

Risk Equalisation in Australia

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Health Care Financing in Australia

- Medicare: universal, compulsory health care financing scheme
 - zero price treatment as a public patient, in a public hospital
 - or, recently in some states, a public patient in a private hospital
 - subsidised private fee-for-service (FFS) general and specialist medical practitioner services
 - in-hospital
 - out-of-hospital
- Subsidised pharmaceuticals

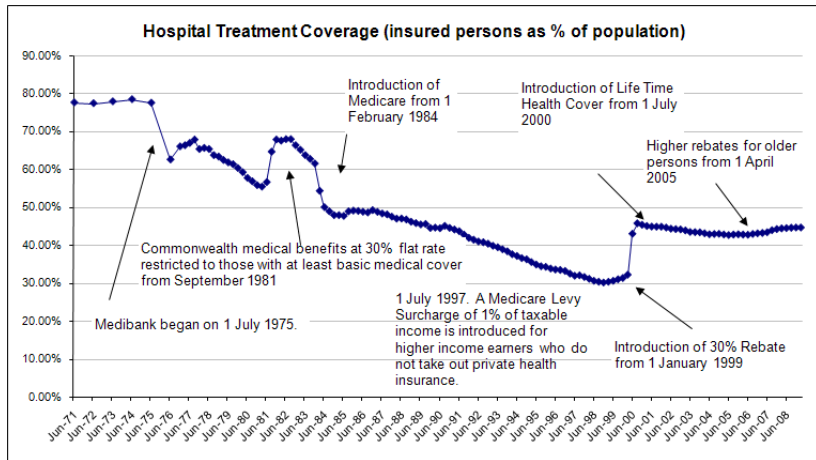
Private Health Insurance

- “Voluntary” private health insurance (PHI) coverage is available for
 - services partly or wholly covered by Medicare
 - services not covered by Medicare (e.g., physiotherapy)
- 44.8% of the population has PHI cover.

Regulatory Environment

- PHI markets are heavily regulated.
 - Mandatory community rating and open enrolment.
 - however, membership of some funds is restricted *within an industry* (but open enrolment within that industry)
 - Mandatory participation in a risk equalisation (RE) scheme.

Population Coverage Over Time



Source: Adapted from PHIAC (2009a).

Industrial Organisation

- 38 funds:
 - 32 not-for-profit, 6 for-profit funds
 - One large fund (Medibank Private Limited (MPL)) is publicly-owned.
 - 25 open funds, 13 registered as restricted membership funds.
 - markets are, however, highly concentrated.

Health Expenditure and PHI

- Although 45% of the population has PHI, it accounts for only 7% of total health expenditures
- The only other OECD country with similar figures is Ireland (52% coverage; 10% health expenditures)
- In both countries, there is a strong incentive to buy PHI to avoid tax penalties.

Risk Equalisation

1 April 2007:

The Health Benefits Reinsurance Trust Fund established under section 73BC of the National Health Act 1953 is continued in existence as the Private Health Insurance Risk Equalisation Trust Fund (the Risk Equalisation Trust Fund) (p.285).

Claims Experience

- Belgium, Germany, Israel, The Netherlands and Switzerland have adopted an *ex-ante* (prospective) RE arrangement based on *predicted expenditures*
- The Australian RE scheme entails an *ex-post* (retrospective) mechanism based on actual *claims experience*.

The Risk Equalisation Trust Fund (RETF)

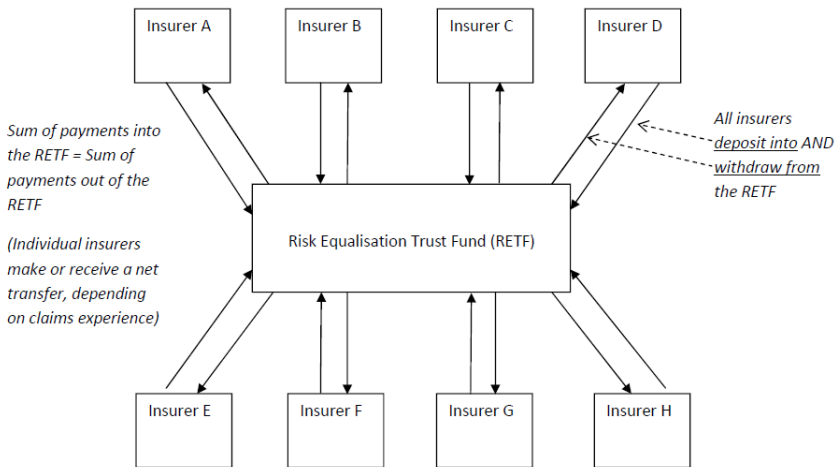
- Services covered include
 - Hospital benefits (97.6% of the total being equalised)
 - Hospital substitute benefits (0.05% of the total being equalised);
 - Chronic Disease Management Program benefits (0.07% of the total being equalised);
 - High Cost Claimants benefits (after the age based pool) (2.28% of the total being equalised).

