

# **A Decade of Government Mandated Privately Run Pension in Mexico: What Have We Learned?**

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# Overview

- How has the system has evolved over the past decade?
- Number of affiliates: headcounts, active versus inactive members
- Methods of assigning “reluctant workers”
- Distribution of money
- Industrial organization by market share using headcounts and fund values
- Transfer of affiliates over time
- Portfolio choice of funds

# Overview

- Growth and development of annuities
- Cost of the new system in three dimensions
  - First, we analyze the fees
  - Second, we compare how the cost of the old system would have evolved had there been no change in the system with the cost of the new system
  - Third, we analyze the cost of minimum pension guarantee in Mexico. We show that the new system is costly and it will not be able to pay for at least half the new affiliates without government funding in the future. It does not seem have had much effect on the informal markets thus far.

# The Good News

End Year	Affiliates	EAP	Affiliates/ EAP
1997	11188144	38584394	29%
1998	13827674	39562404	35%
1999	15594503	39648333	39%
2000	17844956	40161543	44%
2001	26518534	40072856	66%
2002	29421202	41085736	72%
2003	31398282	41515672	76%
2004	33316492	43398755	77%

# When did it happen?

Month	Affiliates	Growth
April 2001	18,657,474	1.16%
May 2001	18,865,906	1.12%
June 2001	25,555,664	35.46%
July 2001	25,665,592	0.43%
August 2001	26,297,659	2.46%
September 2001	26,353,396	0.21%

