

Table 1 Current pension system in Poland

	1 st tier	2 nd tier	3 rd tier
Management	state	private	private
Participation	mandatory	mandatory	voluntary
Financing	repartition	funded	funded
Benefit formula	notional defined contribution	defined contribution	defined contribution
Responsibility	safety net	means for retirement	individual cautiousness
Current status	main source of pension benefit	additional source of pension benefit	marginal source of pension benefit

Source: Author, based on UNFE information.

Table 2 The net assets and the market structure of the pension funds measured as a % of all net assets as of end of August 2002.

Rank	Pension fund	PLN m	USD m*	market share	
				a fund	accumulated
1	Commercial Union	7,770	1,943	29.2%	29.2%
2	ING NN	5,825	1,456	21.9%	51.0%
3	PZU Zlota Jesien	3,758	939	14.1%	65.1%
4	AIG	2,282	570	8.6%	73.7%
5	Zurich	909	227	3.4%	77.1%
6	Bankowy	820	205	3.1%	80.2%
7	Sampo	782	195	2.9%	83.1%
8	Allianz	701	175	2.6%	85.8%
9	Credit Suisse (prev. Winterthur)	647	162	2.4%	88.2%
10	Skarbiec Emerytura	621	155	2.3%	90.5%
11	Pocztylion	550	137	2.1%	92.6%
12	DOM	464	116	1.7%	94.3%
13	Pekao	442	111	1.7%	96.0%
14	Ergo Hestia (prev.PBK Orzel)	396	99	1.5%	97.5%
15	Ego	377	94	1.4%	98.9%
16	Kredyt Bank	189	47	0.7%	99.6%
17	Polsat	108	27	0.4%	100.0%
	Total	26,637	6,659	100.0%	100.0%

* 1 USD equals approx. 4 PLN

Source: Author's calculations based on <http://emerytura.hoga.pl>.

Table 3 Comparison of Polish pension fund administrators according to their own capital as of end of August 2002

Rank	Administrator	PLN m	USD m*	%
1	Bankowy	260.0	65.0	10.67%
2	Ergo Hestia (prev.PBK Orzel)	222.2	55.6	9.12%
3	DOM	221.0	55.3	9.07%
4	Sampo	212.4	53.1	8.72%
5	Ego	205.0	51.3	8.41%
6	ING NN	200.0	50.0	8.21%
7	PZU Zlota Jesien	200.0	50.0	8.21%
8	AIG	150.0	37.5	6.16%
9	Zurich	145.5	36.4	5.97%
10	Credit Suisse (prev. Winterthur)	125.0	31.3	5.13%
11	Kredyt Bank	119.2	29.8	4.89%
12	Polsat	108.0	27.0	4.43%
13	Commercial Union	99.8	25.0	4.10%
14	Allianz	73.5	18.4	3.02%
15	Skarbiec Emerytura	68.8	17.2	2.82%
16	Pekao	18.1	4.5	0.74%
17	Pocztylion	8.0	2.0	0.33%
	Total	2,436.5	609.1	100.00%

* Approximate value (1 USD = 4.0 PLN)

Dark-shadowed administrators are those whose funds manage the biggest net asset
Light-shadowed ones are the funds who are in third and fourth positions in the net
asset ranking (c.f. Table 2).

Source: Author's calculations based on <http://emerytura.hoga.pl>.

Table 4 Investment limits

Instrument	Investment limit as a % of net total assets
Banks deposits and securities	20
Equity (stock exchange)	40
- secondary and third markets jointly	10
- third market	5
Public non-listed equity	10
National Investment Funds	10
Certificates of closed and mixed mutual funds	10
Investment units of opened mutual funds	15
Municipal bonds:	
- publicly traded	10
- non-public	5
Bonds issued by other institutions:	
- publicly traded	10
- non-public	5
Public corporations bonds	5
Foreign investment	5

Source: Based on Chapter 15 of the Bill from 28 of August 1997 on organisation and functioning of the pension funds.

Table 5 System-built costs

Position		Current cost
Central collection via ZUS	⇒ transfer fee	0.8% of contributions
	⇒ database problems ("dead" an accounts)	20 m PLN (2000), decreasing over time
Guarantees	⇒ Reserve Fund	1.5 % of contributions
	⇒ Guarantee Fund	0.1 % of contributions
Supervision	⇒ UNFE	0.14% of contributions
	⇒ penalties & legal expenses	approx. 8 m PLN*
	⇒ Insurance Ombudsman	0.01% of contributions
Information disclosure	⇒ reports to supervisory	-
	⇒ reports to public and members	registered letters – 23 m PLN (2000)
Min. rate of return & incentive system	⇒ opportunity costs (shorter investment horizon, herding)	-
No risk-profiling	⇒ opportunity costs (risk exposure)	-
Low level of funded contribution	⇒ high fixed costs of the system	-