The Risk Equalisation Trust Fund (RETF)

Two components: an age-based pool (ABP) and a high-cost claimants pool (HCCP)

- ABP has eight age bands seven from age 55 attracting positive weights: 55-59, 60-64, ..., 85+
 - previously, reinsurance weights kicked in at 65+
- HCCP pools benefits paid to HCCs
 - replaces pooling of claims for claimants with >35 days hospitalised during 12 month period

Risk Equalisation Trust Fund (RETF)



Age-Based Pool

Fund 1

<i>A</i>	<i>B</i>	<i>C</i>	<i>D = BC</i>
Member Age	ABP Weight	Eligible Benefits Fund 1	Fund 1 ABP
0-54	0.00	\$13,818,135	-
55-59	0.15	\$1,765,650	\$264,848
60-64	0.425	\$2,516,052	\$1,069,322
65-69	0.60	\$4,025,683	\$2,415,410
70-74	0.70	\$6,843,661	\$4,790,563
75-79	0.76	\$12,044,844	\$9,154,081
80-84	0.78	\$21,439,823	\$16,723,062
85+	0.82	\$39,020,477	\$31,996,791
Totals		\$101,474,325	\$66,414,077

Age-Based Pool

Fund 2

<i>A</i>	<i>B</i>	<i>E</i>	<i>F = BE</i>
Member Age	ABP Weight	Eligible Benefits Fund 2	Fund 2 ABP
0-54	0.00	\$10,242,164	-
55-59	0.15	\$1,308,721	\$196,308
60-64	0.425	\$1,864,927	\$792,594
65-69	0.60	\$2,983,884	\$1,790,330
70-74	0.70	\$5,072,603	\$3,550,822
75-79	0.76	\$8,927,781	\$6,785,114
80-84	0.78	\$15,891,449	\$12,395,330
85+	0.82	\$28,922,438	\$23,716,399
Totals		\$75,213,967	\$49,226,898

High-Cost Claimant Pool

Fund 2

<i>A</i>	<i>B</i>	<i>C</i> = 0.425(<i>B</i>)	<i>D</i> = <i>B</i> - <i>C</i>	<i>E</i>	<i>F</i>	<i>G</i> = 0.82(<i>E</i> - <i>F</i>) - <i>H</i> ; <i>G</i> > 0
Quarter	Gross Benefits Paid	Age-Based Pool (ABP) amount	Residual	Cumulative Residual (R)	Threshold (T)	HCCP Amount =0.82(R- T)-H
1	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
2	\$75,292	\$31,999	\$43,293	\$43,293	\$50,000	Nil.
3	\$85,021	\$36,134	\$48,887	\$92,180	\$50,000	\$34,588
4	\$60,000	\$25,500	\$34,500	\$126,680	\$50,000	\$28,290
Annual Totals		\$93,633				\$62,878

RETF Transfers

<i>A</i>	$D = B + C$	<i>E</i>	$F_T =$ $\frac{B_T + C_T}{E_T}$	<i>G</i> $= EF_T$	<i>I</i> $= D - G$
	RETF Contributions (=ABP+HCPP)	SEUs	Total Trust Fund Con- tributions/ Total SEUs	Expected Benefits	RE Transfers
Fund1	\$66,414,077	463,024		\$66,450,671	-\$36,594
Fund 2	\$49,289,776	343,193		\$49,253,182	\$36,594
Totals (<i>T</i>)	\$115,703,853	806,217	\$143.5145		

RETF Transfers

- Note that
 - the net transfers in this example (\$36K) is a small fraction of the “churn” through the RETF (\$115m).
 - the RE scheme is a pure redistribution (zero-sum game) scheme for the industry.

