

**Report of The Health Insurance Authority to the Minister for Health, in accordance with  
Section 7E (1)(b) of the Health Insurance Acts, 1994 - 2009.**

November, 2011



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## Introduction

The Authority has been asked by the Minister for Health to prepare a Report under Section 7E (1)(b) of the Health Insurance Acts 1994 –2009 (“the Health Insurance Acts”). For the purposes of the legislation, the relevant period is 1 July 2010 to 30 June 2011. The basis of the Report is specified in the legislation and comprises:

- (i) such evaluation and analysis in respect of the information returns which relate to the specified period
- (ii) such matters concerning the carrying on of health insurance business and developments in relation to health insurance generally that the Authority considers ought to be brought to the attention of the Minister (including information in relation to the profitability of any registered undertaking or former registered undertaking where the operation of the relevant financial provisions is expected to result in a positive cumulative net financial impact on the undertaking)
- (iii) the amounts of the age-related tax credits that the Authority considers, after having regard to such evaluation and analysis, would need to be afforded, under section 470B(4) of the Taxes Consolidation Act 1997, to persons insured by registered undertakings (other than restricted membership undertakings) having regard to the principal objective specified in section 1A(1) (in so far as that objective relates to health insurance contracts that provide for in-patient indemnity payments) and to achieving the aim of avoiding overcompensation being made to a registered undertaking or former registered undertaking under the operation of the relevant financial provisions
- (iv) if the amounts referred to in subparagraph (iii) were given effect by a statutory provision, the amount of the stamp duty that the Authority considers would need to be paid, pursuant to section 125A of the Stamp Duties Consolidation Act 1999, by registered undertakings (other than restricted membership undertakings) in respect of the persons insured by them in order to meet the cost to the Exchequer of the total of the amounts referred to in subparagraph (iii).

The Minister also informed the Authority that he will shortly introduce a Bill proposing that separate tax credits be allocated to insured persons within a series of 5-year age bands starting at age 50 years and ending with those aged 85 years and over. The Minister requested that the Authority’s Report would include assessments based on tax credits for 10 year age bands and tax credits based on 5 year age bands.

The Report has been agreed by the Members of The Health Insurance Authority (“the Authority”) and constitutes the Authority’s Report to the Minister for Health in accordance with Section 7E (1)(b) of the Health Insurance Acts, 1994-2009.



## **Section A. Summary of Conclusions**

### **Evaluation and Analysis of Data Received**

The evaluation and analysis of returns and of the other data received by the Authority shows that after the application of tax credits and the stamp duty the net claims cost for older people continues to be significantly higher than the net claims cost for younger people. This is particularly the case for insured persons over the age of 70. Tax credits compensating for 65% of the higher claims costs of older people reduces the net cost for those in the 70-79 age group to 170% of the market average claim costs, while the net claims cost for those over the age of 80 are reduced to double the market average. (If there were no tax credits, the above relativities would be treble and quadruple respectively).

This differential for those over the age of 70 continues to present a very large incentive for insurers to adopt strategies that undermine the Principal Objective of the legislation, such as risk selection and segmentation.

### **Review of Market Developments**

Throughout the period under review the impact of segmentation and selection strategies have continued to undermine community rating, reflecting the incentives referred to above. These strategies have included price increases of up to 45% on products mostly held by older people, continuing proliferation of products and product amendments and the marketing of lower cost plans to lower risk corporate schemes. A significant development during the period has been the proliferation of products with reduced orthopaedic cover. Two insurers have introduced these products at a significantly lower cost than similar products providing full orthopaedic cover. Few older people are insured with these products.

### **Calculation of Tax Credits and Levy**

The Authority has concluded that tax credits should be increased significantly for people over the age 70 so that the net claims costs for all age groups is no more than 150% of the market average claim costs, thereby reducing the incentive for insurers to select against this age group and to segment the market.

Consequently, the approach adopted by the Authority is to calculate the tax credit for each age group over the age of 60 to be the greater of the amount necessary to compensate for 65% of the higher claims cost of the age group (based on market claims data) and the amount necessary so that the net claims cost for the age group does not exceed 150% of the market average claims cost (again based on market data).

In order to remove the incentive for insurers to adopt selection and segmentation strategies based on age, it would be necessary to introduce tax credits so that the net claims cost for all age groups are equal. A stamp duty of c. €400, with tax credits ranging from €400 at age 50 – 59 to €2,800 at age 80+ is projected to be necessary in order to equalise the net claim cost for all age groups over 40. This would lead to net transfers of █████ and █████ from Aviva Health and Quinn Healthcare and a net transfer of █████ to Vhi Healthcare.

However, claim rates vary by product and by insurer, so that no level of stamp duty and age credits can equalise claims rates for all products and for all insurers. Therefore, the impact of tax credits with a stamp duty of €400 would vary by product type resulting in different consequences for different sectors of the market. For example, the impact on lower cost products would be very inflationary, the amount of stamp duty and tax credits being well in excess of the amount that would be required to equalise claims for these products. In addition, insurers with lower claims rates could argue that the level of payments would result in compensating less efficient insurers. Overall, such a move would represent a significant shock to the market, with detrimental impacts on some sectors and with unpredictable results, including for the maintenance of community rating.

In deciding on the level of tax credits, which will apply in respect of the whole market, the Authority has had regard to the claims rates within insurers as well as the market claims rates and has also had regard to the fact that claims rates vary by level of cover.

It must be accepted that, under the measures proposed for the current interim system, a significant incentive to select against older people and segment risks remains. The Authority is aware that a range of recommendations that it has made in relation to the regulation of the market, particularly regarding minimum benefit and risk equalisation are currently under consideration. Amendments of this kind will be helpful in assisting the risk equalisation system in supporting community rating and in addressing some of the issues referred to above.

**Conclusion with 10-year age bands**

On the basis of 10-year age bands, the Authority proposes that the following tax credits should apply for health insurance policies that are renewed or entered into on or after 1 January 2012. The credits applicable in 2011 are shown for comparison.

Age Band	Tax Credit 2011 Actual	Tax Credit 2012 Proposed
50-59	€ NIL	€ NIL
60-69	€ 625	€ 700
70-79	€ 1,275	€ 1,500
80+	€ 1,725	€ 2,275



The Authority estimates that a stamp duty of:

- €260 (2011 €205) in respect of each insured person aged 18 or over
- €85 (2011 €66) in respect of each insured person aged less than 18

would require to be paid by the insurers of policies that are renewed or entered into on or after 1 January 2012 in order to meet the cost to the Exchequer of the tax credits proposed.

The Authority projects that the net financial impact on each insurer and on the Exchequer of this proposal for 2012 renewals is as follows:

	Aviva €m	Quinn €m	Vhi €m	Exchequer €m
Age related tax credits				(428)
Stamp Duty				428
Net benefit				-

### Conclusion with 5-year age bands

On the basis of 5-year age bands, the Authority would propose that the following tax credits should apply for health insurance policies that are renewed or entered into on or after 1 January 2012. The credits applicable in 2011 are shown for comparison

Age Band	Tax Credit 2011 Actual	Tax Credit 2012 Proposed
50-54	€ NIL	€ NIL
55-59	€ NIL	€ NIL
60-64	€ 625	€ 550
65-69	€ 625	€ 875
70-74	€ 1,275	€ 1,275
75-79	€ 1,275	€ 1,850
80-84	€ 1,725	€ 2,200
85+	€ 1,725	€ 2,475

The Authority estimates that a stamp duty of:

- €260 (2011 €205) in respect of each insured person aged 18 or over
- €85 (2011 €66) in respect of each insured person aged less than 18

would require to be paid by the insurers of policies that are renewed or entered into on or after 1 January 2012 in order to meet the cost to the Exchequer of the tax credits proposed.

The Authority projects that the net financial impact on each insurer and on the Exchequer of this proposal for 2012 renewals is as follows:

	Aviva €m	Quinn €m	Vhi €m	Exchequer €m
Age related tax credits				(428)
Stamp Duty				428
Net benefit				-

These figures are an estimate of the age related tax credits and stamp duties that would be payable to / by each insurer to the Exchequer in respect of policies commencing in 2012.

**Net Financial Impacts**

The net financial impact on the Exchequer referred to in the previous sections is sensitive to mid-policy year cancellations / rewrites where a full year's stamp duty arises but only a proportion of the tax credit applies. It is also sensitive to the rate of ageing of the insured population, which in turn is impacted by the rate of growth / decline in the market. The Authority has assumed that the number insured will continue to decline at the same rate as it declined over the past 12 months and that the decline will occur in the same age groups. Accordingly, the Authority estimates that the market will decline by a further 75,000 by the end of 2012. However, due to current economic circumstances, there is considerable uncertainty in relation to this assumption and if, for example, an additional 50,000 younger adults leave the health insurance market by the end of 2012 than is projected there would be a negative impact on the Exchequer of approximately €13m.

The projections for individual insurers are sensitive to developments in each insurer's age profile, which can be influenced by product or pricing strategy or by developments in one particular insurer and it is not possible to predict many of these factors. As such, projections of the net financial impact on individual insurers are subject to considerable uncertainty and should be viewed as indicative only.



## Section B. Evaluation and Analysis of Returns and other Data Requested

### Introduction

#### Information Returns

Half-yearly returns for the July to December 2010 and January to June 2011 time periods were received from Aviva Health Ireland Ltd (trading as Aviva Health), Quinn Insurance Ltd (trading as Quinn Healthcare) and the Voluntary Health Insurance Board (trading as Vhi Healthcare) along with independent accountants' reports and analyses of the differences between total claims paid and prescribed benefits. Returns were not required or received from BUPA Insurance Ltd as it was not a registered undertaking during the periods even though it is still settling a small amount of claims incurred in previous periods.

This Report is, to a significant extent, based on the information returns received under the Health Insurance Act 1994 (Information Returns) Regulations 2009 from undertakings for the 6-month period commencing on 1 July 2010 and for the 6-month period commencing on 1 January 2011 and on additional data submitted by Quinn Healthcare. Where appropriate, account has also been taken of data submitted for earlier periods.

Not all benefits paid are included in the information returns received by the Authority. The "prescribed benefits" that insurers include in information returns are set out in the Health Insurance Act 1994 (Information Returns) Regulations 2009. The main exclusions are:

- Benefits relating to services provided other than by a hospital or a hospital consultant.
- The amount of the benefit exceeding the maximum prescribed benefit levels set out in the Regulations.
- Benefits relating to services otherwise excluded from the definition of "Prescribed Health Services", such as outpatient benefits.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



### Draft Amendments to Information Return Regulations

In July 2011, the Authority circulated draft amendments to the Information Return Regulations to insurers. Subsequently, the Authority requested that the insurers submit the data set out in the draft Regulations. This data differs from the data prescribed in the 2009 Information Returns Regulations in the following respects:

- The data in the draft amended returns is more detailed, in that it is broken down by year of age (rather than by age band) and by product.
- In addition to requiring that insurers provide details of “prescribed benefits” paid, the draft amended returns require that insurers provide details of “returned benefits” paid. Returned benefits differ from prescribed benefits in that returned benefits are not subject to the maximum prescribed benefit levels set out in the Regulations.

### Membership Profile

#### Market Size

The following table sets out membership details and market shares of insurers per the information returns for the half-years ended 30 June 2010, 31 December 2010 and 30 June 2011.

Insurer	1 July 2010		1 January 2011		1 July 2011	
	Members '000s	Market Share	Members '000s	Market Share	Members '000s	Market Share
Aviva Health	261	12.5%	295	14.2%	363	17.8%
Quinn Healthcare	483	23.1%	457	22.0%	450	22.0%
Vhi Healthcare	1,349	64.4%	1,327	63.9%	1,231	60.2%
Total	2,094		2,078		2,044	

Aviva Health's membership increased by 101,000 in the 12 months ended June 2011. Vhi Healthcare's membership decreased by 119,000 over the same period, while Quinn Healthcare's membership decreased by 33,000. In total, the number of insured persons reduced by 50,000.

As of end June 2011, 48% of the Irish population are estimated to have had private health insurance compared to 50% in June 2010.

Vhi Healthcare's market share has consistently fallen since the market was opened to competition and this trend has accelerated over the period under review. The fall in market share has mainly been in the younger age groups.



