THE NEW SUPPLEMENTARY RETIREMENT SYSTEM FOR PUBLIC EMPLOYEES IN BRAZIL

SÃO PAULO: THE PIONEER STATE

Carlos H. Flory
CEO SP-PREVCOM
### BRAZIL x SÃO PAULO

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th>São Paulo</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (1.000/km²)</td>
<td>8,5 mi</td>
<td>248</td>
<td>3%</td>
</tr>
<tr>
<td>Population (million)</td>
<td>195</td>
<td>41</td>
<td>21%</td>
</tr>
<tr>
<td>GDP (US$)</td>
<td>2,143 bi</td>
<td>707 bi</td>
<td>33%</td>
</tr>
<tr>
<td>GDP per capita (US$)</td>
<td>10,9</td>
<td>17,1</td>
<td>+ 57%</td>
</tr>
</tbody>
</table>

Source: IBGE/World Bank (2010)
## SÃO PAULO: GDP & POPULATION

### COMPARISON WITH SELECTED COUNTRIES

<table>
<thead>
<tr>
<th>State/Country</th>
<th>GDP US$ (Billions)</th>
<th>index</th>
<th>State/Country</th>
<th>POPULATION (Millions)</th>
<th>index</th>
</tr>
</thead>
<tbody>
<tr>
<td>São Paulo</td>
<td>707</td>
<td>100%</td>
<td>São Paulo</td>
<td>41</td>
<td>100%</td>
</tr>
<tr>
<td>Chile</td>
<td>216</td>
<td>31%</td>
<td>Netherlands</td>
<td>17</td>
<td>40%</td>
</tr>
<tr>
<td>Argentina</td>
<td>369</td>
<td>52%</td>
<td>Chile</td>
<td>17</td>
<td>41%</td>
</tr>
<tr>
<td>Turkey</td>
<td>731</td>
<td>103%</td>
<td>Argentina</td>
<td>40</td>
<td>98%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>774</td>
<td>109%</td>
<td>Turkey</td>
<td>73</td>
<td>198%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>1.487</td>
<td>210%</td>
<td>Russian Federation</td>
<td>142</td>
<td>344%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.143</td>
<td>300%</td>
<td>Brazil</td>
<td>195</td>
<td>472%</td>
</tr>
</tbody>
</table>

Source: IBGE/ World Bank (2010)
Population Ageing: A GLOBAL QUESTION
BRAZIL - FROM 1980 UNTIL 2050
POPULATION AGES IN BRAZIL

1970

- Population ages 0-14 (% of total)
- Population ages 15-64 (% of total)
- Population ages 65 and above (% of total)

2010

DEMOGRAFIC BONUS

Source: World Bank
AGEING TIMELINE

Source: IBGE

Global Life Expectancy

Medicine advances = increase of life expectancy = PROBLEMS IN RETIREMENT SYSTEMS

Source: IBGE
AGEING x RETIREMENT SYSTEM

DEPENDENCY RATIO

✓ 1940 = 31 active employees/beneficiary
✓ 1980 = 2,9 active employees/beneficiary
✓ 2010 = 1,7 active employees/beneficiary
✓ 2040 = 0,8 active employees/beneficiary (projection)

SÃO PAULO RETIREMENT SYSTEM TODAY = 1,25

Source: MPS
RETIREMENT SYSTEM IN BRAZIL

PRIVATE SECTOR

NOT MANDATORY

1 - Pension Fund = Employer + employees
2 - Class Associations = Only participants
3 - Banks/Insurances = Only clients

CAPITALIZATION – DB or DC

Up to US$ 2,000.00

MANDATORY = RGPS

Employers + Employees Contributions

PAY AS YOU GO

SUPPLEMENTARY SYSTEM

PUBLIC SECTOR

MANDATORY = RPPS

CONTRIBUTIONS:
PUBLIC EMPLOYEES (11%)
GOVERNMENT (22%)
(Country/State/Local)