Big jump in numbers in June 2001: forced assignment of affiliates

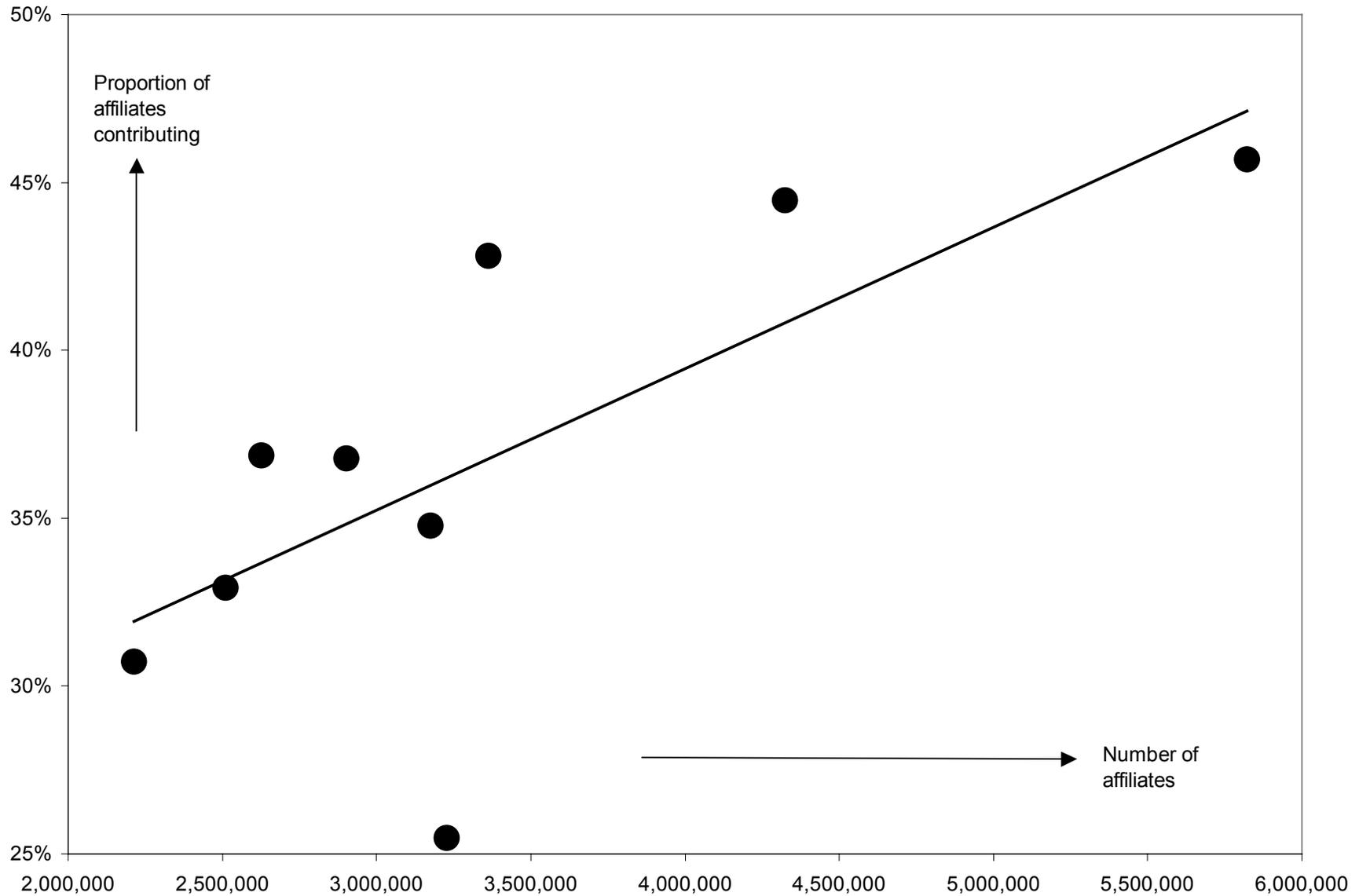
# Method of allocation of affiliates

- CONSAR allocates affiliates by ranking all the funds according to their charges equivalent over account balance *for one year*.
- It then takes the quartile of AFOREs with the lowest charges
- Thus, the fund with the lowest charge gets allocated 100 points. If the AFORE with the second lowest fees charge 80% of the lowest, then that AFORE gets 80 points and so on
- AFOREs are then allocated the new accounts based on their points

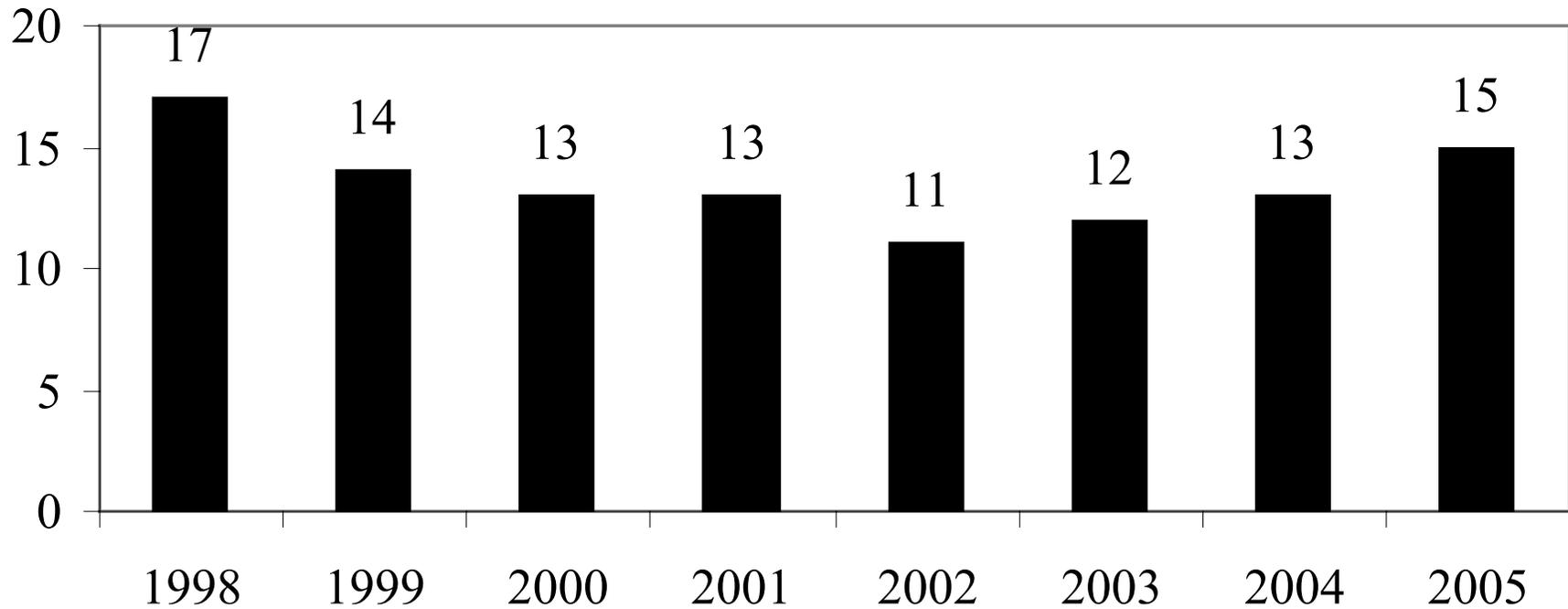
# The Bad News

	Contributors	Affiliates	Proportion
1997	7,769	11,188	69%
1998	879,979	13,827,674	64%
1999	948,855	15,594,503	61%
2000	10,379,823	17,844,956	58%
2001	11,864,672	26,518,534	45%
2002	12,292,152	29,421,202	42%
2003	12,577,265	31,398,282	40%
2004	12,751,029	33,316,492	38%