Gender profile of insurers' members

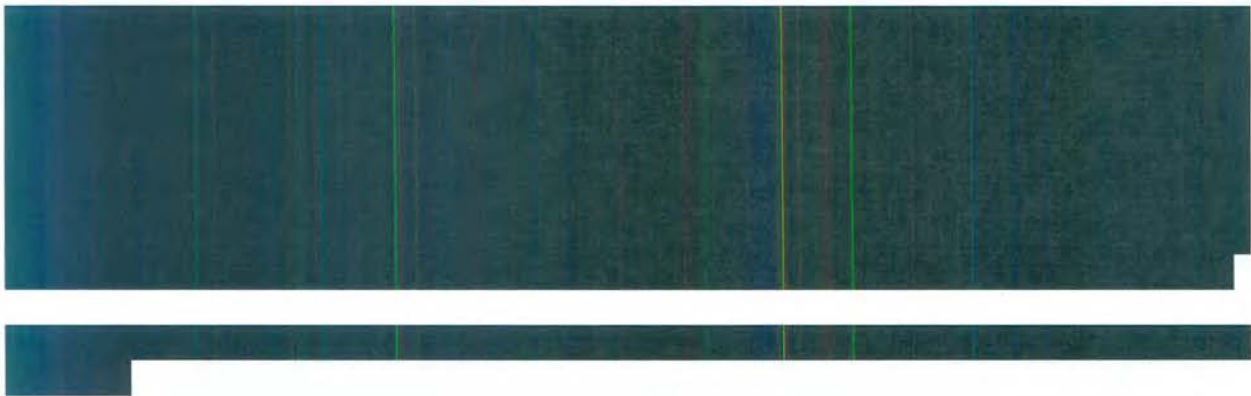
The gender distributions of the memberships of the three insurers for the period January to June, 2011 are set out in the table below. The proportions in each gender for each insurer have remained relatively static for some time.

Gender	Aviva Health	Quinn Healthcare	Vhi Healthcare
Male	48%	49%	48%
Female	52%	51%	52%

Age Profile of Insurers Members

The age distribution (average for the period January to June, 2011) of each insurer's membership is shown in the following table. The figures shown in brackets are the corresponding averages for the period January to June 2010.

Age Group	Aviva Health %	Quinn Healthcare %	Vhi Healthcare %
0-17			
18-29			
30-39			
40-49			
50-59			
60-69			
70-79			
80+			



## Claims Profile

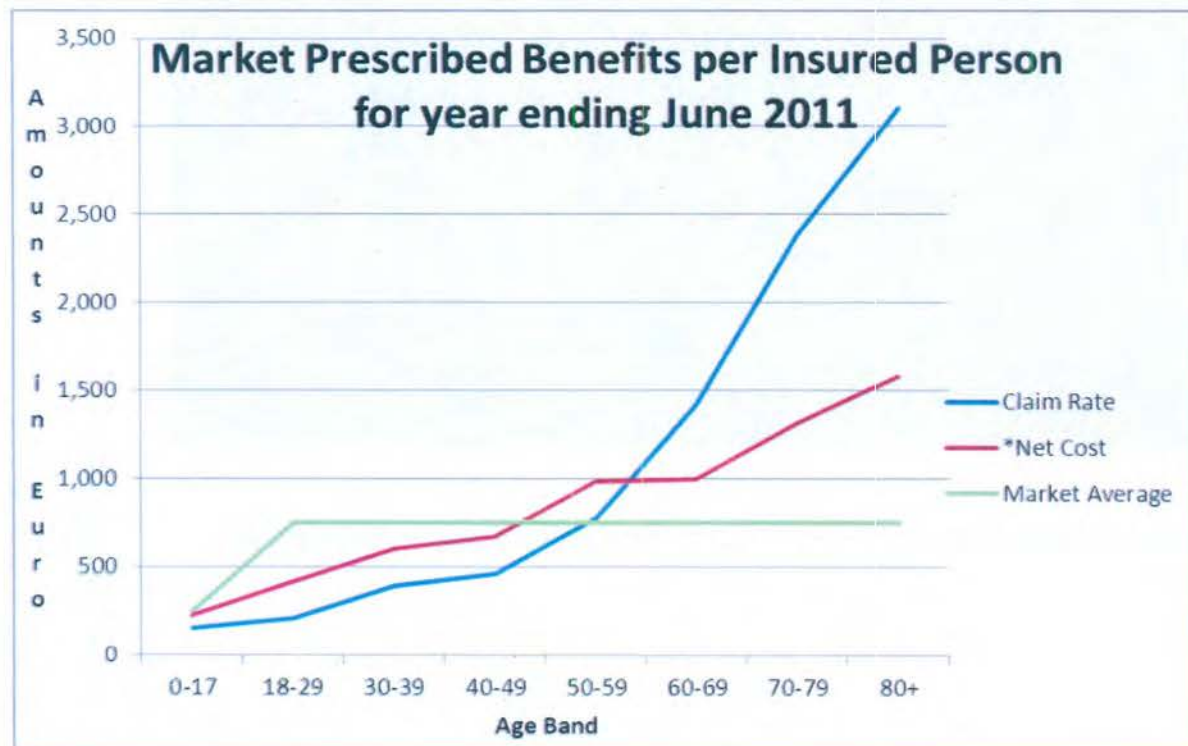
### Proportion of claims included in returns:

The benefits included in information returns (described as “prescribed benefits”) as a percentage of total benefits paid for the second half of 2010 and for the first half of 2011 are set out in the table below.

Insurer	July-Dec 2010	Jan-June 2011
Aviva Health		
Quinn Healthcare		
Vhi Healthcare		

### Average claim per member

The information returns provide the prescribed benefit for each age group and gender for each insurer for the second half of 2010 and the first half of 2011. The average prescribed benefit per insured person (i.e. the claim rate) for each insurer and for the market is calculated from these returns and increases with age.

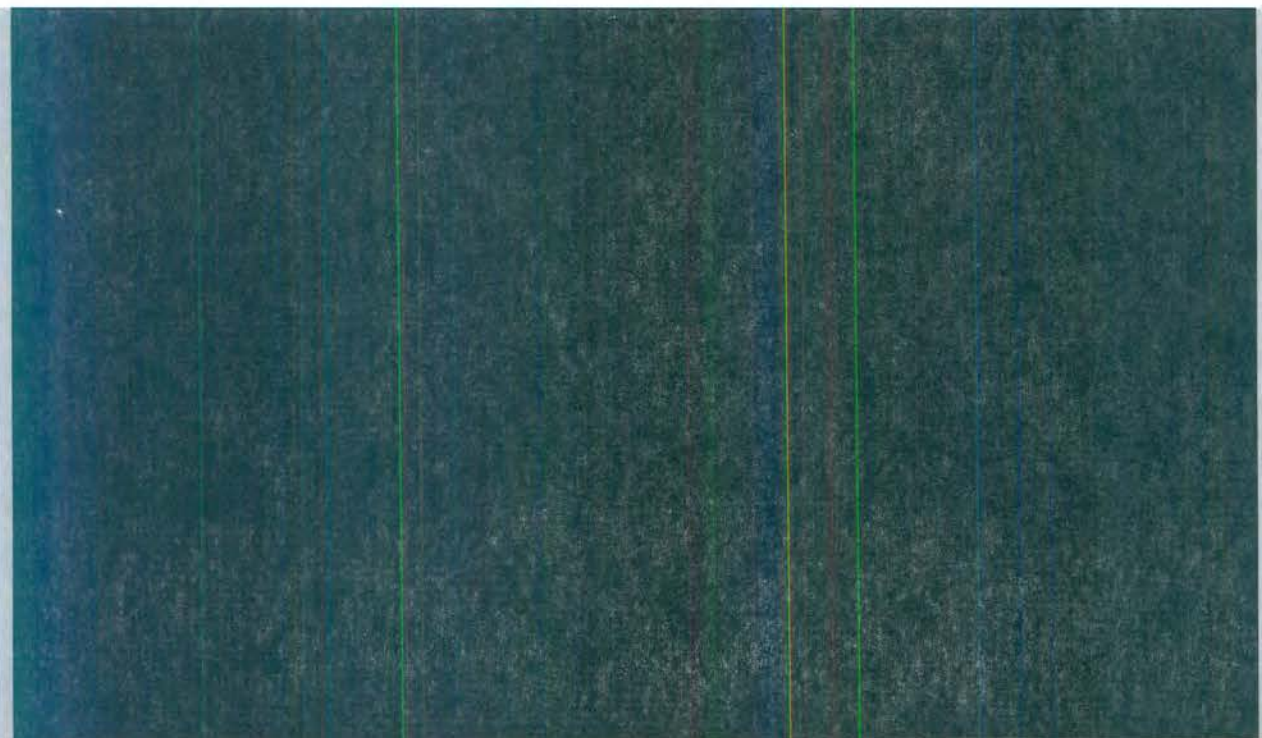


\* Net Cost is defined as average prescribed benefit plus stamp duty less age related tax credit.



The preceding chart shows the impact the 2011 age related tax credits and stamp duty would have on claim rates for the 12 months ending June 2011 for the market as a whole. It should be noted that the 2011 age related tax credits apply for the policy year from the renewal date in 2011 while the market prescribed benefits are for the year ending June 2011. The net cost is higher than the claim rate for all age groups up to 50-59 and lower for all age groups greater than 50-59. After application of the 2011 age related tax credits and stamp duty, the net costs for older age groups remain significantly higher than for younger age groups (e.g. €1,583 for over 80's compared to €418 for age group 18-29). This means that insurers continue to have a significant incentive to attract younger customers and avoid older customers.

The following chart shows the average net cost (i.e. prescribed benefit adjusted for stamp duty and age related tax credit) per insured person by age range for each insurer for the twelve months to end June 2011.



Further analysis of the information returns for July to December 2010 and January to June 2011 is in Appendices 1 and 3.

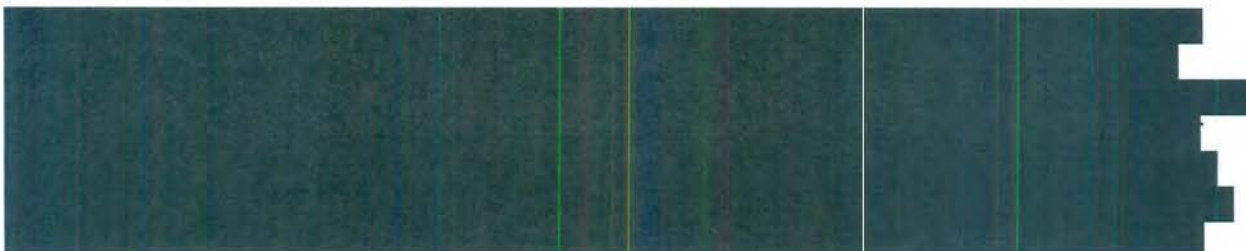
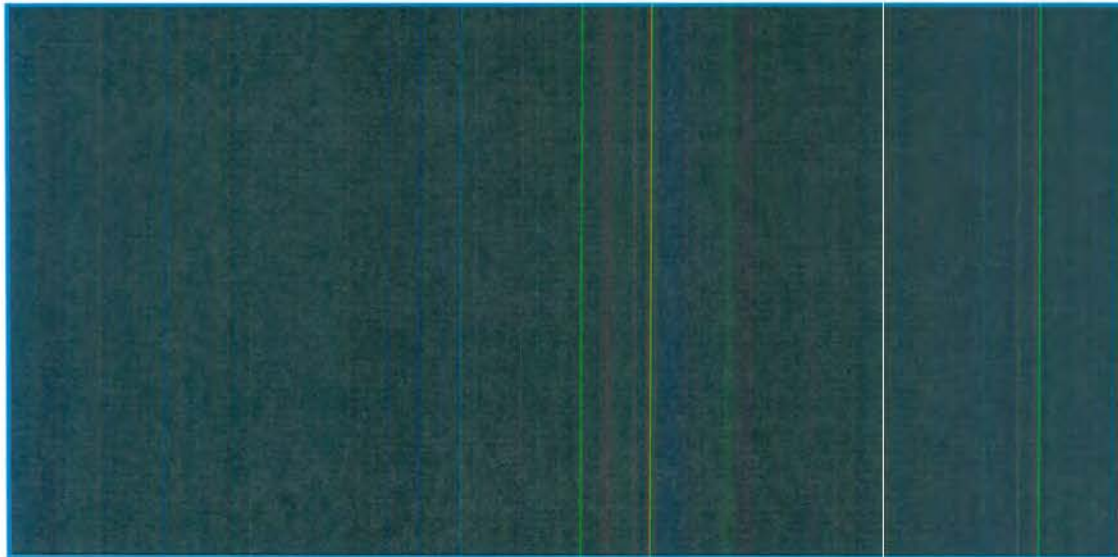