PAY AS YOU GO
and/or
CAPITALIZATION - DB

LAST PAYMENT

ONLY ONE SYSTEM

PRIVATE SECTOR

PUBLIC SECTOR

OLD MODEL
### SÃO PAULO EMPLOYEES

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active employees under RPPS rules</td>
<td>550,000</td>
</tr>
<tr>
<td>Retirees + dependents</td>
<td>440,000</td>
</tr>
<tr>
<td>Active employees/ beneficiaries ratio</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Total RPPS</strong></td>
<td>990,000</td>
</tr>
<tr>
<td>Active employees under RGPS rules</td>
<td>120,000</td>
</tr>
<tr>
<td><strong>São Paulo Total Public Employees</strong></td>
<td>1,110,000</td>
</tr>
</tbody>
</table>

Data: Dez/11

<table>
<thead>
<tr>
<th>ACTIVE EMPLOYEES PROFILE - RPPS</th>
<th>Age (average)</th>
<th>Time to retirement (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>550,000</td>
<td>45 years</td>
<td>12 years</td>
</tr>
</tbody>
</table>
### BENEFITS PAYROLL

#### PROJECTIONS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>US$ - BENEFITS PAYROLL (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>88% 9,773</td>
</tr>
<tr>
<td>2022</td>
<td>150% 14,854</td>
</tr>
<tr>
<td>2032</td>
<td>221% 18,062</td>
</tr>
<tr>
<td>2042</td>
<td>272% 18,718</td>
</tr>
<tr>
<td>2052</td>
<td>255% 16,427</td>
</tr>
<tr>
<td>2062</td>
<td>205% 12,843</td>
</tr>
</tbody>
</table>

**Source:** Actuarial studies (2011)

**EFFECT OF THE NEW MODEL ADOPTED**

**RELATED TO THE ACTIVE EMPLOYEES PAYROLL**
WHAT ARE WE CHANGING?

PRIVATE SECTOR

- Basic System
  - RGPS
  - Pay as you go

- Supplementary System
  - Capitalization: DB or DC
  - Up to US$ 2,000.00

PUBLIC SECTOR

- Basic System
  - Mandatory RPPS
  - Pay as you go and/or capitalization - DB
  - Up to US$ 2,000.00

- Supplementary System
  - Individuals
    - Mandatory
    - No match
    - +/- 80% of last payment

- Individuals Contributing
  - Government: 22%
  - Employee: 11%

- Supplementary System
  - Only for 30% of new employees

- Employees
  - No limits of contribution

- Government
  - Up to 7.5% match (maximum limit)

OLD MODEL

NEW MODEL
NEW MODEL

SÃO PAULO’S PUBLIC EMPLOYEES

BASIC SYSTEM

DB PLAN
Lifetime benefits limited to US$ 2,000.00

RPPS or RGPS

SUPPLEMENTARY SYSTEM

DC PLAN
Depends of the accumulate value in individual accounts and chosen benefit’s time

SP-PREVCOM

TOTAL RETIREMENT BENEFITS
IF THE STATE OF SÃO PAULO HAD ADOPTED THE FUNDED PENSION FUND SYSTEM IN THE 70’S, WHEN THE BIGGEST BRAZILIAN PENSION FUNDS WHERE CREATED, IT WOULD BE:

- THE BIGGEST IN BRAZIL;
- AMONG THE 10 LARGEST PUBLIC EMPLOYEES’ PENSION FUNDS IN THE WORLD, WITH APPROXIMATELY US$ 150 BILLION IN ASSETS.
### 10 LARGEST PUBLIC EMPLOYEES PENSION FUNDS

<table>
<thead>
<tr>
<th>Rank</th>
<th>Fund</th>
<th>Country</th>
<th>Total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government Pension Investment</td>
<td>Japan</td>
<td>$1,432,122</td>
</tr>
<tr>
<td>2</td>
<td>Government Pension Fund</td>
<td>Norway</td>
<td>$550,858</td>
</tr>
<tr>
<td>3</td>
<td>ABP</td>
<td>Netherlands</td>
<td>$318,807</td>
</tr>
<tr>
<td>4</td>
<td>National Pension</td>
<td>Korea</td>
<td>$289,418</td>
</tr>
<tr>
<td>5</td>
<td>Federal Retirement Thrift</td>
<td>U.S.</td>
<td>$264,013</td>
</tr>
<tr>
<td>6</td>
<td>California Public Employees</td>
<td>U.S.</td>
<td>$214,317</td>
</tr>
<tr>
<td>7</td>
<td>Local Government Officials</td>
<td>Japan</td>
<td>$189,633</td>
</tr>
<tr>
<td>8</td>
<td>Canada Pension</td>
<td>Canada</td>
<td>$149,142</td>
</tr>
<tr>
<td>9</td>
<td>Employees Provident Fund</td>
<td>Malaysia</td>
<td>$145,570</td>
</tr>
<tr>
<td>10</td>
<td>Central Provident Fund</td>
<td>Singapore</td>
<td>$144,844</td>
</tr>
</tbody>
</table>