* based on KNUiFE

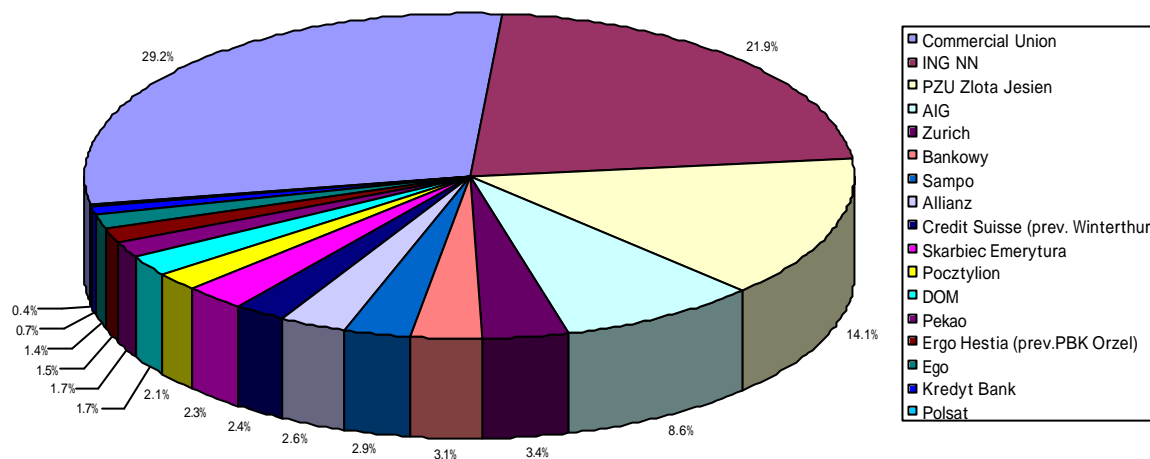
Source: Author's compilation based on KNUiFE Bulletins, Wojciechowski (2002) and Chlon (2001).

Table 6 Benchmark proposals

Benchmark	Construction	Function
Total funds universe	<p>Universe of assets allowed by pension law to invest in (equity, bonds, TB, foreign investments, etc.).</p> <p>Returns on each asset category is capped by investment limit values and multiplied by assets market</p>	<p>To present a comparison of all possible investment for the pension industry.</p> <p>More technical character, however relatively easy for the clients to use, especially for funds comparisons.</p>
Individual asset allocation index	<p>a) Declared by a fund (what is the percentage structure of a fund's portfolio)</p> <p>b) Actual index (a portfolio structure calculated on the basis of actual portfolio holdings)</p>	<p>To allow a risk-level choice. To present fund's risk profile and performance (market timing and stock selection).</p> <p>Both types of indexes cannot be used to direct comparisons of funds with various risk levels. However useful fund's risk-reward indicator for the clients.</p>
Average weighted rate of return	Geometric linked rates of return.	Simple index to present an overall investment return in comparison to other investment vehicles.
System's rate of return	Accumulated assets / Total premiums paid	To present system's return for an individual member (especially in comparison to the PAYG alternative).
Reduction in the rate of return	Difference between the hypothetical (no costs) and actual (costs) rates of return achieved by a fund.	More technical character, however relatively easy for the clients to use for cost-effectiveness comparisons.