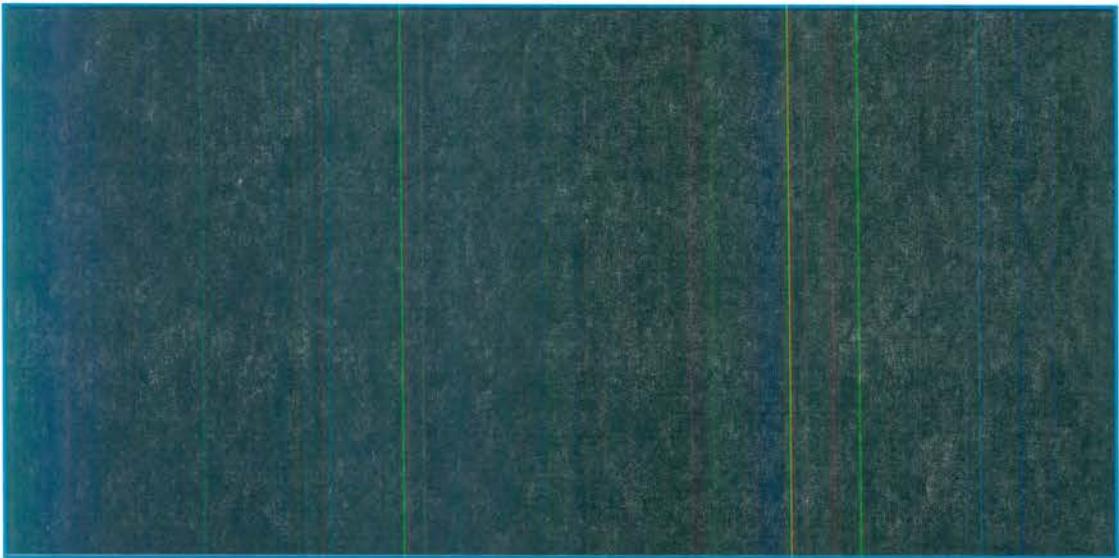
### **Information Request based on Draft Information Returns Regulations**

The Authority received claims data for the first half of 2011 broken down by individual product and individual age from each insurer as a result of an information request. The claims data provided included both Cell Prescribed Benefits (reflecting the impact of the maximum limits of net provider payments) and Cell Returned Benefits (excluding these maximum limits). These limits are included in the 2009 Information Returns Regulations to limit the level of benefits included in the returns so that “luxury” elements are excluded.

The data received on foot of the information request was used to break down the level of claims costs by the level of cover, so that products that contain higher levels of benefit than the level held by the majority of the population can be looked at separately. Consequently, the maximum limits are not applied when looking at data by level of cover.

The data for products that offer similar levels of hospital cover was grouped by the Authority. The data for the first half of 2011 was used to estimate corresponding figures for the second half of 2010. The following charts show the average levels of Cell Returned Benefit for the year ending 30 June 2011 in respect of Level 1 cover contracts (contracts mainly providing cover for public hospitals ) and Level 2 cover contracts (contracts providing cover for semi private accommodation in private hospitals in addition to cover for public hospitals) .

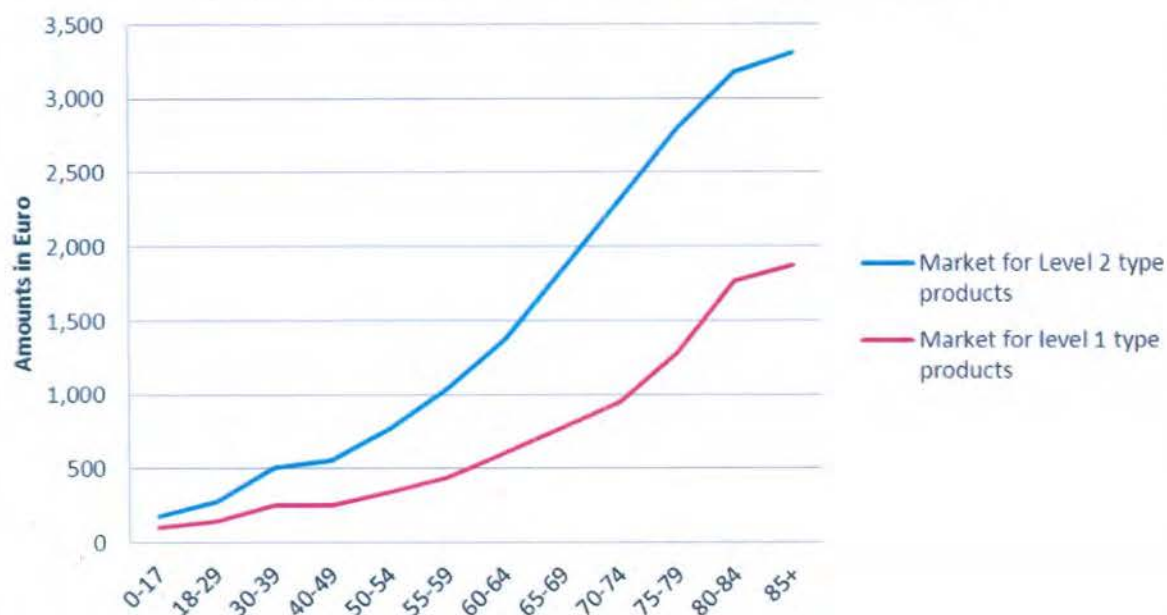




The proportion of each insurer's membership in each market segment on 1 July 2011 is shown in the table below.

	Level 1 Products	Level 2 Products	Higher Cover Products
Aviva Health			
Quinn Healthcare			
Vhi Healthcare			

### Market Claim Rate for Level 1 and Level 2 type products for year ending 30th June 2011



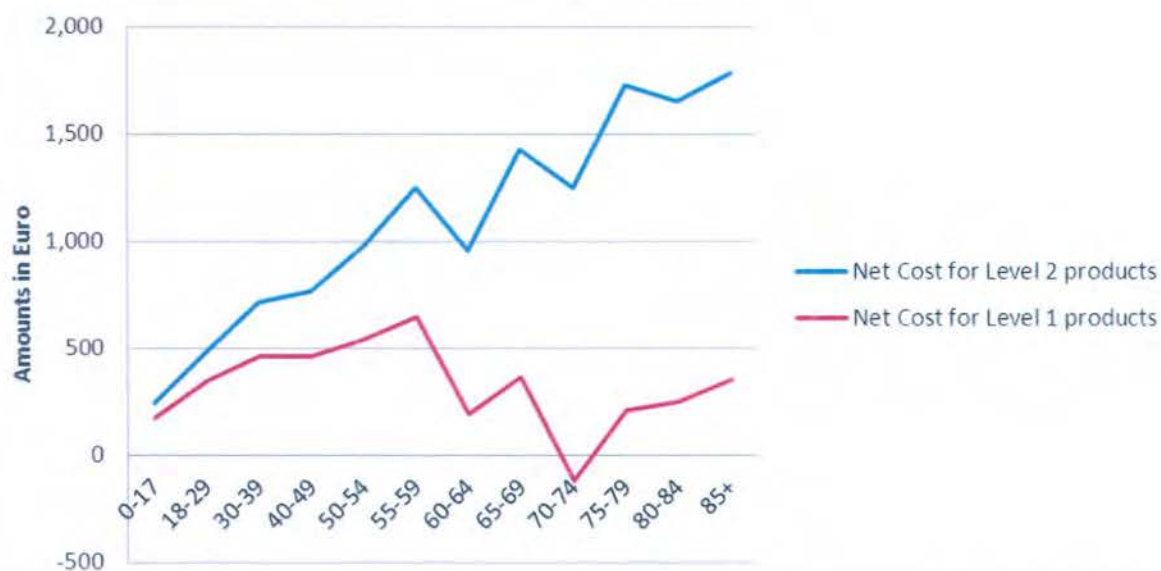
The above chart shows that claim costs for Level 2 type products are consistently higher than for Level 1 products with the percentage difference varying from 65% to 140% depending on age range. The differences were lowest in the youngest and oldest age groups.

#### Impact of 2011 Tax Credits on different market segments

The chart overleaf shows the impact of the 2011 age related tax credits and stamp duty on the net claims by age for Level 1 and Level 2 products.



### Market Claim Rates with the impact of stamp duty and tax credits for year ending 30th June 2011



For Level 2 products the net cost increases with age reflecting the fact that the tax credits recommended for 2011 do not compensate fully for the higher claims costs of older lives with these products (on the basis of market data). As the tax credits were set for 10 year age bands, the net claim costs (analysed by 5 year age bands) gives a lower result for age group 70-74 than for age group 65 – 69 (and similarly for 60 -64 compared to age group 55 -59 and 80 -84 compared to 75- 79).

The Net Cost for Level 1 Products reduces as age increases beyond age 55 as the tax credits for 2011 were set based on the level of prescribed benefit across all products.

In addition to differences in the level of benefits, some of the difference in claims rates between Level 1 and Level 2 products may be due to health status, as less healthy people are more likely to purchase a higher level of cover.

## Section C - Financial Data

### Profitability of Insurers

The profitability of insurer's private health insurance business in 2010 is set out in the following table. These figures were provided by insurers to the Authority pursuant to its work in relation to assessing whether overcompensation occurred in 2010.

The accounts below may differ from published accounts, which may have been finalised on a different date and may include business other than private health insurance business.

€m	Aviva Health 12 months to end Dec 2010	Quinn Healthcare 12 months to end Dec 2010	Vhi Healthcare 12 months to end Dec 2010
Earned premiums before reinsurance and age related tax credit			
Age related tax credits less levy earned in year			
Claims incurred before reinsurance			
Claims ratio (Gross of tax credits and levy)			
Claims ratio (Net of tax credits and levy)			
Expenses & reinsurance			
Expenses & Reinsurance as % Earned Premiums			
Underwriting result			
Underwriting profit as % earned premiums			
Impact of Investments			
Profit before tax			



[REDACTED]

[REDACTED]

[REDACTED]

**Estimated Net Financial Impact of the Stamp Duty and Tax Credits**

The Authority is required to assess the net financial impact on each registered undertaking of the relevant financial provisions in respect of the Relevant Periods. “Net Financial Impact” is not defined in the legislation, but “cumulative net financial impact” is defined as the difference between:

- The total amount of age related tax credits recorded in accounts for that undertaking in respect of that period and
- The total amount of the stamp duty recorded in accounts for that undertaking in respect of that period.

At the request of the Authority, insurers supplied estimates of the net financial impact in respect of the current levels of tax credits and stamp duty in respect of 2011 and actual net financial impact in respect of 2009 and 2010. It should be noted that insurers’ estimates are based on their view of membership figures over the full 2011 calendar year and on their methods of accounting for age related tax credits and stamp duty. The Authority considers that the figures provided, which are summarised in the following table, form the best available basis for assessing the net financial impact as required by the legislation. The Authority’s assessment is that the net financial impact in the second half of 2010 and the first half of 2011 combined would be approximately half of the amounts shown in the 2010 and 2011 columns in the table.

	Net Financial Impact 2009	Net Financial Impact 2010	Estimated Net Financial Impact 2011	Estimated Net Financial Impact 1/7/10 – 30/6/11
Aviva Health	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Quinn Healthcare	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Vhi Healthcare	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]



The tax credits and stamp duty projected to be accrued by end 2011, in aggregate, would have a negative net impact of €35m on insurers' financial results. This amounts to approximately 3.5% of the stamp duty incurred over the 3-year period. This is a larger impact than would have been anticipated on the basis of the Authority's projections, which would indicate an aggregate net impact of €10m to €15m for the three year period, arising from the higher stamp duty applied in 2010 (estimated impact €5m) and the [REDACTED]

[REDACTED] It is also to be expected that the impact on the Exchequer will vary from the Authority's projections as a result of differences between the projected insured population and the actual insured population.

Other factors, not provided for in the Authority's calculations, including normal mid-term cancellations (including deaths) and switching, will also impact on the net transfers and are likely, on balance, to benefit the Exchequer.

The 2010 tax credits have a financial impact in 2010 and 2011. Likewise the 2011 tax credits have a financial impact in 2011 and 2012. Consequently, the actual cash outturn for policies commencing in 2010 and 2011 will not be available to the Revenue Commissioners until all associated tax credits have been disbursed (end 2011 and 2012 respectively).