# Bigger funds have more affiliates contributing regularly



## Number of AFORES



The numbers are deceptive as all funds are not of equal size

# Appearance, Disappearance and Concentration

AFORE	2003	2004	2005
Allianz	3.92%	*	*
Azteca	1.42%	2.47%	2.84%
Banamex	17.87%	17.48%	16.93%
Bancomer	13.79%	12.98%	12.67%
Principal	10.22%	9.69%	9.63%
Profuturo	9.95%	10.09%	10.06%
Top 4	52.21%	50.63%	48.72%

Share of top 4 has barely fallen

# “Regular” contributors, 2004, 13m

Salary	No. of contributors	Percent
0 to 1	667892	5.3%
1 to 2	4293589	33.8%
2 to 3	2572563	20.2%
3 to 4	1518439	11.9%
4 to 5	919184	7.2%
5 to 6	619877	4.9%
6 +	2118815	16.7%

60% of regular contributors earn 3 times minimum salary or less

## Transfers as a percentage of contributors

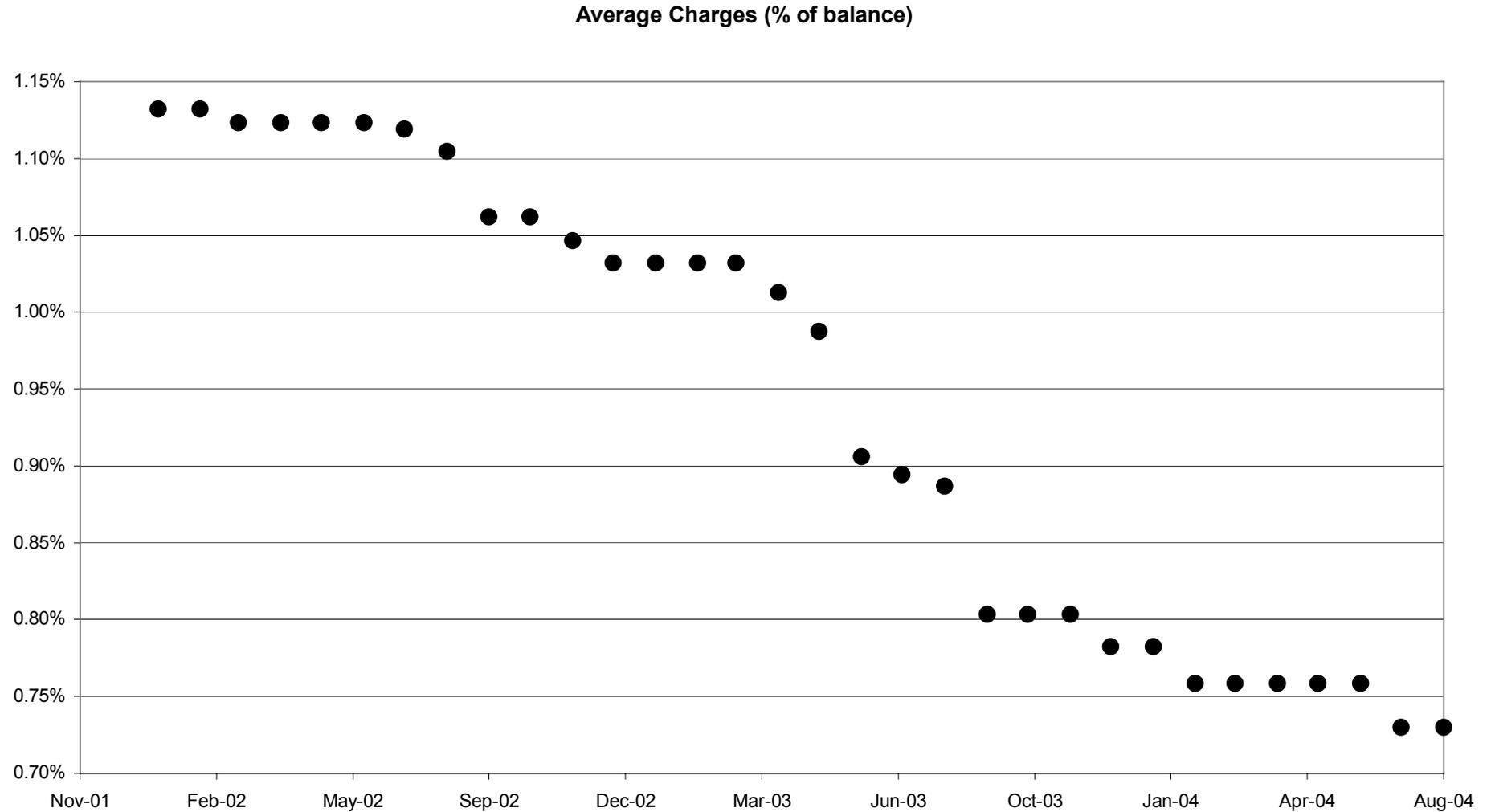
Year	Transfers	Contributors	Percent
1998	3535	879979	0.40%
2000	91653	10379823	0.88%
2001	106220	11864672	0.90%
2002	120089	12292152	0.98%
2003	420791	12577265	3.35%
2004	1199293	12751029	9.41%