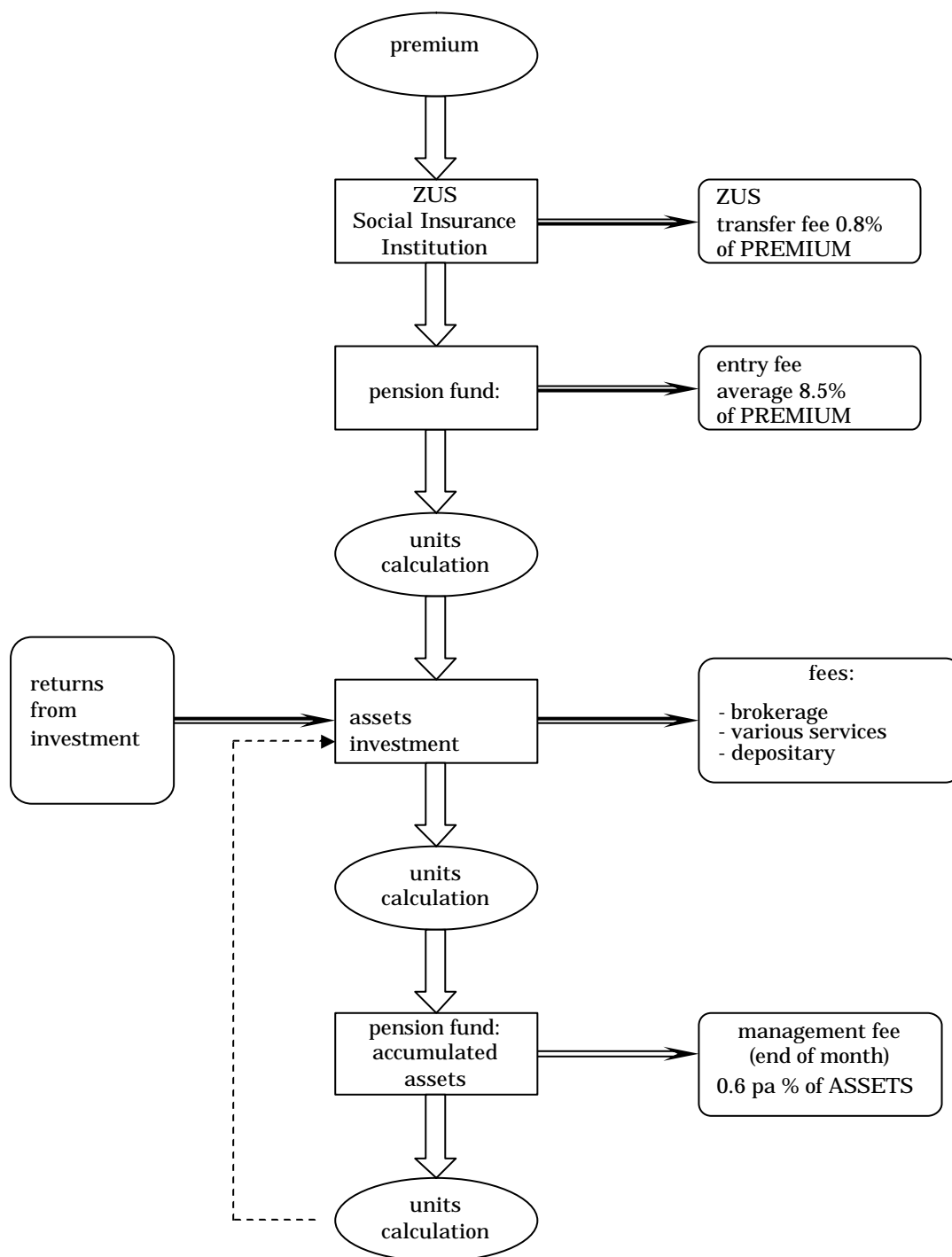
Source: Author.

Figure 1 Structure of the Polish fund market according to net assets (% , end of August, 2002)



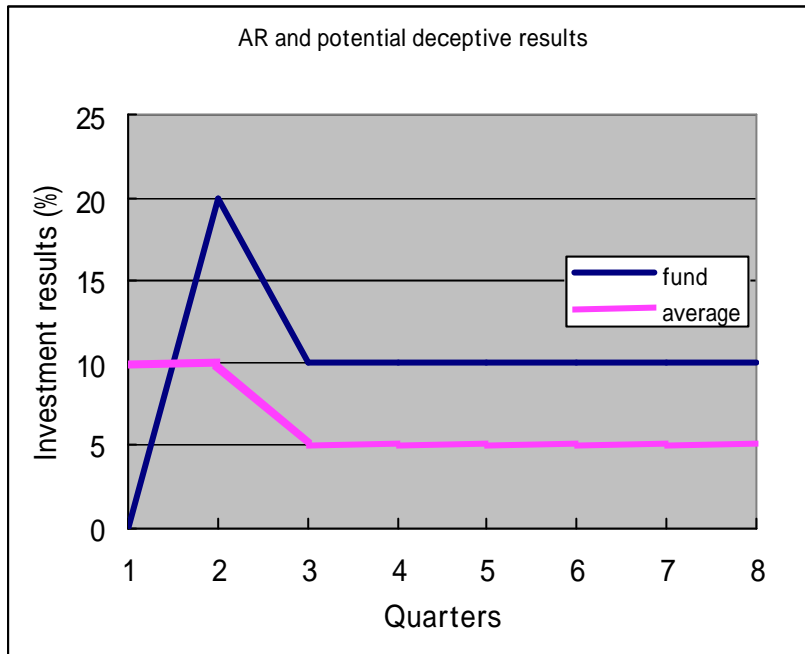
Source: Author's calculations based on www.emerytura.hoga.pl

Figure 2 Flow of premiums and costs incurred during the retirement saving process



Source: Author's compilation.

Figure 3 Potential deceptive interpretation of AR



Source: Based on IGTE Bulletin, 3/2002.