## **Section D. Review of Market Developments**

### **Price changes in the Market**

The most significant general price increases made by insurers in 2011 are set out below. There were also a large number of other price changes, each affecting a small number of plans.

- On 1 January 2011, Quinn Healthcare increased the cost of its individual and family plans by amounts varying (0% to 24%) depending on the plan.
- On 1 February 2011, Quinn Healthcare increased the prices of its corporate plans by 3% - 15%.
- On 1 February 2011, Vhi Healthcare increased the cost of most of its individual and family plans by 0% - 45%.
- On 9<sup>th</sup> February 2011, Vhi Healthcare increased the cost of their company plans by 10% - 25%.
- On 1 March 2011 Aviva Health increased the cost of their individual plans by a flat 14%. They increased the cost of their business plans on 23 March by 14%.
- On 1 April 2011, Quinn Healthcare increased the cost of their plans by amounts ranging from 0% - 22%.
- On 1 September 2011, Aviva Health withdrew 54 products. Many of these customers were switched to Hospital Level 2 Plan on their next renewal. The Hospital Level 2 Plan increased on that date by 19.7% for new customers of Aviva and by 9.5% for existing customers of Aviva.

### **Product developments**

#### **Level 1 Products**

As can be seen from the analysis in the previous section, with the current level of age related tax credits and stamp duty, the net claims costs for older consumers of Level 1 products (15% of the market) are lower than the net claim costs for younger consumers.

#### **Other Products**

The analysis in the previous section also shows that, in all other products, with the current level of age related tax credits, the net claims costs for older consumers on average continue to be considerably higher than net claims costs for younger consumers with the result that younger consumers are on average profitable, while older consumers are on average unprofitable. In particular, those over the age of 70 are on average extremely unprofitable. Insurers are thereby incentivised to use various marketing and other strategies to target profitable segments of the market. Product developments and special offers in the period have reflected these incentives. Newer products offering better value than existing comparable products are marketed to new customers. Product developments have tended to concentrate on providing cover attractive to younger healthier customers but less attractive to older less healthy customers. While open



enrolment means that anyone can buy any product, the marketing and product strategies adopted are resulting in extensive product segmentation in the market. This is evidenced in the behaviour of insurers, all of which have introduced a range of corporate plans at more competitive prices aimed at particular segments of the market.

Features of the market in the last twelve months have been:

- Large price increases (up to 45% in some cases).
- Reduced orthopaedic and ophthalmic benefits in private hospitals in return for reduced premiums.
- Increased penetration of corporate plans that are not marketed or offered to individual customers.
- Large number of customers have switched to cheaper but near identical plans or changed renewal dates to avoid price increases.
- Special offers that give discounted or free cover to children.

Product developments continue to proliferate. On 1 November 2011 there were a total of 187 inpatient private health insurance plans in the market.

As result of these strategies, health insurance is currently being provided to different market segments at significantly different prices to an extent that, in the Authority's view, is increasingly tending to undermine community rating and, therefore, the achievement of the Principal Objective.

The table below compares the prices of older plans with the prices of newer plans, many of which are, in practice, only sold to a segment of the population.

<b>Lower Cover Plans (Level 1)</b>		
	<b>Older Individual Plan</b>	<b>Newer Plan</b>
Vhi Healthcare	€739.39 "One Plan Access Plus" (Formerly Plan A Option)	€679 "Company Plan Starter Plus"
Quinn Insurance Ltd	€595 "Essential"	€535 "Company Health"
Aviva Health	€719 "We Level 1"	€638 "Hospital Plan Level 1"
<b>Standard Cover Plans (Level 2)</b>		
	<b>Older Individual Plan</b>	<b>Newer Plan</b>
Vhi Healthcare	€1,460.94 "Health Plus Extra" (Plan B Option)	€755.56 "PMI 19 11"
Quinn Insurance Ltd	€1,110 "Essential Plus"	€762 "Health Sense Excess"
Aviva Health	€1,126.20 "Level 2 Hospital"	€754 "Business Plan Hospital"



While there are differences in the products being compared in the preceding table (e.g. private hospital excesses, restrictions on orthopaedic cover in private hospitals and outpatient benefits) in the view of the Authority the products being compared are broadly similar.

As can be seen from the table, while there is some difference in price between similar Level 1 Plans, the differences are much lower than those applying for Level 2 plans.

## Section E – Projections and Discussions with Insurers

### Retrospective review of projections in 2010 Report regarding 2011 tax credits

#### Review of Membership Projections in the Authority's 2010 Report

In the 2010 Report the Authority projected that the change in the age profile of the market in the year ending June 2010 would continue at the same pace over the next 18 months. The following table compares the projected open enrolment market at 1 July 2011, as set out in last year's report, with the actual market as at 1 July 2011 and the percentages of the total market for each age group.

Membership for the Market as of 1 <sup>st</sup> July 2011			
Age Group	Actual	Projected	Net Difference
Aged 17 and under	497,919 (24.4%)	497,069 (24.2%)	850
Aged 18 to age 29	267,720 (13.1%)	270,493 (13.1%)	-2773
Aged 30 to age 39	340,372 (16.7%)	344,045 (16.7%)	-3673
Aged 40 to age 49	310,949 (15.2%)	314,196 (15.3%)	-3247
Aged 50 to age 59	270,212 (13.2%)	273,497 (13.3%)	-3285
Aged 60 to age 69	206,048 (10.1%)	207,531 (10.1%)	-1483
Aged 70 to age 79	107,821 (5.3%)	108,321 (5.3%)	-500
Aged 80 and over	42,503 (2.1%)	42,751 (2.1%)	-248
Total	2,043,544(100.0%)	2,057,902 (100.0%)	-14,359

The above table shows that the population for 1 July 2011 that was projected in 2010 is c. 0.7% higher than the actual population at that date.

The projected age profile of the insured population, rather than the total size of the insured population, is the key assumption in deriving the age related tax credits and stamp duty and this is very much in line with the Authority's projection.

#### Review of Claims Inflation Assumptions in the Authority's 2010 Report

In its 2010 Report, the Authority assumed that, within age-bands prescribed benefit per insured person would increase at 0% per annum and that the ageing of the market would contribute c. 3% to claims inflation per annum. This subsection reviews how claims rates have changed over the year.

The change in the average prescribed benefit per insured person in the twelve month period from the first half of 2010 to the first half of 2011 for each age range for each insurer and for the market is shown in the following table.

Age Group	Aviva Health	Quinn	Vhi	Market
0-17				1%
18-29				-4%
30-39				-3%
40-49				-1%
50-59				-2%
60-69				0%
70-79				1%
80+				3%
All Ages				2%

The 'all ages' percentages are impacted by the ageing of insurers' portfolios which would contribute about 3% to the 'all ages' inflation costs.

The "Market" column shows that market inflation was in line with the Authority's projection (averaging -1% within age bands with a 3% contribution from ageing, versus the Authority's projection of 0% within age bands with a 3% contribution from ageing).

There are significant variations in the increases between insurers and between different age groups for each insurer.

## Projections for 2012 Tax Credits

### Projected age profile of market in 2012

The number of insured lives at 1 July 2010 is taken from the returns for January to June 2010. The age definition for these returns is age attained at 1 January 2010. The population at 1 July 2011 is taken from the returns for January to June 2011. The age definition for these returns is age attained at 1 January 2011.

OPEN ENROLMENT MARKET			
	01-July-10	01-Jul-11	Net Diff
Aged 17 and under	509,787	497,919	-11,868
Aged 18 to age 29	295,542	267,720	-27,822
Aged 30 to age 39	355,966	340,372	-15,594
Aged 40 to age 49	317,364	310,949	-6,415
Aged 50 to age 59	271,482	270,212	-1,270
Aged 60 to age 69	200,419	206,048	5,629
Aged 70 to age 79	103,150	107,821	4,671
Aged 80 and over	39,854	42,503	2,649
Total	2,093,564	2,043,544	-50,020



The Authority considers that the economic and other factors that impacted on the health insurance market in the year ending June 2011 will continue to have an impact over the next year. The scale of the economic downturn makes it particularly difficult to make predictions about the size and age profile of the health insurance market. While the total market size is not a critical factor, from the viewpoint of balancing the financial impact of tax credits and stamp duty, the forecast age profile is important. The Authority has assumed that the changes in age profile over the twelve months to June 2011 will continue at the same pace for the next 18 months. The resulting numbers are set out in the table below.

	PROJECTED MARKET		
	01-Jan-12	01-Jul-12	01-Jan-13
Aged 17 and under	491,985	486,051	480,117
Aged 18 to age 29	253,809	239,898	225,987
Aged 30 to age 39	332,575	324,778	316,981
Aged 40 to age 49	307,742	304,534	301,327
Aged 50 to age 59	269,577	268,942	268,307
Aged 60 to age 69	208,863	211,677	214,492
Aged 70 to age 79	110,157	112,492	114,828
Aged 80 and over	43,828	45,152	46,477
Total	2,018,534	1,993,524	1,968,514

It is important to note that this projection assumes that there is no major shock to the market during the period of the projection. A foreseeable shock at present arises from the uncertain situation of Quinn Insurance Ltd's health insurance business. If Quinn's health insurance business were to close it would appear likely that a substantial number of its [REDACTED] customers under the age of 60 may not renew their health insurance with any insurer.

#### Projected prescribed benefit for each insurer

The claims costs for the twelve months to end June 2011 are used as the base figures in order to reduce the impact of seasonality on claims paid and also the impact of random fluctuations.

For each age group, the average prescribed benefit per insured person for the year ending June 2011 was calculated for each insurer and for the market. The average benefit across all ages was also calculated (giving a one third weighting to the 0 -17 age group). The figures are as set out in the following table.

Age Group	Aviva Health €	Quinn €	Vhi €	Weighted Market Average €
0-17				155
18-29				213
30-39				395
40-49				463
50-59				782
60-69				1,423
70-79				2,386
80+				3,103
All Ages				757

The “All Ages” figures give a weighting of 1/3<sup>rd</sup> to children in order to reflect the lower premium payable. Giving a full weighting to children results in a weighted market average for all ages of €635. The figures show an increasing trend by age with the market average claims rates for age groups from age 50 exceeding the weighted market average for “All Ages”.

Claims rates differ between insurers. Such differences may arise for a number of reasons, including differences in health status, differences in product mix and benefits provided, the proportion of people serving waiting periods, differences in the way business is conducted and differences in the rate of growth of insurers’ membership.



The figures shown are based on settled claims rather than incurred claims. Aviva Health’s insured population has increased rapidly, Quinn Healthcare’s and Vhi Healthcare’s has reduced in the 12 month period.



In a rapidly growing insurer, such as Aviva Health, claims paid (which are based on a past population) will tend to be significantly lower than claims incurred (which relate to the current population). This factor has a significant depressing effect on the level of prescribed benefits per person for Aviva Health, particularly at older ages. The combination of small numbers and rapid growth makes it difficult to draw inferences in relation to Aviva Health’s claim rates particularly for older age groups.

Insurers were asked for their views on the expected increase in the average prescribed benefit per insured person for their portfolios. Having regard to the responses received, the Authority considers that a reasonable method for projecting the average prescribed benefit per insured person for renewals in 2012 would be to apply an inflation factor of 3% per annum to the age specific market claims cost per insured person for the twelve months to end June 2010. As the projected ageing of the insured population will contribute an additional increase of 3% in the average claims costs, the overall increase in average claims cost is anticipated to be approximately 6% per annum.



It has been assumed that policies commence uniformly throughout the year and that policyholders switching between insurers do not affect expected claim payments. It is not considered that these assumptions have a significant impact.

It has been assumed that the same claims inflation rate would apply for each insurer and for each age group. On this basis, the projected average prescribed benefit for each insurer for the 2012 policy year is set out in the following table.

Age Group	Aviva €	Quinn €	Vhi €	Market €
0-17				164
18-29				226
30-39				419
40-49				492
50-59				829
60-69				1,510
70-79				2,531
80+				3,292
				850

### Discussions with insurers

The Authority staff met with insurers to hear their views on what age related tax credits should apply for 2012 renewals and to ascertain their views on the assumptions that the Authority should apply in its projections. A summary of their views are set out below.

[REDACTED]

[REDACTED]

[REDACTED]





## **Section F. Age related tax credits and stamp duty for policies commencing in 2012**

### **Calculation of tax credits**

After projecting the market profile and claims rates, it is necessary to consider to what extent the higher claims rates of older people should be compensated for through tax credits. This is critical to the degree to which the system addresses the imbalance in claims rates between younger and older people and to the extent to which the system supports the achievement of the Principal Objective specified in the Health Insurance Acts. In 2009 and 2010, tax credits compensated for 50% of the higher claims costs of older people. This percentage was increased to 65% in respect of policies commencing in 2011.