Transfers are accelerating...but people are not necessarily moving to lower cost AFORES

# Voluntary contribution

- It is possible for affiliates to invest additional amounts (beyond the 6.5%). July 2005 less than 0.5% in this account (laundering?)
- It is also possible to invest additional amounts in a separate voluntary account
- What are the benefits of this separate voluntary fund? Tax
- The current law allows the funds to be withdrawn after six months with a penalty of 20% tax payment. Benefits for people over 20% tax bracket

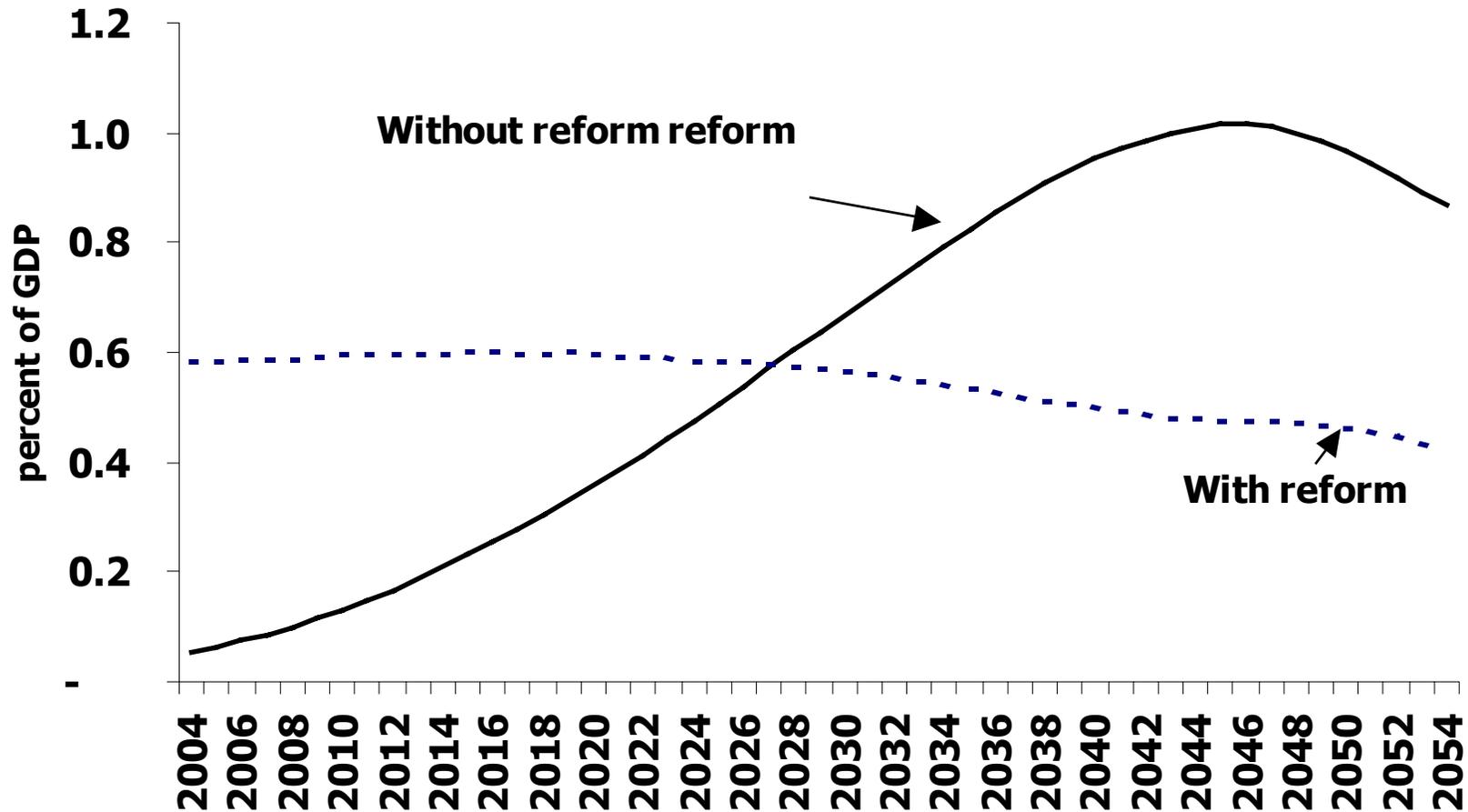
# CON SAR: Average charges falling....