RE Outcomes: 2007-2008

- At the industry level:
 - In 2007-2008, churn through the RETF was \$2,908m.
 - Net transfers amounted to only \$254m (8.7% of the churn).

RE Outcomes: 2007-2008

- How does RE affect *individual funds*?

Net Transfers by Fund (8 largest)

Fund	Market Share	Net RE Transfers	Net RE as % of redistributed funds	Net RE transfers as % of benefits paid
Medibank	28.66%	\$34,878,057	13.64%	1.25%
MBF	15.70%	\$102,581,523	40.11%	6.11%
BUPAAH	10.07%	\$37,039,038	14.48%	3.48%
HCF	9.04%	-\$21,492,058	-8.40%	-2.28%
NIB	7.25%	-\$73,348,555	-28.68%	-11.70%
HBF	6.65%	\$26,416,408	10.33%	4.00%
AHM	3.13%	-\$21,195,796	-8.29%	-6.80%
AUHL	3.46%	\$32,024,141	12.52%	10.17%

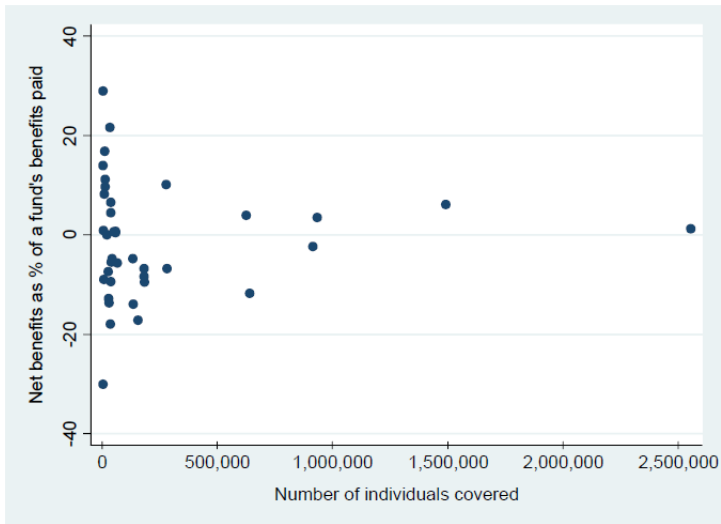
Source: Derived from PHIAC (2009b)

Net Transfers by Fund (8 Smallest)

Fund	Market Share	Net RE Transfers	Net RE as % of redistributed funds	Net RE transfers as % of benefits paid
Phoenix	0.13%	\$5,549,619	0.60%	9.69%
DHF	0.11%	\$5,470,146	0.80%	16.86%
ACA	0.09%	\$3,935,247	0.42%	8.24%
HCI	0.06%	\$1,585,686	-0.28%	-8.90%
Transport	0.07%	\$76,989	0.03%	0.93%
CDH	0.05%	\$624,653	0.24%	13.97%
NHBA	0.04%	-\$772,432	-0.30%	-30.01%
RBHS	0.04%	\$1,720,452	0.67%	28.99%

Derived from PHIAC (2009b)

Net Transfers



Net Transfers

Size group	Mean no. of individuals insured	Net transfers as a proportion of each fund's benefits paid		Statistical tests of differences in means and variance	
		Mean	Variance	$t, (p)$ means	$F, (p)$ variance
Lower half ($n=19$)	21,259	12.0%	6.81×10^{-3}	2.63 (0.016)	3.19 (0.010)
Upper half ($n=19$)	472,161	6.2%	2.17×10^{-3}		

Significance of RE in Australia?

- The Australian RE scheme results in net transfers that are fairly small, by comparison with the RETF churn.
- For large funds, net transfers constitute a small proportion of benefits paid.
- For smaller funds, net transfers tend to constitute a larger proportion of benefits paid and there is also greater variance.

Incentive Effects?

- In this paper, we did not examine incentive effects.
 - e.g., are the insurers' risk profiles purely exogenous?
 - if not, how weak/strong are the related selection incentives?
 - does the RE scheme lower the incentives for funds to monitor and minimise benefit payments, supplier prices (etc.)?
 - how might the incentive effects of *ex post* RE compare with the current *ex ante* scheme, in the Australian market?

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