The Authority has now received five sets of Information Returns under the relevant legislation. The Authority has also received data in respect of the first half of 2011 broken down by individual product and age. The data received confirms the extent to which market claims costs increase with age and varies depending on the level of cover. While the age related tax credits, stamp duty and other measures introduced in the 2009 Health Insurance (Miscellaneous Provisions) Act have had some effect in protecting community rating, a high level of risk segmentation continues in the market with the result that community rating in the market is diluted.

On the basis of its evaluation and analysis of the relevant data and the state of the market, the Authority has concluded that an increase in the level of tax credits at the oldest ages is required in order to further support the Principal Objective set out in the legislation. The chart on page 11 shows that, even after the application of the age related tax credits and stamp duty, the net claim cost for those over the age of 70 remains very much higher than the market average claims cost (more than twice as high for those over the age of 80). Consequently, there continues to be a very strong incentive for insurers to avoid covering this group and to segment their risk profile so as to be in a position to charge a higher premium to this group. As a result, on average, older people are paying more for their health insurance. The Authority considers that, in order to better support the Principal Objective of the legislation, the net claim costs for any age group (based on market data) should not be greater than 150% of the market average claim costs. This requires further increases in tax credits for age groups over the age of 70.

The Authority has concluded that the approach to be applied in the calculation of tax credits for policies commencing in 2012 should be as follows:

The tax credit for each age group over the age of 60 should be the greater of the amount necessary to compensate for 65% of the higher claims cost of the age group (based on market claims data) and the tax credit necessary so that the net claims cost for the age group does not exceed 150% of the market average claims cost (again based on market data).



### Age related tax credits and stamp duties for policies commencing in 2012

Having regard to the criteria set out in the Health Insurance Acts, and on the basis of its projections of market profile and claims rates, the Authority considers that the following tax credits need to be afforded to insured persons for health insurance policies that are renewed or entered into on or after 1 January 2012.

Age Bands	Tax Credits 2011 Actual	Recommended Tax Credits 10 year Age Bands 2012	Recommended Tax Credits 5 year Age Bands 2012
50-54	€ NIL	€ NIL	€ NIL
55-59	€ NIL	€ NIL	€ NIL
60-64	€ 625	€ 700	€ 550
65-69	€ 625	€ 700	€ 875
70-74	€1,275	€1,500	€1,275
75-79	€1,275	€1,500	€1,850
80-84	€1,725	€2,275	€2,200
85+	€1,725	€2,275	€2,475

The Authority considers that a stamp duty of:

- €260 (€205 in 2011) in respect of each insured person aged 18 or over
- €85 (€66 in 2011) in respect of each insured person aged less than 18

would require to be paid by the insurers of policies that are renewed or entered into on or after 1 January 2012 in order to meet the cost to the Exchequer of the tax credits.

Tables illustrating the unrounded calculations are included in Appendix 2 along with alternative age related tax credits and associated calculations.

This level of stamp duty recommended for policies commencing in 2012 of €260 is 27% higher than the stamp duty of €205 for 2011 renewals. The main reasons for this difference are the following:

- The tax credits for policies commencing in 2011 were set to equate to 65% of the higher claims cost of the age group. The proposed tax credits for policies commencing in 2012 are set so that the tax credits for each age group over the age of 60 should be the greater of the amount necessary to compensate for 65% of the higher claims cost of the age group and the tax credit necessary so that the net claims cost for the age group does not exceed 150% of the market average claims cost. This results in an increase in the tax credits paid in respect



of people over the age of 70. The increases in these tax credits cause a 14% increase in the stamp duty.

- Inflation in claims costs has caused a c. 5% increase in the stamp duty.
- Ageing of the insured population has caused a c. 5% increase in the stamp duty.

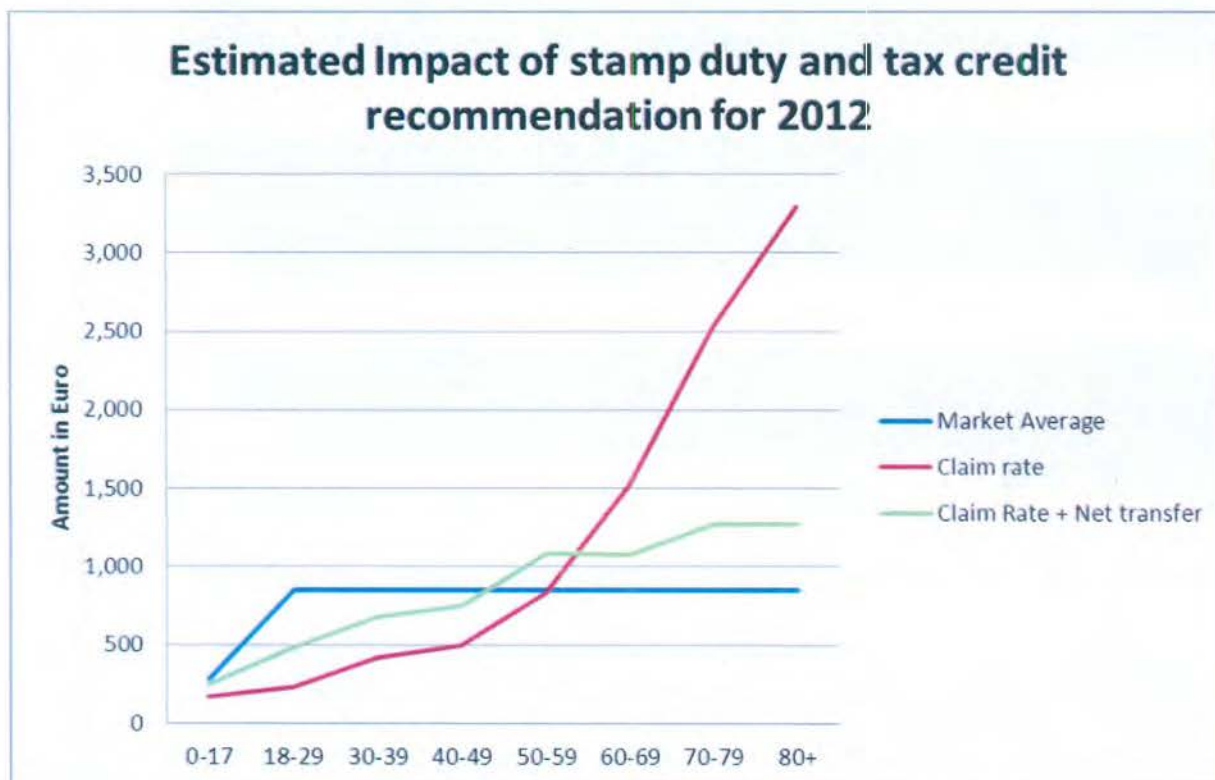
### *Age bands*

As requested by the Minister, the Report contains conclusions based on both 5-year and 10-year age bands.

Claims rates increase rapidly with age over the age of 60 (at a rate of almost €100 for each year of age between 60 and 80). Age related tax credits that vary by 5-year age bands better reflect these rapidly changing claims rates than do tax credits that vary by 10-year age bands. Therefore, the Authority considers that tax credits that vary by 5-year age bands would be more effective in supporting the Principal Objective of the legislation, while avoiding overcompensation.

### *Projected impact of applying the conclusion on market prescribed benefit levels*

The following chart shows the estimated impact of the age related tax credits and stamp duty on the projected average prescribed benefit per insured person in the policy year commencing in 2012.



*Projected Net Claim Cost by Insurer (based on conclusion)*

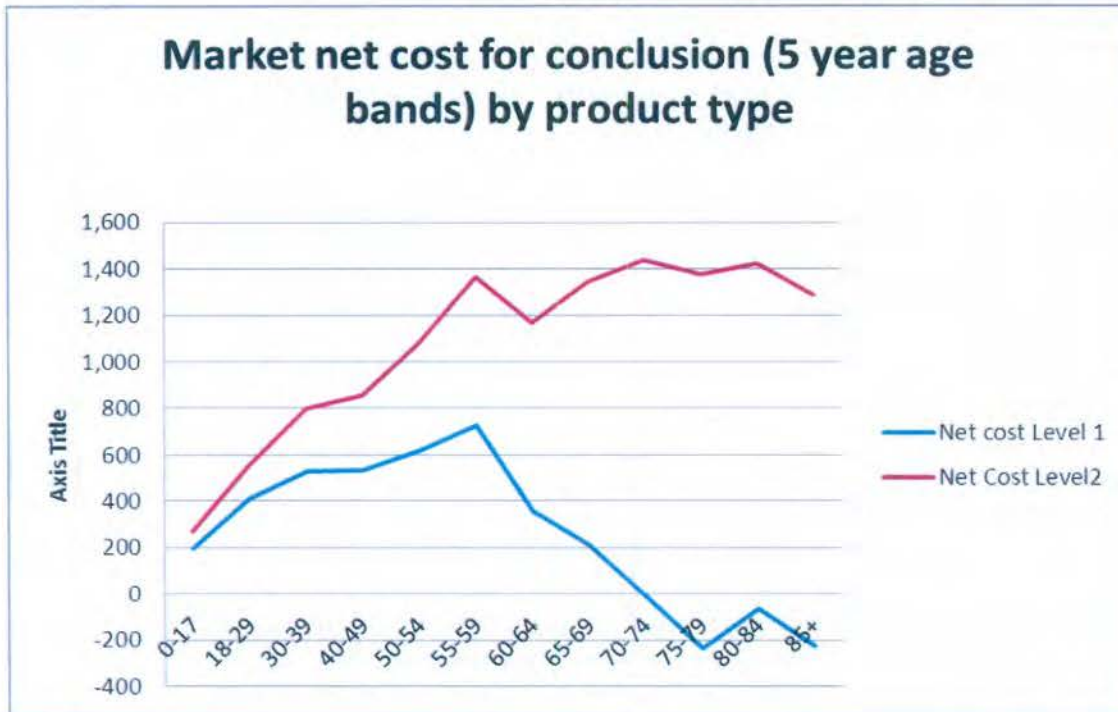


*Projected net claim cost, based on conclusion, for different product types using 5-year age bands.*

The following chart shows how the Authority’s conclusion in relation to the level of tax credits and stamp duty impact on the claims levels for different product types. Level 1 products are products that mainly cover public hospitals. Level 2 products are products that cover a semi-private room in a private hospital. Level 1 products cover approximately 16% of the market, while approximately 75% of the insured population have a Level 2 Product. The data in the chart relates



to “returned benefits” rather than “prescribed benefits”. Returned benefits are not subject to the maximum prescribed benefit levels that are included in the regulations in order to exclude “luxury benefits”. As the chart covers Level 1 and Level 2 products only this is not an issue.



It can be seen from the above chart that the impact of the proposed tax credits and stamp duty on Level 2 plans is that the claim cost (net of tax credit and stamp duty) increases to age 55-59 and is relatively flat thereafter, as the tax credits have an effect. The Net cost for Level 1 plans decreases from when the tax credits start to have an effect, as the claims rates for these plans are lower than the claim rates for Level 2 plans.

#### **Rationale for the Recommendation of 150% Factor**

In deriving the proposed tax credits and stamp duty the Authority had regard to its evaluation and analysis of the information returns for the period July 2010 to June 2011. These returns provide evidence of the much higher level of health insurance benefit payable in respect of older people after allowing for the age related tax credits paid in 2009 and 2010. In projecting the market, the Authority had regard to these returns and to other relevant data and information provided by insurers as set out in this Report.

### *Principal Objective*

Section 1A of the Health Insurance Acts states that “The principal objective of the Minister and the Authority in performing their respective functions under this Act is to ensure, in the interests of the common good, that access to health insurance cover is available to consumers of health services with no differentiation made between them (whether effected by income tax or stamp duty measures or other measures, or any combination thereof), in particular as regards the costs of health services, based in whole or in part on the respective age range and general health status of the members of any particular generation (or part thereof)...”.

As a result of the much higher costs associated with insuring older less healthy people, insurers have a large incentive to target younger healthier people when selling health insurance. There is also an incentive for insurers to segment their insured populations so that younger healthier people and older less healthy people are sold different products, charging higher premiums on average to older less healthy people. Despite the legislation governing community rating, insurers can achieve this through target marketing and product development. This impacts negatively on the achievement of the Principal Objective.