# What is wrong with that picture?

- (The obvious point that it would decline automatically as there is more and more money is not discussed here)
- First, the average charges reported are not for the date in which it is reported but they are average of the next 25 years
- Second, up to 2004, if any affiliate switched, is penalized – new entrants are penalized still
- Third, the average charges do not take into account the number of affiliates in each AFORE. New funds and old funds all get the same weight

CONSAR transition arithmetic, we are better off with the reform ...right?



# Transition cost

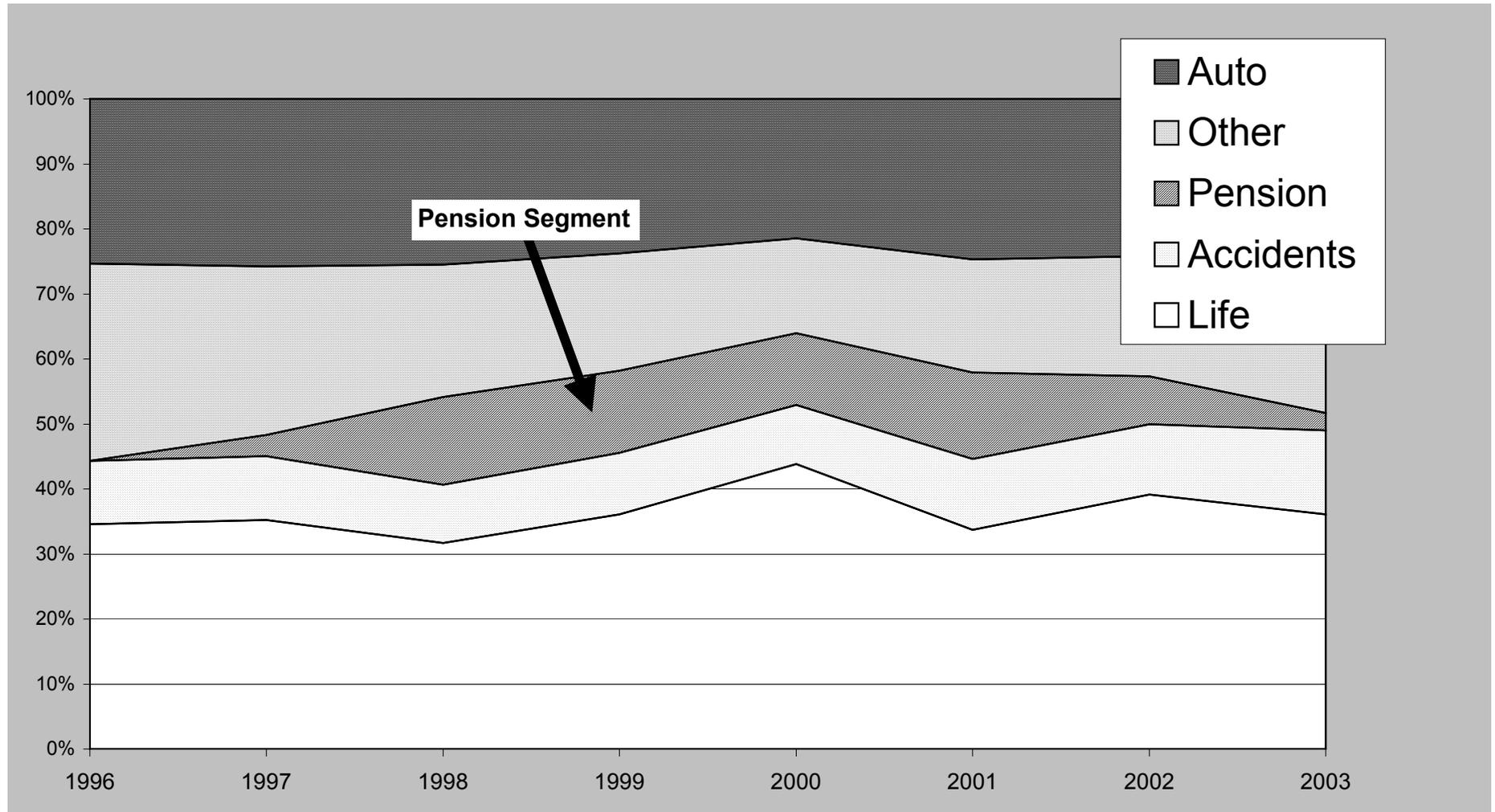
Discount rate	Without reform	With reform
0%	\$10,679.41	\$4,462.17
3%	\$1,965.85	\$1,984.38
6%	\$776.09	\$1,338.12
10%	\$361.55	\$690.01

