
<tr>
<td>Active Emerging Market Equity</td>
<td>MSCI Emerging Market Index</td>
<td>Batterymarch; Morgan Stanley; Schroders</td>
</tr>
<tr>
<td>Active European Equity</td>
<td>MSCI Europe Index</td>
<td>Newton; Fidelity</td>
</tr>
<tr>
<td>Active Global Equity</td>
<td>MSCI World Index</td>
<td>Prudential (UK); Wellington</td>
</tr>
</tbody>
</table>

*Source: NSSF*

- No target return or tracking error was specified
NSSF Investment Returns

- Investment returns as of 31 December 2010
  - 9.2% p.a. since inception vs. inflation rate of 2.1% p.a.

Source: NSSF; Stirling Finance research.
Sovereign Wealth Funds – CIC

- China Investment Corporation (CIC)
  - Established in September 2007
  - 5th largest SWF in the world
  - Mandated to manage a portion of China’s foreign exchange reserves
  - Asset size increased from initially US$200bn to US$410bn as of 31 December 2010
  - **Domestic investments**
    - US$67bn to acquire Central Huijin
    - US$50bn to recapitalise ABC and CDB
  - **International investments**
    - Blackstone (US$3bn), Morgan Stanley (US$5.6bn+1.2bn)
    - Investments in PE funds, money market funds, natural resources and high-tech companies etc.
    - Two batches of selected international fund managers – not public
  - For international investments, annual total return of 11.7% in 2010, and return of 6.4% p.a. since inception
  - HK subsidiary (November 2010) and Toronto office (January 2011) set up
CIC – First Batch of International Mandates

- Equity-oriented
- Made public in December 2007

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Benchmark</th>
<th>Target Rate of Return (Annual, net-of-fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity Active</td>
<td>MSCI All Country Index(USD), dividends reinvested</td>
<td>+ 300 bps</td>
</tr>
<tr>
<td>MSCI EAFE Active</td>
<td>MSCI EAFE(USD), dividends reinvested</td>
<td>+ 200 bps</td>
</tr>
<tr>
<td>Emerging Market Active</td>
<td>MSCI Emerging Market Index(USD), dividends reinvested</td>
<td>+ 300 bps</td>
</tr>
<tr>
<td>Asia ex Japan Equity Active</td>
<td>To be provided by applicants</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Source: CIC; Stirling Finance research.
### CIC – Second Batch of International Mandates

- **Fixed income**
- **Made public in February 2008**

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Benchmark</th>
<th>Target Rate of Return (Annual, net-of-fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Global Fixed Income</strong></td>
<td>GDP weighted customized global bond index (composed of Barclays Capital US, Euro Zone, Japan, UK Treasury indices), measured in USD, dividends reinvested</td>
<td>+ 150 bps</td>
</tr>
<tr>
<td><strong>Active Emerging Market Debt</strong></td>
<td>JP Morgan EMBI Global, measured in USD, dividends reinvested</td>
<td>+ 200 bps</td>
</tr>
</tbody>
</table>

*Source: CIC; Stirling Finance research.*
# CIC - Asset Allocation and Investment Returns

<table>
<thead>
<tr>
<th>Year-end</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>3.2%</td>
<td>36%</td>
<td>48%</td>
</tr>
<tr>
<td>Fixed income</td>
<td>9%</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>0.4%</td>
<td>6%</td>
<td>21%</td>
</tr>
<tr>
<td>Cash</td>
<td>87.4%</td>
<td>32%</td>
<td>4%</td>
</tr>
<tr>
<td>Total Return on international investments (US$)</td>
<td>-2.1%</td>
<td>11.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Overall return (US$)</td>
<td>6.8%</td>
<td>12.9%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(No disclosure from CIC)

*Source: CIC, Stirling Finance research.*
CIC – Future

- Consideration for restructuring?
  - Strip out all bank holdings?
  - CIC to focus on overseas investments?
  - Central Huijin to concentrate on state-owned financial assets?

- Another USD50bn may be obtained this year?

- Given its size and potential to sway the markets, every move of the CIC is closely watched.
Sovereign Wealth Funds – SAFE

- State Administration of Foreign Exchange (SAFE)
- China’s FX reserves as of 31 June 2011: USD3.2trn
- 5% of the assets are allowed for overseas equity investments
- Hong Kong subsidiary (“SAFE Investment Company Limited”) established in June 1997
  - Asset size: ~USD568bn as of 31 December 2010
  - 4th largest SWF in the world
- Deals done through SAFE Investment or other nominee accounts
- Quietly built up stakes in over 50 European companies, Australian banks and PE funds
Sovereign Wealth Funds – CADFund

- China-Africa Development Fund (CADFund)
- Launched in June 2007 as the largest PE fund in China
- Also the largest fund invested in Africa
- Aims to enhance China-Africa strategic partnerships in various areas
- Initially US$1bn provided by China Development Bank
- Will increase to US$3bn by 2013 and eventually US$20bn
- Operating independently based purely on market economy principles
- Have invested in over 30 projects in Africa
  - Energy, infrastructure, agriculture, manufacturing, mining etc.
  - e.g., glass plant (Ethiopia); electric power plant (Ghana); chrome plant (Zimbabwe)
  - Suez Economic and Trade Park (Egypt)
Investment Opportunities
and
Future Outlook
## Opportunities for International FMIs

<table>
<thead>
<tr>
<th>Pillars (Chinese)</th>
<th>Opportunities?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar Ia</td>
<td>No</td>
</tr>
<tr>
<td>Pillar Ib</td>
<td></td>
</tr>
<tr>
<td>Short Term</td>
<td>No</td>
</tr>
<tr>
<td>Medium Term</td>
<td>Outsourcing by Social Security Bureaus</td>
</tr>
<tr>
<td>Long Term</td>
<td>Like MPF or 401(k) plans?</td>
</tr>
<tr>
<td>Pillar II</td>
<td>Need EA License</td>
</tr>
<tr>
<td>Pillar III</td>
<td>Via insurance companies</td>
</tr>
<tr>
<td>NSSF</td>
<td>Yes</td>
</tr>
<tr>
<td>CIC</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Source: Stirling Finance research*
Possible Future Developments

- Improvements needed to further refine the urban system
  - Individual Accounts
    - Broaden investment scope?
    - Outsource to private sector?
  - EA: permit overseas investments?
- Rural pension system to follow
- More clearly defined objectives necessary for NSSF
Possible Future Developments (Cont’d)

- Under 12th 5-year plan, CSRC will aim to support investment industry
- CSRC + MoHRSS now studying 401(k)
- 401 (k) : Savings for retirement
  - Member choice of investment
  - Tax incentive
- Chinese 401(k) and Enterprise Annuity to merge?
- Could be very powerful stimulus to fund management industry
- Also CIRC permitting trial of Variable Annuities
谢谢!