The age related tax credits and stamp duty provide a means of reducing the disincentive against insuring older people and the incentive to segment the insured population by age. They only address differences in health status to the extent that these arise from age differences.

The incentive for insurers to differentiate between age groups would be addressed if the expected average prescribed costs for an age group plus the age related tax credits were the same across all age groups for each insurer. The expected prescribed costs net of age related tax credits of insuring an 85 year old would then be the same as for insuring a 25 year old and an insurer would have no incentive, based on claims rates, to differentiate between them. However, as expected prescribed costs by age differ between insurers and across products, no level of age related tax credits would achieve this objective in respect of all insurers and all products. If the age related tax credits are based on the differences in the market expected prescribed costs, the incentives will vary by insurer and by health insurance product.

For example, a stamp duty of c. €400, with tax credits ranging from €400 at age 50 – 59 to €2,800 at age 80+ is projected to be necessary in order to equalise the net claim cost (based on prescribed benefits) for all age groups over 40. This would lead to projected net transfers of [REDACTED] and [REDACTED] from Aviva Health and Quinn Healthcare and a net transfer of [REDACTED] to Vhi Healthcare.

However, because claims rates vary by product and by insurer, the impact of tax credits with a stamp duty of €400 would vary by product type resulting in different consequences for different sectors of the market. For example, the impact on lower cost products would be very inflationary, the amount of stamp duty and tax credits being well in excess of the amount that would be required to equalise claims for these products. In addition, insurers with lower claims rates could argue that the level of payments would result in compensating less efficient insurers. Overall, such a move would represent a significant shock to the market, with detrimental impacts on some sectors and with unpredictable results, including for the maintenance of community rating.



In deciding on the level of tax credits, which will apply in respect of the whole market, the Authority has had regard to the claims rates within insurers as well as the market claims rates and has also had regard to the fact that claims rates vary by level of cover.

The tax credits applying for policies commencing in 2011 were set to equate to 65% of the higher levels of prescribed benefit for older people. While this reduced the incentive for insurers to select and segment risks, a significant incentive remains. Indeed a large incentive remains for the oldest age groups.

The Authority considers that there is a high level of segmentation in the market whereby older people are on average paying more for health insurance and this segmentation has developed further in the last twelve months through target marketing of special offers and through product development. In particular, the level of segmentation in the largest segment of the market (cover for a semi-private room in a private hospital) has increased greatly, with two insurers reducing cover for orthopaedic treatment on products in this segment.

The analysis earlier in this document shows that 75% of insured people are in this segment of the market and that, with the level of tax credits applying in 2011, the net cost of insuring older people in this segment continues to be higher than the net cost of insuring younger people. In particular the net cost of insuring people over the age of 70 in this segment of the market is very significantly higher than the net cost of insuring younger people. It is in this context that the Authority considers that a higher level of support for the Principal Objective than provided for in the 2011 tax credits is required.

The Authority considers that the support for the oldest age groups should be increased significantly. With the tax credits applying for 2011 renewals, the net claim costs (i.e., net of age related tax credits and stamp duty) for the oldest age groups remain considerably higher than the market average claims costs.

The approach proposed in this Report (i.e. applying a criterion that the claims cost for older age groups should not exceed 150% of the market average claim costs) results in a significant increase in tax credits for the oldest groups.

However, it must be accepted that, under these measures proposed for the current interim system, a significant incentive to select against older people and segment risks remains. The Authority is aware that a range of recommendations that it has made in relation to the regulation of the market, particularly regarding minimum benefit and risk equalisation are currently under consideration. Amendments of this kind will be helpful in assisting the risk equalisation system in supporting community rating and in addressing some of the issues referred to above.

#### *Avoiding Overcompensation*

In proposing the amounts of age related tax credits for 2011, the Authority is required under the Health Insurance Acts to have regard “to achieving the aim of avoiding overcompensation being made to a registered undertaking under the operation of the relevant financial provisions”. The tax credits and levy proposed in this report will have a financial impact on insurers in the years 2012 and 2013.



The net impact of the tax credits and levy proposed by the Authority in this Report in respect of older people is less than the estimate of the extra cost of providing cover to older people, calculated using market data.

This indicates that insurers of older people will not be facilitated in making more than a reasonable profit by virtue of the tax credits and stamp duty proposed in this Report. Consequently, the proposed stamp duty and tax credits have regard to the need to avoid overcompensation.

If the measures result in overcompensation, the legislation provides that the amount of overcompensation will be repaid to the Exchequer. The Authority has carried out and will carry out the following assessments in relation to whether, in the context of the European State Aid regime, any undertaking has been overcompensated under the interim measures to support community rating.

- In 2010 the Authority determined that there was no overcompensation in respect of the period 1 January 2009 to 31 December 2009.
- In 2011 the Authority determined that there was no overcompensation in respect of the period 1 January 2009 to 31 December 2010.
- In 2012 the Authority will carry out an assessment in respect of the period 1 January 2009 to 31 December 2011.
- In 2013 the Authority will carry out an assessment in respect of the period 1 January 2009 to 31 December 2012.
- In 2014 the Authority will carry out an assessment in respect of the period 1 January 2009 to 31 December 2013.

Summary income and expenditure accounts for Vhi Healthcare for 2009 and 2010 are included in Appendix 4 along with a projection for 2011.

**Projected financial impact of proposals on each insurer and on Exchequer in 2012**

The Authority projects that the net financial impact on each insurer and on the Exchequer of this proposal (using 10 year age bands) on 2012 renewals is as follows:

	Aviva €m	Quinn €m	Vhi €m	Exchequer €m
Age related tax credits				(428)
Stamp Duty				428
Net benefit				-



These figures are an estimate of the age related tax credits and stamp duties that would be payable to / by each insurer to the Exchequer in respect of policies commencing in 2012.

The Authority projects that the net financial impact on each insurer and on the Exchequer of this proposal (using 5 year age bands) on 2012 renewals is as follows:

	Aviva €m	Quinn €m	Vhi €m	Exchequer €m
Age related tax credits				(428)
Stamp Duty				428
Net benefit				-

These figures are an estimate of the age related tax credits and stamp duties that would be payable to / by each insurer to the Exchequer in respect of policies commencing in 2012.

The cash flow impact on the Exchequer in 2012 will be different as the age related tax credits paid by the Exchequer in 2012 will be partly at 2011 and partly at 2012 rates. It is also affected by the distribution of renewal dates over the year, the proportion of business where premiums are paid annually and the timing of payments to / from the Exchequer.

### **Net Financial Impacts**

The net financial impact on the Exchequer referred to in the previous sections is sensitive to mid-policy year cancellations / rewrites, where a full year's stamp duty arises but only a proportion of the tax credit applies. It is also sensitive to the rate of ageing of the insured population, which in turn is impacted by the rate of growth / decline in the market. The Authority has assumed that the number insured will continue to decline at the same rate as it declined over the past 12 months and that the decline will occur in the same age groups. Accordingly, the Authority estimates that the market will decline by a further 75,000 by the end of 2012. However, due to current economic circumstances, there is considerable uncertainty in relation to this assumption and if, for example, an additional 50,000 younger adults leave the health insurance market by the end of 2012 than is projected there would be a negative impact on the Exchequer of approximately €13m.

The projections for individual insurers are sensitive to developments in each insurer's age profile, which can be influenced by product or pricing strategy or by developments in one particular insurer and it is not possible to predict many of these factors. As such, projections of the net financial impact on individual insurers are subject to considerable uncertainty and should be viewed as indicative only.

Summary of impact of using alternative approaches

The following table summarises the tax credits and stamp duty that would arise if alternative approaches to determining age related tax credits were used. Full details are set out in Appendix 2.

	Conclusion – ARTR higher of 65% diff in Pres. Claims and net cost no more than 150% market average cost	Conclusion with 5 year age bands	Current Approach - 65% of difference in Pres. Claims for age ranges 60+	75% of difference in Pres. Claims for age ranges 60+	80% of difference in Pres. Claims for age ranges 60+
Age related tax credits					
60-69	€ 700	€550/€875	€ 658	€ 759	€810
70-79	€1,500	€1,275/€1,850	€1,322	€1,525	€1,627
80+	€2,275	€2,200/€2,475	€1,817	€2,096	€2,236
Stamp Duty					
Adult	€260	€260	€229	€264	€282
Children	€85	€ 85	€ 76	€88	€94
Projected Net Financial Impact					
Aviva					
Quinn					
Vhi					



## Appendix 1 – Further analysis of Information Returns

### Risk Profiles

When comparing the risk profiles of different insurers issues arise due to difficulties in separating out the effects of differences in the way insurers conduct business and differences in insurance products. In order to compare risk profiles we use the following techniques:

- Average Claim per member.
- Average Treatment Days per member.
- An index based on the Age/Sex Risk Profile of each insurer (complementary to this index, we will also gauge the significance of variations in treatment days not captured by the Age/Sex Risk Profile Index by calculating a Hospital Utilisation Risk Profile Index.)

In each case the Authority will note the disadvantages of the index being used. Also, where appropriate, when calculating indices the Authority will treat each insured child as 1/3<sup>rd</sup> of an insured adult to reflect the fact that they are not charged a full premium.

Comparing risk profiles by comparing the average prescribed benefit per insured person of each insurer is not completely reliable. It does not allow for the fact that insurers may conduct business in different ways or that one insurer may sell more of a product that provides less benefits or provides a different level of cover (for example, by applying different excesses, exclusions or waiting periods). In this context it is worth noting that Quinn Healthcare has a larger proportion of members who have plans that only provide cover in public hospitals compared to Vhi Healthcare and also has a larger proportion of members who have plans that include excesses than Vhi Healthcare.

Counting each child as 1/3<sup>rd</sup> and each adult as 1, the average prescribed benefit per insured person for each insurer is outlined in the following tables.

Average "Prescribed Benefits" per Insured Person					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	€339	€383	€363	€383	€373

The market prescribed benefits per insured person has decreased to €373 in the current period from €383 in the previous period – a fall of 3%.

Comparing the first half of 2011 with the first half of 2010 shows a 2.8% increase for the market average prescribed benefit.

Average "Prescribed Benefits" per Insured Person as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%

#### Average prescribed benefit per treatment day

The differences in the average “prescribed benefit per member” is partly due to differences in the average prescribed benefit per treatment day for each insurer and partly to differences in the average number of treatment days per insured person for each insurer. The average “prescribed benefit per treatment day” varies between insurers as set out in the following tables.

Average Prescribed Benefit per Treatment Day					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	€858	€852	€849	€842	€845



Average Prescribed Benefit per Treatment Day as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%



#### Average number of treatment days per insured person

Another approach for comparing risk profiles is to compare the average number of treatment days per Insured Person. However it does not separate out all differences in the way insurers conduct business or all differences in the level of cover.

The reliability of the average treatment days per member also relies on the assumption that the “value” (in terms of the underlying healthcare cost) of each treatment day is the same for each insurer. In practice, it is possible that this assumption may not be borne out. For example, where the cost of treatment days vary by age of the patient or the treatment and insurers’ memberships have different age or treatment profiles, a comparison of the number of treatment days per member would not fully capture the differences in the risk profiles of the insurers.

The average number of treatment days per member for each insurer is set out in the following tables. Again, each insured child counts as 1/3 when counting the number of insured persons in order to allow for the fact that children are not charged a full premium.

Average Treatment Days per Insured Person					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	0.394	0.449	0.427	0.455	0.442

Average Treatment Days per Insured Person as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%



Age/Sex Risk Profile Index

Another approach is to compare the risk profiles based on the age/sex profile of each insurer. We do this by applying a “risk weighting” to each member of the insured population. This weighting will be based on the age/sex of the insured person. We can then compare the average weighting for each insurer. We refer to this average weighting as the Age/Sex Risk Profile Index.

The difficulty with this approach lies in finding an appropriate weight for each age/sex combination. One weight that may be considered appropriate is the market average number of treatment days for each age/sex group. Thus each insurer is using the same weights.

The use of the number of treatment days as the basis for setting the risk weights is not without its disadvantages. As already mentioned, the number of treatment days will not provide a pure measure of risk, since it could include an element of efficiency and other factors. Also, as noted earlier, it does not take account of differences in the value of treatment days. It is not necessary to adjust for children by counting each child as 1/3 in the calculation of this index.