Note: The costs are measured with a 50 year time horizon only

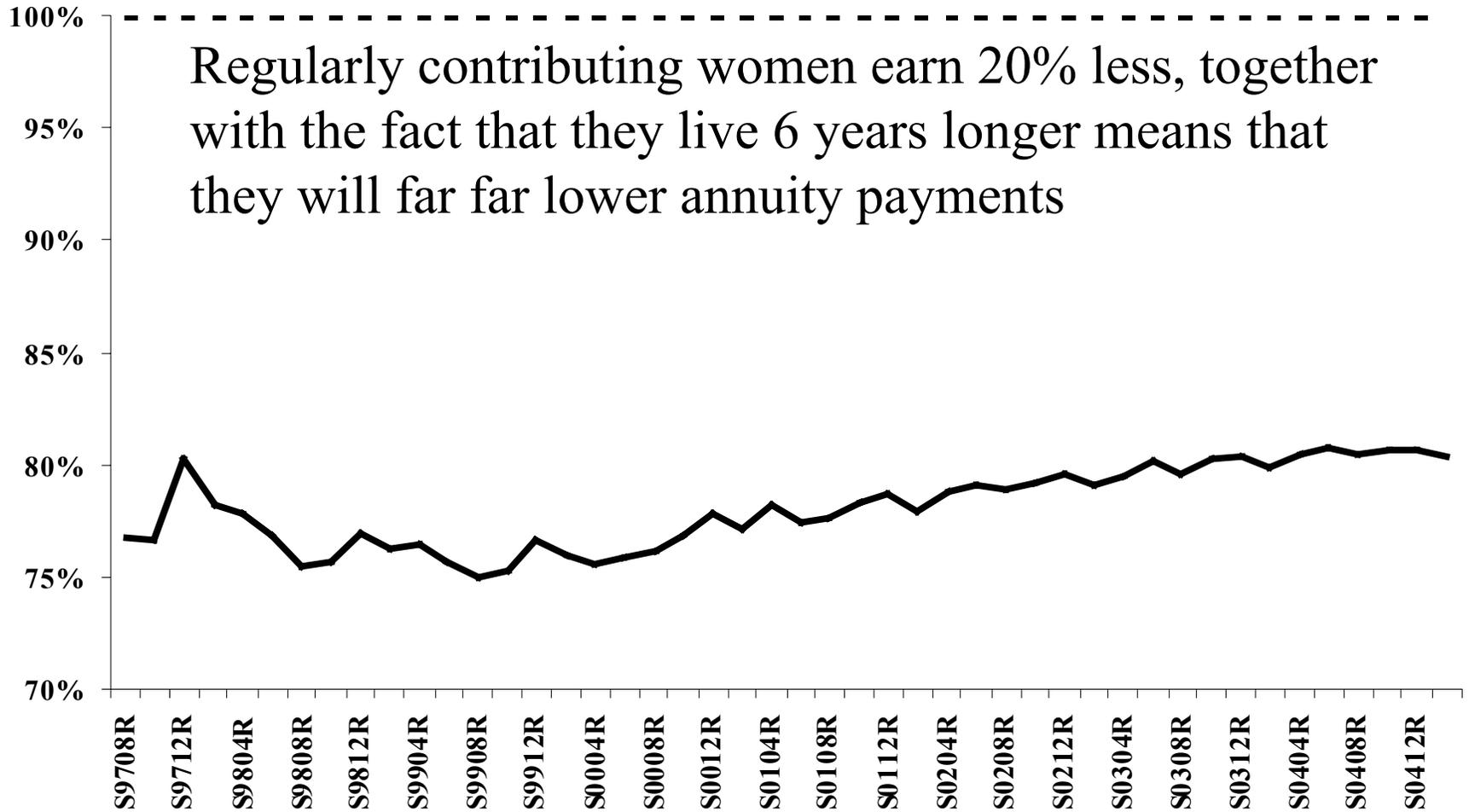
# Number of annuitants under the new regime