Source: P&I/Watson Wyatt (set/11)
**HOW DOES OUR NEW MODEL WORK?**

- **New employee admission**
- **Retirement**
- **DC Benefit Ends**

- **35 years (minimum by law)**
- **20 years (choice)**
- **20 years?**

**Risk benefits covered by insurance companies**

- **In 35 years will it be necessary to retire at this age?**

- **And this risk?**
WHAT DO THEY HAVE IN COMMON?

Catherine Deneuve
Sophia Loren
Morgan Freeman
Mick Jagger
Paul McCartney
Clint Eastwood
Hellen Mirren
Warren Buffett
When I get older, losing my hair, many years from now
Will you still be sending me a valentine, birthday greetings, bottle of wine?
If I'd been out 'til quarter to three, would you lock the door?
Will you still need me, will you still feed me when I'm sixty-four?

You'll be older too
Ah, and if you say the word, I could stay with you

I could be handy, mending a fuse when your lights have gone
You can knit a sweater by the fireside, Sunday mornings, go for a ride
Doing the garden, digging the weeds, who could ask for more?
Will you still need me, will you still feed me when I'm sixty-four?

Every summer we can rent a cottage
In the Isle of Wight if it's not to, dear
We shall scrimp and save
Ah, grandchildren on your knee, Vera, Chuck and Dave

Send me a postcard, drop me a line stating point of view
Indicate precisely what you mean to say, yours sincerely wasting away
Give me your answer, fill in a form, mine forever more
Will you still need me, will you still feed me when I'm sixty-four?
ARE THEY REALLY OLD?
HOW TO MANAGE THE LONGEVITY RISK?

**QUESTION:**
For new employees (woman/man), in 35 years will **THIS** be a normal retirement age?
IF LONGEVITY CONTINUE TO BE A RISK?

25 years
New Employee Admission

45 years (10 years over minimum)
Contribution phase

70 years
Retirement

30 years (choice)
Benefits phase

100 years
DC Benefit Ends

120 years?

How many years?

LONGEVITY

How can we manage this risk effectively?

INSURANCE?

HOW CAN WE GUARANTEE THE NECESSARY INVESTMENT RETURNS?
CONCLUSIONS

✓ Preparing for the future: the previous system was not sustainable in long term.

✓ Crisis prevention: avoid strong benefits’ cuts in the future.

✓ Until DEC/11, public employees had only DB plan. Then, the adoption of CD Plan is a paradigm shift in Brazil.

✓ Risk benefits covered directly by insurance companies, costs paid by participant.

✓ We’re just a “baby”! There is much to be learned with other experiences.
CONTINUOUS CHALLENGES

✓ Assets allocations based in lifecycle / lifestyle?

✓ Continuous reduction of administration fees (Maximum limit set by law).

✓ Estimate employees participation at relevant decisions.

✓ Development of communication and education strategies for building member engagement.

✓ Provide information, advanced tools and knowledge to allow employees to take more effective control of their retirement and understand the need for saving.
THANK YOU!

Research sources:
IBGE (www.ibge.gov.br)
Banco Central do Brasil (www.bcb.gov.br)
Ministério da Previdência Social (www.mps.gov.br)
International Monetary Fund (www.imf.org)
JP Morgan (www.jpmorgan.com)
P&I/Watson Wyatt (www.pionline.com)
Portfolio Performance Ltda. (www.pps-net.com.br)
United Nations (www.un.org)
World Bank (www.worldbank.org)