Age / Sex Risk Profile Index					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%



Hospital Utilisation Risk Profile Index

Of course the Age/Sex Risk Profile Index ignores differences in risk profiles due to other factors, i.e. it ignores whether insurers’ risk profiles vary within age/sex bands. It therefore ignores differences in hospital utilisation within age /gender cells. In order to gauge the significance of variations of risk profile within age/sex bands we calculate an overall index of the hospital utilisation risk profile (ignoring the effect of differences in the age/sex distributions of the memberships). We call this index the Hospital Utilisation Risk Profile Index.

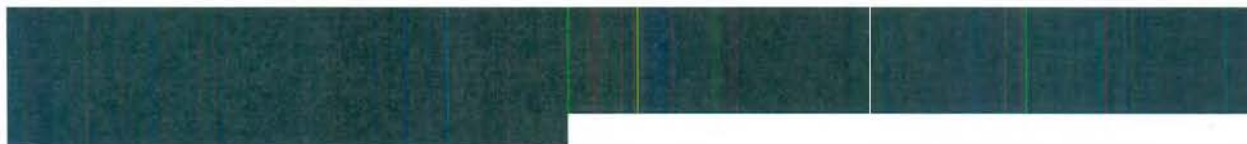
The Hospital Utilisation Risk Profile Index is calculated by estimating the average number of treatment days that each insurer would have if they all had the same standard age/sex profile and

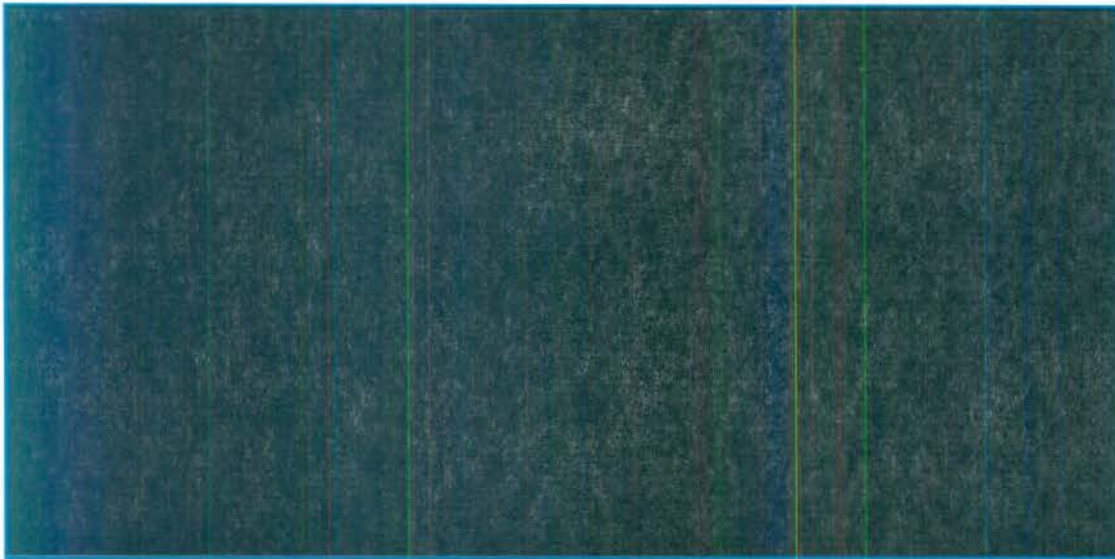


their own level of treatment days for each age/sex group. The standard age/sex profile that we use is the profile for the market as a whole.

As we aim to ignore the effect of the age and sex profile with this index, there is no need to adjust for the number of children. The following table shows the relative values of the Hospital Utilisation Risk Profile Index over time.

Hospital Utilisation Risk Profile Index					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					



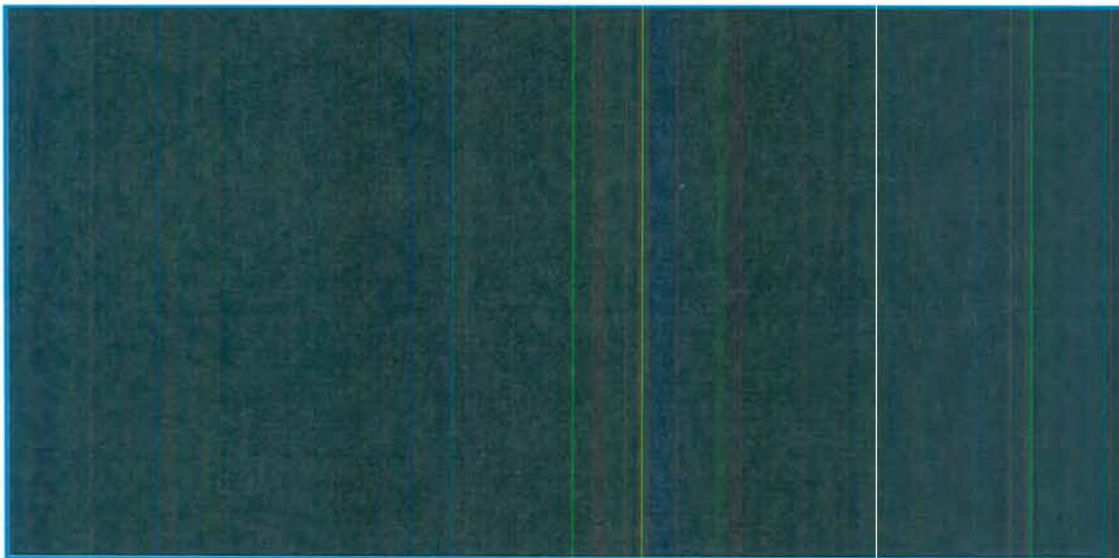




## Appendix 2 Results if different approaches are used to calculate tax credits and stamp duty for 2012

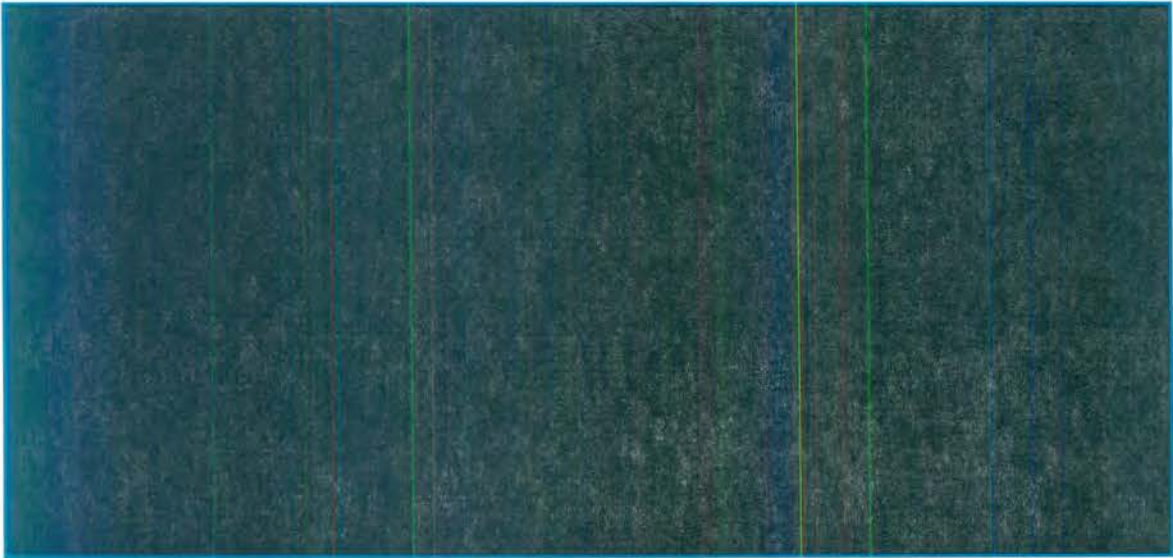
APPENDIX 2.1: Table illustrating the calculations of conclusion – For age ranges of 60+ the ARTR that is the higher of (a) 65% of the difference in the projected prescribed benefits for that age range compared to the average projected prescribed benefit across all ranges plus stamp duty, and (b) an ARTR so that net cost for that age range is not more than 150% net cost across all age ranges

Age Group	Projected Prescribed Benefit 2012	Projected Market Size 2012	Possible Tax Credit 2012	Possible Stamp Duty 2012	Cost of possible tax credit 2012	Cost of possible Stamp Duty 2012
	€		€	€	€m	€m
0-17	164	480,117		85		40.8
18-29	226	225,987		260		58.8
30-39	419	316,981		260		82.4
40-49	492	301,327		260		78.3
50-59	829	268,307		260		69.8
60-69	1,510	214,492	689	260	147.8	55.8
70-79	2,531	114,828	1,516	260	174.1	29.9
80+	3,292	46,477	2,278	260	105.9	12.1
Total/Average	850	1,968,514			427.8	427.8



**APPENDIX 2.2: Table illustrating the calculations of conclusion – For age ranges of 60+, the ARTR that is the higher of (a) 65% of the difference in the projected prescribed benefits for that age range compared to the average projected prescribed benefit across all ranges plus stamp duty and (b) an ARTR so that net cost for that age range is not more than 150% net cost across all age ranges – 5 Year Age Bands**

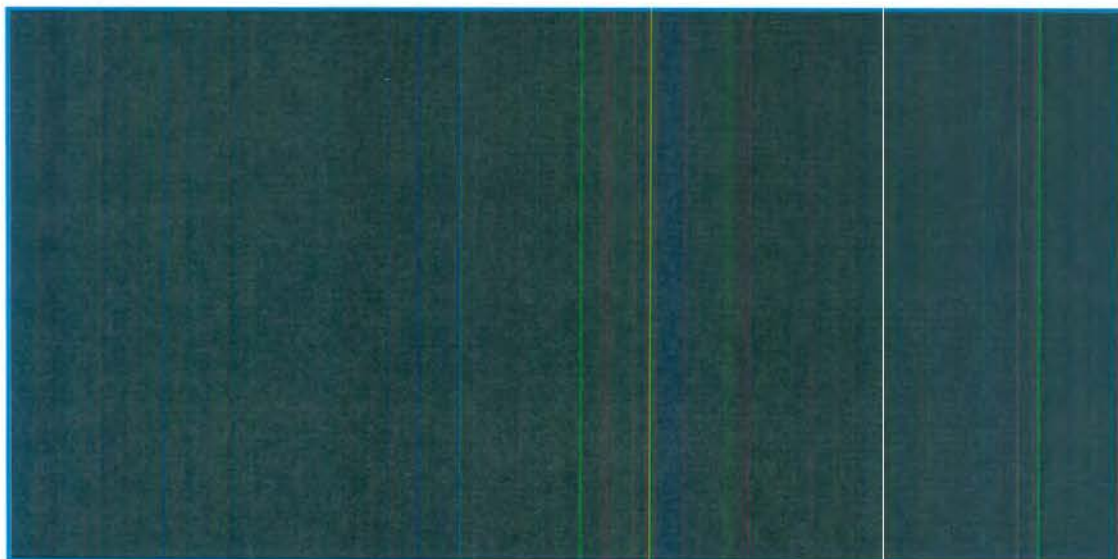
Age Group	Projected Prescribed Benefit 2012 €	Projected Market Size 2012	Possible Tax Credit 2012 €	Possible Stamp Duty 2012 €	Cost of possible tax credit 2012 €m	Cost of possible Stamp Duty 2012 €m
0-17	164	480,117		84		40.3
18-29	226	225,987		259		58.5
30-39	419	316,981		259		82.1
40-49	492	301,327		259		78.0
50-54	705	140,271		259		36.3
55-59	962	128,036		259		33.2
60-64	1,296	122,490	549	259	67.3	31.7
65-69	1,789	92,002	870	259	80.0	23.8
70-74	2,289	68,873	1,273	259	87.7	17.8
75-79	2,855	45,955	1,840	259	84.5	11.9
80-84	3,196	28,577	2,181	259	62.3	7.4
85+	3,474	17,899	2,458	259	44.0	4.6
Total/Average	850	1,968,514			425.8	425.8