Year	Total number
1997	4,213
1998	23,257
1999	24,680
2000	27,108
2001	30,621
2002	15,361
2003	5,798
2004	6,124

# Result: Pension segment of the market grew and then died



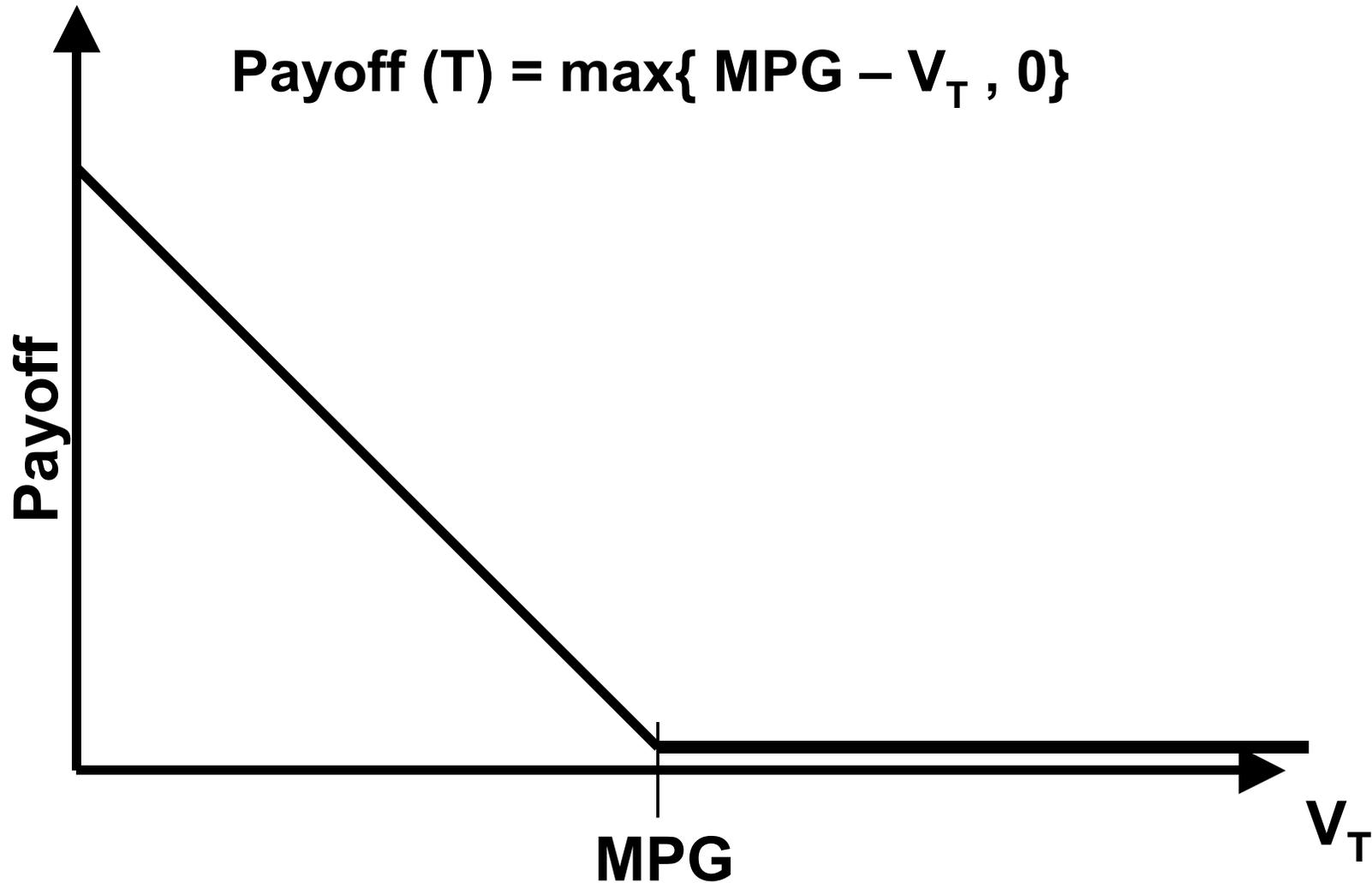
## Salary of women as a percent of salary of men



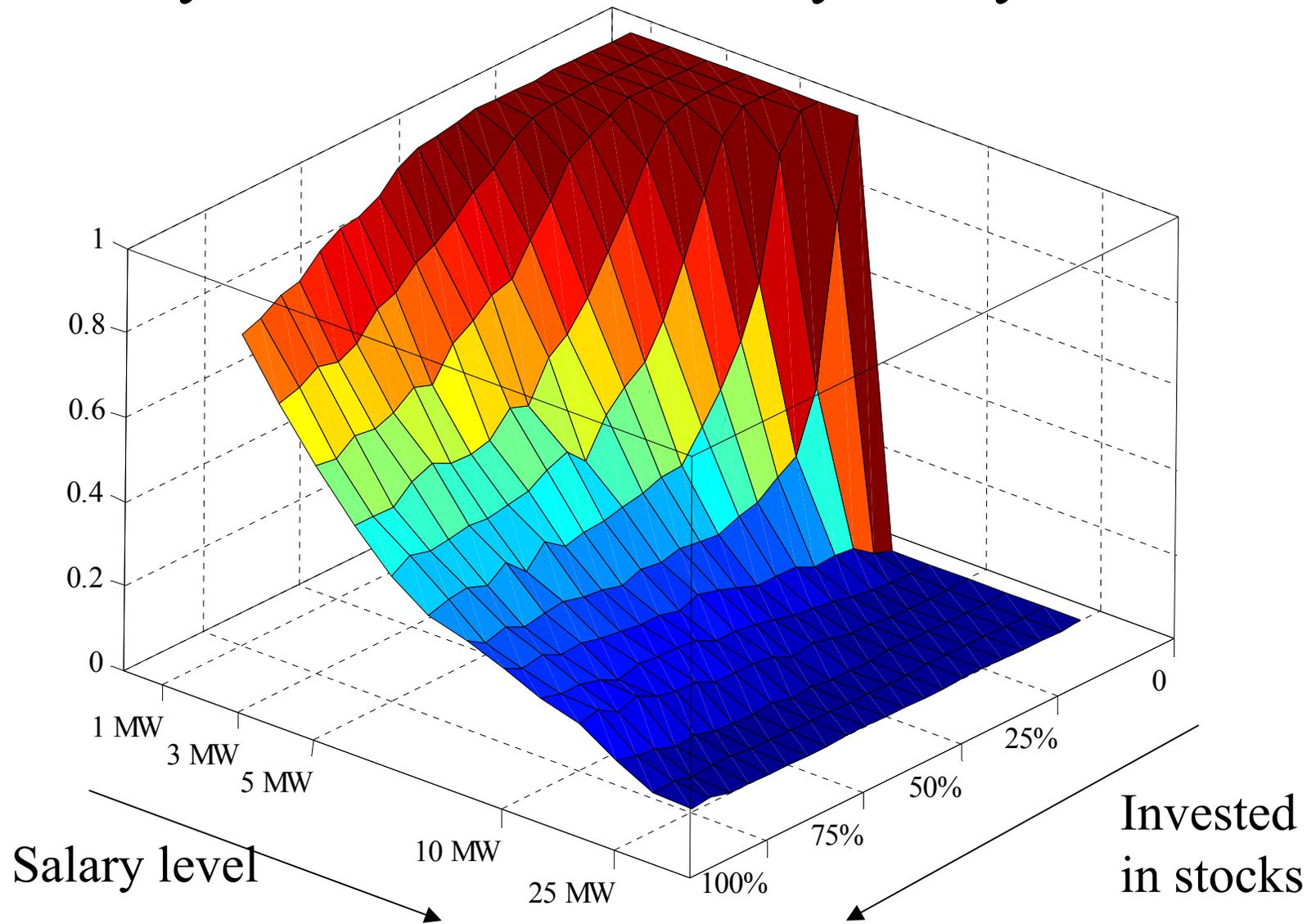
August 1997-February 2005

— Females - - Males

Minimum pension guarantee is a put option



# Probability of NOT having a minimum pension after 25 years of contribution by salary level



# Conclusions

- Informality is NOT being reduced
- Low income people would NOT have enough in their box to get MPG
- No provision is being made for those who will fall back on MPG
- Counterfactual: old versus new
- Capital market development: yes developing long government bonds but transition being paid for government bonds
- 20% resources eaten up by fees (not including payout phase)