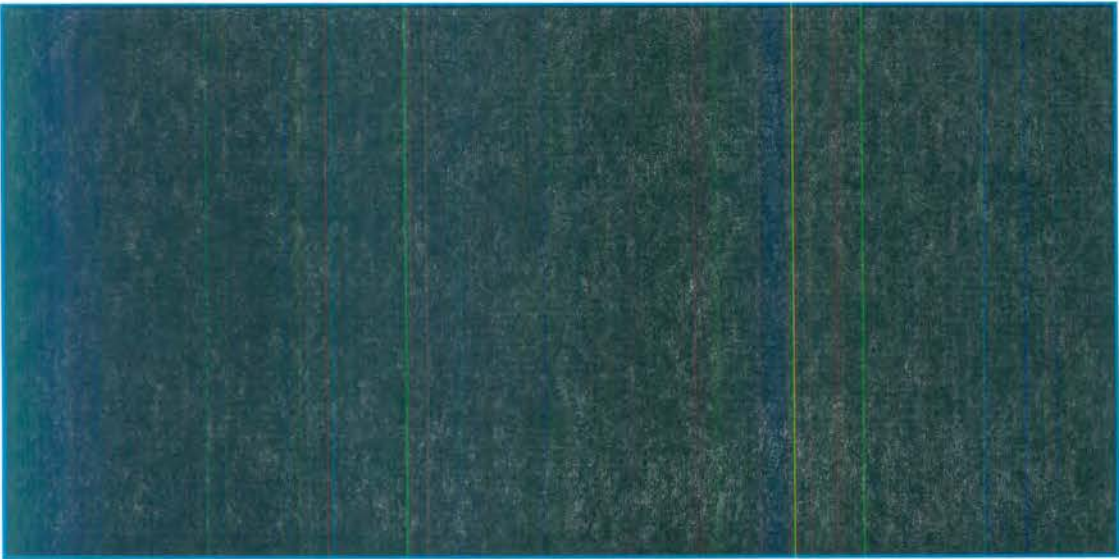
**APPENDIX 2.3 :Table illustrating the calculations of Current Approach – For age ranges of 60+ , ARTR of 65% of the difference in the projected prescribed benefits for that age range compared to the average projected prescribed benefit across all ranges plus stamp duty**

Age Group	Projected Prescribed Benefit 2012 €	Projected Market Size 2012	Possible Tax Credit 2012 €	Possible Stamp Duty 2012 €	Cost of possible tax credit 2012 €m	Cost of possible Stamp Duty 2012 €m
0-17	164	480,117		76		36.6
18-29	226	225,987		229		51.8
30-39	419	316,981		229		72.7
40-49	492	301,327		229		69.0
50-59	829	268,307		229		61.4
60-69	1,510	214,492	658	229	141.1	49.1
70-79	2,531	114,828	1,322	229	151.8	26.3
80+	3,292	46,477	1,817	229	84.4	10.6
Total/Average	848	1,968,514			377.4	377.5



**APPENDIX 2.4 : Table illustrating the calculations for age ranges of 60+, of ARTR of 75% of the difference in the projected prescribed benefits for that age range compared to the average projected prescribed benefit across all ranges plus stamp duty**

Age Group	Projected Prescribed Benefit 2012	Projected Market Size 2012	Possible Tax Credit 2012	Possible Stamp Duty 2012	Cost of possible tax credit 2012	Cost of possible Stamp Duty 2012
	€		€	€	€m	€m
0-17	164	480,117		88		42.3
18-29	226	225,987		264		59.7
30-39	419	316,981		264		83.7
40-49	492	301,327		264		79.6
50-59	829	268,307		264		70.8
60-69	1,510	214,492	759	264	162.8	56.6
70-79	2,531	114,828	1,525	264	175.1	30.3
80+	3,292	46,477	2,096	264	97.4	12.3
Total/Average	848	1,968,514			435.3	435.2





**APPENDIX 2.5 : Table illustrating the calculations for age ranges of 60+ , ARTR of 80% of the difference in the projected prescribed benefits for that age range compared to the average projected prescribed benefit across all ranges plus stamp duty**

Age Group	Projected Prescribed Benefit 2012 €	Projected Market Size 2012	Possible Tax Credit 2012 €	Possible Stamp Duty 2012 €	Cost of possible tax credit 2012 €m	Cost of possible Stamp Duty 2012 €m
0-17	164	480,117		94		45.1
18-29	226	225,987		282		63.7
30-39	419	316,981		282		89.4
40-49	492	301,327		282		85.0
50-59	829	268,307		282		75.7
60-69	1,510	214,492	810	282	173.7	60.5
70-79	2,531	114,828	1,627	282	186.8	32.4
80+	3,292	46,477	2,236	282	103.9	13.1
Total/Average	848	1,968,514			464.5	464.9

**Appendix 3 – Further analysis of Information Returns**

**Risk Profiles**

When comparing the risk profiles of different insurers issues arise due to difficulties in separating out the effects of differences in the way insurers conduct business and differences in insurance products. In order to compare risk profiles we use the following techniques:

- Average Claim per member.
- Average Treatment Days per member.
- An index based on the Age/Sex Risk Profile of each insurer (complementary to this index, we will also gauge the significance of variations in treatment days not captured by the Age/Sex Risk Profile Index by calculating a Hospital Utilisation Risk Profile Index.)

In each case the Authority will note the disadvantages of the index being used. Also, where appropriate, when calculating indices the Authority will treat each insured child as 1/3<sup>rd</sup> of an insured adult to reflect the fact that they are not charged a full premium.

Comparing risk profiles by comparing the average prescribed benefit per insured person of each insurer is not completely reliable. It does not allow for the fact that insurers may conduct business in different ways or that one insurer may sell more of a product that provides less benefits or provides a different level of cover (for example, by applying different excesses, exclusions or waiting periods). In this context it is worth noting that Quinn Healthcare has a larger proportion of members who have plans that only provide cover in public hospitals compared to Vhi Healthcare and also has a larger proportion of members who have plans that include excesses than Vhi Healthcare.

Counting each child as 1/3<sup>rd</sup> and each adult as 1, the average prescribed benefit per insured person for each insurer is outlined in the following tables.



Average "Prescribed Benefits" per Insured Person					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	€333	€377	€357	€379	€369

The market prescribed benefits per insured person has decreased to €369 in the current period from €379 in the previous period – a fall of 2.6%.

Average "Prescribed Benefits" per Insured Person as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%

#### Average prescribed benefit per treatment day

The differences in the average “prescribed benefit per member” is partly due to differences in the average prescribed benefit per treatment day for each insurer and partly to differences in the average number of treatment days per insured person for each insurer. The average “prescribed benefit per treatment day” varies between insurers as set out in the following tables.

Average Prescribed Benefit per Treatment Day					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	€861	€854	€852	€845	€848

Average Prescribed Benefit per Treatment Day as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%



#### Average number of treatment days per insured person

Another approach for comparing risk profiles is to compare the average number of treatment days per Insured Person. However it does not separate out all differences in the way insurers conduct business or all differences in the level of cover.

The reliability of the average treatment days per member also relies on the assumption that the “value” (in terms of the underlying healthcare cost) of each treatment day is the same for each insurer. In practice, it is possible that this assumption may not be borne out. For example, where the cost of treatment days vary by age of the patient or the treatment and insurers’ memberships have different age or treatment profiles, a comparison of the number of treatment days per member would not fully capture the differences in the risk profiles of the insurers.

The average number of treatment days per member for each insurer is set out in the following tables. Again, each insured child counts as 1/3 when counting the number of insured persons in order to allow for the fact that children are not charged a full premium.

Average Treatment Days per Insured Person					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	0.394	0.449	0.419	0.448	0.435

Average Treatment Days per Insured Person as a % of the Market Average					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%



### Age/Sex Risk Profile Index

Another approach is to compare the risk profiles based on the age/sex profile of each insurer. We do this by applying a “risk weighting” to each member of the insured population. This weighting will be based on the age/sex of the insured person. We can then compare the average weighting for each insurer. We refer to this average weighting as the Age/Sex Risk Profile Index.

The difficulty with this approach lies in finding an appropriate weight for each age/sex combination. One weight that may be considered appropriate is the market average number of treatment days for each age/sex group. Thus each insurer is using the same weights.

The use of the number of treatment days as the basis for setting the risk weights is not without its disadvantages. As already mentioned, the number of treatment days will not provide a pure measure of risk, since it could include an element of efficiency and other factors. Also, as noted earlier, it does not take account of differences in the value of treatment days. It is not necessary to adjust for children by counting each child as 1/3 in the calculation of this index.

Age / Sex Risk Profile Index					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health					
Quinn Healthcare					
Vhi Healthcare					
Market	100%	100%	100%	100%	100%

### Hospital Utilisation Risk Profile Index

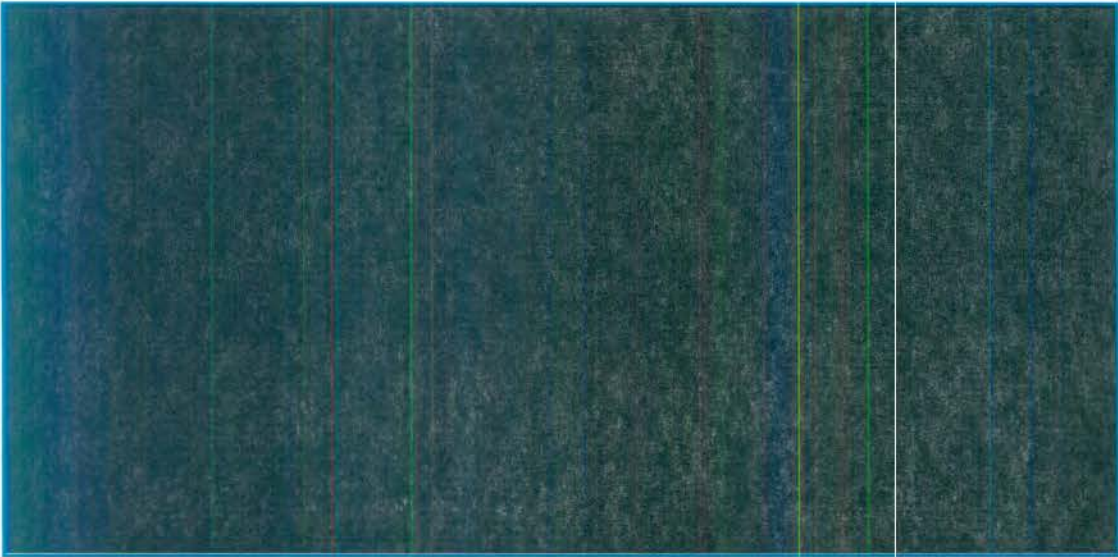
Of course the Age/Sex Risk Profile Index ignores differences in risk profiles due to other factors, i.e. it ignores whether insurers' risk profiles vary within age/sex bands. It therefore ignores differences in hospital utilisation within age /gender cells. In order to gauge the significance of variations of risk profile within age/sex bands we calculate an overall index of the hospital utilisation risk profile (ignoring the effect of differences in the age/sex distributions of the memberships). We call this index the Hospital Utilisation Risk Profile Index.

The Hospital Utilisation Risk Profile Index is calculated by estimating the average number of treatment days that each insurer would have if they all had the same standard age/sex profile and

their own level of treatment days for each age/sex group. The standard age/sex profile that we use is the profile for the market as a whole.

As we aim to ignore the effect of the age and sex profile with this index, there is no need to adjust for the number of children. The following table shows the relative values of the Hospital Utilisation Risk Profile Index over time.

Hospital Utilisation Risk Profile Index					
Insurer	Jan - June 2009	July - Dec 2009	Jan - June 2010	July - Dec 2010	Jan - June 2011
Aviva Health	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Quinn Healthcare	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Vhi Healthcare	100%	100%	100%	100%	100%





## Appendix 4 – Accounts and Projection for Vhi Healthcare

In order for the Authority to assess whether any organisation was overcompensated in the period 2009 to 2010, the Authority received profit and loss accounts in respect of 2009 and 2010 from all insurers. The accounts were broken down between business that falls within the information returns (SGEI<sup>1</sup> business) and other business. In addition, the Authority requested projected profit & loss accounts on the same basis in respect of the years 2011 to 2013 from the expected net beneficiary, Vhi Healthcare. Vhi Healthcare supplied projections for 2011 and has stated that it is not in a position to supply projections for 2012 and 2013 as these would be heavily influenced by the level of tax credits. The outturn for 2009 and 2010 and the projections for 2011 are as follows:

	2009 SGEI Business €m	2009 Non SGEI €m	2009 Total €m
Earned Premiums before age related tax credits			
Claims incurred			
Change in Unexpired risk reserve			
Age related credits less stamp duty			
Expenses			
Impact of investments			
Profit before tax			

	2010 SGEI Business €m	2010 Non SGEI €m	2010 Total €m
Earned Premiums before age related tax credits			
Claims incurred			
Age related credits less stamp duty			
Expenses			
Underwriting profit			
Impact of Investments			
Profit before tax			

